Transversal: International Journal for the Historiography of Science 2021 (11): 1-14 ISSN 2526-2270 Belo Horizonte – MG / Brazil © The Author 2021 – This is an open-access journal

Special Issue Historiography of Science in South America: Reception, Reflection and Production (Argentina, Brazil and Uruguay)

Some Remarks on the History of the Introduction of Alexandre Koyré in Brazil

Marlon Salomon¹ [https://orcid.org/0000-0002-2446-2141]

Abstract:

This article intends to briefly reconstitute the history of the introduction of Alexandre Koyré's work in Brazil. I do not seek to make a general analysis but just to focus on two pathways by means of which his work was introduced in this country. I endeavor to reconstitute the history of the translation of his books into Portuguese and identify the main vectors and intellectual contexts responsible for his works' acclimatation in Brazil. Those two pathways roughly correspond to two distinct geographies and intellectual cartographies; in Rio de Janeiro, interest in his work stemmed from the introduction of French epistemological thinking in the wake of philosophers' readings Louis Althusser's works after the 1960s; in São Paulo, it was linked to university institutionalization of the history of science, starting in the late 1950s, initially promoted by scientists. That history enables an understanding of the major lines and forms that the history of science assumed in Brazil. Furthermore, the study permits the comprehension of the logic of the international circulation of ideas and the history of the translation of human sciences books as forms of cultural appropriation.

Keywords: Alexandre Koyré; Cultural Appropriation; French Epistemology; Circulation of Ideas; Historical Epistemology; Internalism versus Externalism

DOI: http://dx.doi.org/10.24117/2526-2270.2021.i11.06

My object here is quite modest and circumscribed; I do not intend to reconstitute the history of the introduction of Alexandre Koyré's work in Brazil and its reception. That kind of objective would require taking up the routes by which his works arrived in the country, determining the way they were received and mapping the plurality of readings and uses that have been made of them ever since the turn of the fifties to the sixties. That would have required an extensive research effort and a prolonged consultation of innumerable archives and libraries, and, unfortunately, due to the restrictions that the Covid-19 pandemic has

¹ Marlon Salomon is a Full Professor in the Faculty of History at the Federal University of Goiás. Address: Av. Esperança, s/n, Campus Samambaia – Goiânia – GO, 74.690-900, Brazil. E-mail: marlonsalomon@ufg.br. English translation by Martin Charles Nicholl.



imposed on circulation, it was not possible. Furthermore, it would have demanded work so much more extensive that it would extrapolate by far the dimensions of an article.

I intend to make a rapid analysis of just two of the ways by which his first books and texts arrived in Brazil. My strategy, to that end, will be to identify elements of the different intellectual contexts and translation and publishing institutions of his first texts so as to identify some of the vectors of his introduction in this country. It will be necessary to simplify the reconstitution of those trajectories to some extent in order to cover the subject in the space of a few pages. I am fully aware, however, of the series of problems and of the limitations that strategy presents.

For an author's books and texts to be read in other cultures and other countries by readers that share a language other than the one in which the works were written, they do not necessarily need to be translated. The world of the universities is quite cosmopolitan, and a considerable part of the texts written in the dominant languages of the global scientific system circulate free of those obstacles that are usually observed in the circulation of those originally published in peripheral languages. For a very long time, French was a central language of the world language system. Thus, the fact that there are no translations of a given author's work does not mean that he or she has not been read. However, there is no doubt that its translation points to the existence of a greater sphere of interest to its not being exclusive to the universe of the initiated.

It is possible to present, immediately, the difference between the two trajectories, connected, as they are, to different disciplines and geographies: on the one hand, the history of the sciences, in São Paulo and on the other, the history of philosophy in Rio de Janeiro. More importantly, that reconstitution places before us the problem of the international circulation of ideas and the cultural appropriation of the books and authors of the human sciences.

Let us begin with the Guanabara Bay. The first of Alexandre Koyré's books to be translated and published in Brazil appeared in a collection entitled *Campo Teórico* [Theoretical Field] coordinated by two young Brazilian Althusserians. That collection was founded in 1975 in the Rio de Janeiro-based publishing house Forense-Universitária by Manoel Barros da Motta and Severino Bezerra Cabral Filho. Barros da Motta held a degree in philosophy (1970) from the Federal University of Rio de Janeiro and Cabral Filho held a degree in history (1977) from the Fluminense Federal University.

The publication in Brazil of the first books of authors such as Alexandre Koyré, Gaston Bachelard, Georges Canguilhem and Michel Foucault was indissociably connected with the extant interest in the epistemological reflection fed by the reading and introduction of Louis Althusser's Marxism in Brazil in the second half of the 1960s decade. Those young men would meet in the Leonardo da Vinci bookshop on the Rio Branco Avenue, in the center of Rio de Janeiro. On Saturday mornings, teachers, intellectuals, writers, professors, poets, politicians and students flocked to that important bookshop, interested in getting to know the latest publications that had arrived from Paris. It was a place that was fundamental for Rio de Janeiro's intellectual sociability in those days of the military dictatorship that afflicted the country from 1964 to 1985. It was Barros da Motta who suggested to Dona Vanna Piraccini, the legendary founder and proprietor of the Leonardo da Vinci, the importation of Althusser's books. At that time, Cabral Filho was employed by the bookshop. A considerable part of the "discovery" of French epistemology stemmed from the extant interest in the Marxism of Althusserian epistemology" (Pires 1971, 174).

As far back as 1965, the author of *Lire le Capital* stated that one of the central concepts that guided his reading of Marx, that of the *coupure épistémologiue* [epistemological rupture], had been taken from Bachelard (Althusser 2005 [1965], 24). Again in 1965, he acknowledged his debt to the "masters of the readings of works of knowledge, who, for us, were G. Bachelard and J. Cavaillès, and who today are G. Canguilhem and Michel Foucault",

+

2

and to that list, in another place, he later added the name of Alexandre Koyré (Althusser 1973, 13; 50). If we remember that Althusser himself acknowledged how Lacan's theoretical effort in his reading of Freud, which had transformed the interpretation of psychoanalysis, had inspired him and his students in their own reading of Marx, then we can obtain a set of names that could, at a given moment, be theoretically associated and integrated. It is clear that Barros da Motta and Cabral Filho's Collection was guided by that conception.

The first title of the new collection, Campo Teórico, was published in 1977. It was Michel Foucault's O Nascimento da Clínica [Naissance de la Clinique] translated by philosopher Roberto Machado. The following year Georges Canguilhem's O normal e o patológico [The Normal and the Pathological² appeared and in 1979, the third title of the Collection was published, Do mundo fechado ao universo infinito [From the closed world to the infinite universe], by Alexandre Koyré, in a co-edition (that was abandoned immediately afterwards) with the University of São Paulo. In the 1980s, three more titles were published: Estudos de história do pensamento científico [Études d'histoire de la pensée scientifique] also by Alexandre Koyré in a co-edition with the University of Brasília (the second edition was to appear under the aegis of the Rio de Janeiro publisher alone); the second Brazilian edition of Michel Foucault's A arqueologia do saber [L'achéologie du savoir] in 1986, Jacques Lacan's Da psicose paranoica em suas relações com a personalidade [On paranoiac psychosis and its relationship with personality]. Four more titles were published in the 1990s: in 1991, Estudos de história do pensamento filosófico [Études d'histoire de la pensée philosophique], by Alexandre Koyré; in 1995, the book Michel Foucault: uma trajetória filosófica para além do estruturalismo e da hermenêutica [Michel Foucault: beyond structuralism and hermeneutics] by Paul Rabinow and Hubert Dreyfus; in 1997, Teoria e clínica da psicose [The clinical theory of psychosis] by the Brazilian psychoanalyst Antônio Quinet; and, finally, in 1999, Raymond Roussel, by Michel Foucault, the last of the French philosopher's books published when he was alive to be translated in Brazil. Barros da Motta was to be equally responsible for coordinating the same publisher's edition and translation of Dits et écrits, from 2002 on, which ended up being published in ten volumes organized thematically.

As can be seen, the readily identifiable theoretical relation interwoven among those authors materialized and sedimented with the collection which received them in the country; the first three authors the collection published were, in sequence, Foucault, Canguilhem and Koyré. Strangely enough, it published nothing of Bachelard's.³ Even though that interpretation of the proximity and the relations among those authors, materialized in the structuring of the "Collection", was remarkable and enjoyed a long life in Brazilian culture, the books and authors placed side by side in the Brazilian collection graphically publicized by means of a project and visual identity of its own, were actually nothing more than the result and materialization of a cultural appropriation.

³ In 1968 the Rio de Janeiro publishing house Tempo Brasileiro translated Gaston Bachelard's work *Le Nouvel Esprit Scientifique* into Portuguese and the publishers Zahar Editores (also Rio-based) launched *O racionalismo aplicado* [Applied Rationalism]. The first of Althusser's works to be published in Brazil, *Pour Marx*, appeared in 1967 precisely in the Collection Biblioteca das ciências sociais [Social Science Library] published by Zahar Editores with the title Análise crítica da teoria marxista [A critical analysis of Marxist theory] (Motta 2017).



² The Althusserian nature of that reception was apparent in the edition of *O normal e o patológico* which in its third printing, in 1990, carried a Postface by Pierre Machery that was presented by Louis Althusser himself (Almeida 2018, 175).

Some Remarks on the History of the Introduction of Alexandre Koyré in Brazil Marlon Salomon



The first four titles published by the Coleção Campo Teórico of the Forense-Universitária publishing house

In that appropriation, Koyré was strongly associated to the history of philosophy; to a certain kind of philosophy which characterized the work of Foucault, Canguilhem, Cavaillès and Bachelard in the same way. As can be seen, it was a Koyré connected to the Rio de Janeiro Francophiles, connected to the interest in French epistemology extant in Rio de Janeiro at the end of the 1960s and the beginning of the 1970s. It was a Koyré connected to



a French philosophical-historical tradition highly marked by the French Marxist and the structuralist context of the 1960s which entered Brazil via the Guanabara Bay.⁴

In his "Introduction" to the first book of Alexandre Koyré's to be translated in Brazil, Barros da Motta largely took up Yvon Belaval's text on that French historian-philosopher of Russian origin. He remembered Koyré's engagement in the main political events of the first half of the 20th century, his importance in the philosophical renovation that took place in France of the 1930s, in the introduction of Hegel to that country, and the drawing closer that it fostered between linguistics and anthropology that was to make the structuralism of Levi-Strauss feasible. He was the "master reader" of Belaval. "His thinking is going to be present in the research of Foucault, Althusser, Thomas Kuhn and of all the French and American currents of the history of science" (Barros da Motta 2006, VI).⁵ Barros da Motta passed on the set of his research, profiling a Koyré, historiographer of mystic, religious, philosophical *and* scientific thought and insisting on his "conviction of the unity of thought" and the impossibility of separating such thoughts when writing history.

That, however, was not the only Koyré to arrive in Brazil at that time, which obliges us to leave sunny Rio de Janeiro for a while and return to São Paulo. In that city of drizzle, we will find a Koyré who is, above all, a historian of science. The intellectual context of São Paulo, particularly in regard to its relations with the Marxist tradition, was quite different. There was strong anti-Althusserianism at the time in São Paulo and, there, Althusser's works had a greater repercussion in the social sciences than in philosophy. In 1968 São Paulo University professor and philosopher José Arthur Gianotti published an article with the title Contra Althusser [Against Althusser]; in 1971, the Marxist publisher and historian Caio Prado Junior launched the critical work O estruturalismo de Lévi-Strauss e o marxismo de Althusser [Levi-Strauss's structuralism and Althusser's Marxism]; and sociologist Fernando Henrique Cardoso himself raised objections to Althusser's work and opposed it. One of Rio de Janeiro's leading Althusserians, Carlos Henrique Escobar, accused Fernando Henrique Cardoso and José Arthur Gianotti of boycotting the Althusserian school (Motta 2017). If we consider that those figures occupied important institutional positions in the academic field and the publishing market, then we can see that French epistemology did not encounter the same conditions for its introduction in São Paulo as it been afforded in Rio de Janeiro.

The history of science became institutionalized in Brazil in the mid-1960s in the Physics department of the University of São Paulo, associated to the figure of theoretical physicist Mário Schenberg (1914-1990), who managed to form a group of students orientated towards the history of science, among them, Shozo Motoyama and Maria Amélia Mascarenhas Dantes. The university reforms implemented by the authoritarian Brazilian state at the end of that decade obliged the group to migrate to the History Department; Schenberg was compulsorily retired by the military dictatorship in 1969. In 1971, Motoyama defended the first History of Science thesis in Brazil and became the first professor of that study discipline in the same department. In 1973, Mascarenhas Dantes, who was a History of Science teacher became the second person in the country to defend a History of Science thesis. It was by that

⁵ That introduction of Barros da Motta's was not present in the first edition of the book.



⁴ In my view that makes it easier to understand the fact that over the years Gaston Bachelard's epistemological work has been translated in Rio de Janeiro by the publishing house Contraponto and that the complete works of Jean Cavaillès e Georges Canguilhem, published in France more recently have been published in Rio de Janeiro by the publishers Forense-Universitária (in 2010 the Grupo Editorial Nacional - GEN acquired it). Strangely enough central works of Koyré's bibliography such as *Études Galiléennes, Études Newtoniennes* and *La révolution astronomique* ohave never been translated or published in Brazil. In other words, his longest, most technical works, fruit of the development of important projects, are still unpublished in Brazil. That to me is an important element to consider regarding his history in Brazil.

means that the unresolvable North American internalism versus externalism debate and polemic of the 1960s penetrated Brazil.⁶

Schenberg's role in introducing and formatting the professional historiography of science in Brazil still needs to be correctly dimensioned. In the second half of the 1950s, the publishing house *Difusão Europeia do Livro* launched itself with the translation/publishing of three collections that clearly indicated the existence of a new demand for reference works and manuals directed at a new university audience. They were a *História Geral da Civilização* [*Histoire générale de la civilisation*], organized by Maurice Crouzet, and translated in Brazil in 17 volumes between 1955 and 1958, the *História Geral das Ciências* [*Histoire générale des sciences*], organized by René Taton and published in Brazil between 1959 and 1967, in 14 volumes, and the *História Geral da Civilização Brasileira* [*The General History of Brazilian Civilization*], organized by Sérgio Buarque de Hollanda, starting in 1960, a kind of local version of the series that Crouzet had conceived (Venâncio; Furtado 2013, 14).

The second tome of the *História Geral das Ciências* collection published in 1960 was dedicated to Modern Science and its first volume, to the Renaissance. The first book of the volume was dedicated to the "The Exact Sciences" and divided into three chapters: "Mathematics", "the Copernican Revolution" and "Physics" and they occupied a mere 100 pages of the volume (!). It was written by Alexandre Koyré and as far as I know, it was the first of the French historian-philosopher's works to be translated in Brazil. Jacó Guinsburg was responsible for the overall coordination of that volume's translation and Gita Ghinzberg did the actual translation of Koyré's text.

The first tome of the collection on "Ancient and Medieval Science" had been launched in the preceding year. There was a brief introduction in its first volume written by Mário Schenberg. The text began by justifying the translation of the series insofar as the attention of the day had been turned on science. That was because it was an age "marked by the development of industry and technology" (Schenberg 1959, 7). Accordingly, it had become essential to acquire knowledge of "the results and methods of various scientific disciplines" (Schenberg 1959, 7).

Following that Schenberg addressed scientists directly. He argued that the level of specialization attained by the various sciences had made it impossible to learn science in its entirety and in its relations with humanity. On losing sight of the relationship of his specialty with the other different scientific disciplines, the scientist ends by causing "serious harm to his professional activity". On ignoring philosophical and ideological influences "on the process of scientific development" the scientist could become the victim of profound prejudices. "It seems to me to be of great use for any scientist, to dedicate some time to the study of the history of all the sciences within the framework of the general history of social institutions" (Schenberg 1959, 7).

For Schenberg, the "History of Science" had a "unique dramatic quality" that had to do with "the multi-century struggle to discover and make use of the laws of nature and of society" (Schenberg 1959, 7). To him, the amplification of human power and liberty depended on that knowledge. "Great thinkers have taught that liberty is the knowledge of necessity. The History of Science, is therefore, also the history of man's struggle for his liberation" (Schenberg 1959, 7).

⁶ I am not claiming that the history of sciences was born in Brazil at this time. On the contrary, numerous historical studies on different fields of knowledge were published in Brazil during the first half of the 20th century. In 1943, Fernando Azevedo's book *Brazilian Culture* was released, in which the evolution of science received special attention. Later, in 1956, Azevedo edited *The Sciences in Brazil*, an extensive collection with the collaboration of many authors. I do not intend to reconstitute the history of science in Brazil but only highlight the main paths through which Alexandre Koyré's work was introduced in Brazilian land.



Finally, Schenberg stated that the Brazilian translation of the series that Taton had organized should contribute towards "stimulating interest in the History of Science in our country", but he also declared that the volumes of the collection were not destined for the specialized public alone. "Taton and his collaborators knew how to ally scientific rigor with a simple and agreeable presentation in such a way as to make his work accessible to readers with a median cultural [level]" (Schenberg 1959, 7).

The professional historiography of science entered São Paulo through scientists attached to the University of São Paulo (USP). Schenberg was the chair professor of "Celestial and Rational Mechanics"; biologist Paulo Sawaya, director of the Faculty of Philosophy, Science and Language, was in charge of the general coordination of the Brazilian translation of the General History of Science; the cover fold texts of the volumes of the first tome were signed by José Reis, an important advocate for the creation of the discipline in Brazil, and those of the second tome volumes, by mathematician Omar Catunda. Many of the translators of various chapters of the series were by the professors of different disciplines at the university of São Paulo (USP) and the philosopher Ruy Fausto was also an important translator of the series. It was probably on the basis of that nucleus created around the figure of Schenberg and with the support of historian Euripides Simões de Paula, Director of the Faculty of Philosophy, Language and Human Sciences, that the history of science would become transformed into an academic discipline in Brazil. It was, therefore, directly linked to scientific work and not to historians, at least in those first moments. It is interesting to note how, in the 1970s, the reflection on the emergence and institutionalization of the history of science in Brazil insisted on the fact that its occurrence was an effect of the surge of development and the maturing of the scientific and technological community that had been going on for two decades.⁷

Motoyama, who was the first professional historian of science in Brazil, given his research and teaching activities, was also the first researcher in the country to take an interest in the "history of the historiography of science". In an article with the title "Some reflections on the contemporary historiography of science" published 1975, he presented the history of science as a genre or "scientific discipline" based on three great stages that had characterized it "since Tannery's first pioneering works at the end of the 19th century" (Motoyama 1975, 613). His temporal frame on the subject, as his evocation of Tannery's name shows, corresponds to that of the institutionalization but even more to that of the autonomization of that history as an academic discipline in which he acknowledged the history of his own profession.

The period of institutionalization would have been marked by a "culturalist" tendency represented by the pioneering works of Sarton and Mieli. The *Isis* review was the publication most representative of that tendency which was "a globalizing historical perspective of science. In terms of method, it traced established a correspondence between science and the 'cultural sphere' of a given people or period". The works of Neugebauer, Needham and Duhem could be framed in that tendency. It would have been fundamental in enabling the history of science to constitute itself as an academic discipline that was "autonomous and independent, free from restraints and the sometimes-distorting vision of the sciences or of the philosophies to which it had formerly been subordinated" (Motoyama 1975, 613-614). It would also have been important insofar as it "displaced the axis" from preoccupation with

⁷ In 1979 the historiography of science had already been granted citizenship of the scientific city and so the first *História das ciências no Brasil* [*The History of Science in Brazil*] dedicated a chapter to it. The chapter's authors stated that: "just a little over 10 years ago favorable winds began to blow for the institutionalization of the discipline fostered by the maturation of the scientific community itself and government measures designed to promote scientific and technological development to serve as a base for economic development" (Garcia; Motoyama; Oliveira 1979-1980, 387).



European science, to reveal science's existence in other cultures and civilizations (Babylon, China, India etc.) interest in which had become dormant due to excessive specialization and forgetfulness of that initial globalizing perspective.

After the 1930s, that historiography would have become divided between the externalist and internalist tendencies. The former had as its "basal objective the explanation of a superstructure called Science by means of considerations involving its infrastructure. That kind of approach was adopted by the so-called socialist historians of science, among them, the Marxists". Motoyama included historians such as Crowther, Bernal, Needham (again), Lilley, Struick, Hogben and Ogawa. Their importance lay in their inclusion of the "social variable" in their comprehension of the phenomenon of science. In 1975, however,

the times are lean for the externalists faced with the exhaustion of their adopted method. On making a correspondence between the forms of production and Science through the intermediation of technique, those historians were fortunate in establishing its orientation, associating, for example, Newton's era with mercantilism, or early Greek science with the mercantile-slavery society but they could not get beyond that because when they actually endeavored to explain in greater detail the threads of that correspondence, they came up against serious difficulties that have yet to be overcome. (Motoyama 1975, 614)

Motoyama suggested that one possible solution for that impasse would be constituted by "the introduction of intermediary structures" among the terms of that correspondence, like Kuhn's paradigm.

Motoyama identified the founding of the Journal of the History of Ideas in 1940 as a landmark in the affirmation of the "internalist current" and listed historians such as Randall Jr., Moody, Lovejoy and Mackeon as its major exponents. It was, then, a case of inserting

the History of Science within the more general context of the History of Ideas. This history was a reflection of the Weberian-orientated Intellectual History in vogue at the time in the United States and consisted of a systematic analysis of the concept formation process, the identification of the so-called intellectual elements and the reconstruction of scientific development based on them. (Motoyama 1975, 615)

That was the explanation for why the main themes that the tendency addressed revolved around the great scientific and philosophical theories. That perspective of the history of science would have been responsible for transforming the understanding of "scientific development". For that reason, it was no exaggeration to state that it would have turned itself at that time into "the dominant orthodoxy of the present day". It would also have turned into a limiting historiographic factor insofar as it had raised up "new myths and dogmas".

Motoyama spoke of the existence of an "internalist flank", related to the philosophy of science, that had developed in Europe. It was possible to distinguish at least two "streams" within it. He explicitly took up, once more, the kind of distinction that Canguilhem had made a few years before between the "laboratory model" and the "tribunal model" in a text entitled *L'objet de l'histoire des sciences*. In the first case, the history of science was understood as being a laboratory of epistemology and our author listed among its exponents Flourens, Laffitte and Dijksterhuis, the very authors Canguilhem had cited. The second was one of "History judged or sanctioned by Epistemology – an Epistemology in intimate correlation with the Science of the present", and that was "the History of Science of Bachelard, of Canguilhem, of Koyré". In that historiography,

the effort is directed at understanding the past as a living organism of a cultural whole called Science. Accordingly, the investigation of the science of the past in its aspect as



past, means understanding it as being the overcoming, in its own times, of the activities and methods that preceded it, but judged in the light of the scientific values of today. (Motoyama 1975, 615-616)

As can be seen, he closely followed Canguilhem but disagreed with him regarding the real "opposition" between the models. To Motoyama, one model was inductive and the other deductive but what was really important to underscore was that neither is "self-sufficient and they must be considered as being complementary parts of a more complex scientific cognition process" (Motoyama 1975, 616). His disagreement with the French life sciences philosopher and historian deepened to the extent that his position became irreconcilable with that of Canguilhem insofar as, for Motoyama, in the case of this particular historiography, the intimacy between history and philosophy was so great that it ended up becoming dangerous for its autonomy. The text passage in which he underscores that is interesting for also summarizing his conception of the history of science.

Given that the History of Science is the clarification of the essential nature of various variables such as the logic of science, the logic of scientific development, the relationship of science with forms of thinking and cosmovision and the analysis of how those variables are intertwined in the historical process, the need for an intimate relationship of historical research with the Philosophy of Science is perfectly understandable. However, there is an ever-present danger that it will end up affiliating itself with the latter and many have incurred in that error including the great Canguilhem. (Motoyama 1975, 616)

Here we have a sociological stance in regard to the conflict of faculties: it was the autonomy of the fledgling recently-instituted discipline – which he headed at the USP – that all such intimacy placed in danger: it was necessary to make the limits of, and frontiers between the two disciplines perfectly clear and avoid any epistemological promiscuity on pain of losing its independence. Because of the limits the pandemic has imposed on my investigation, I do not have the material elements needed to develop that hypothesis further,⁸ but it seems clear that the institutional context was by no means indifferent to the historiographic reception in São Paulo.

Nevertheless, it is important to point out that Koyré, just like Bachelard and Canguilhem, was historically and conceptually framed in a perspective stemming from the North-American historiographic context of the History of Science. Furthermore, on the other side of the North Atlantic, Foucault did not associate himself with the French epistemological trinity.

That was quite different to what had been going on in Rio de Janeiro since the 1960s with the introduction of French epistemology mediated by philosophers and not by scientists. A review of the first of Koyré's books to be translated in Brazil appeared in the Brazilian press in the newspaper *Jornal do Brasil* in the same year as the book was launched. Theologian Gilberto Vilar presented a phenomenological interpretation of the book and its thesis on the "cultural revolution of the 17th century" and man's withdrawal from the world in which he lives. Furthermore, Koyré was presented as a "philosopher and historian" and his work *Do mundo fechado ao universo infinito* as being "an important book for scholars of history and philosophy" (Vilar 1979, 3).

In the eyes of the Rio de Janeiro intellectuals, the independence of history from philosophy that Motoyama clamored for would make it impossible to understand the very project of figures like Koyré. Indeed, for a real understanding it would be necessary to relate it to the philosophical perspective and even to distinguish it from certain ways of conducting

⁸ It effectively impeded me from consulting Shozo Motoyamas's thesis Galileu Galilei – um estudo sobre a lógica do desenvolvimento científico [Galileu Galilei – a study of the logic of scientific development].



historiography. That relationship, however, was not with any random kind of history. Roberto Machado (1942-2021), who at the time was professor of philosophy at the Catholic university and the State University of Rio de Janeiro felt that epistemology, and he viewed Koyré in that sphere, as did the others in Rio, sought to understand science based on an analysis of its scientificity. To analyze the conditions of possibility for such knowledge differences, he elected "history as the privileged instrument of analysis". That does not mean to say, however, "that all the history of science is philosophical by definition or reflects philosophically".

But when the philosophies of the concept such as those of Bachelard, Cavaillès, Koyré or Canguilhem thematize science in its historicity, they do more than simply describe the inventions, traditions and authors. For epistemology, the history of science can only achieve its objective of establishing the historicity of science by situating itself in a philosophical perspective and consequently, distinguishing itself from the scientific and historical disciplines as such. (Machado 1981, 9)

While on the one hand, in Rio de Janeiro, there was the singularity of the French philosophy of science in relation to others interested in scientific knowledge, identifying an intrinsic and inseparable relation with history, in São Paulo, that very posture was seen as incurring the risk of subordination and calling for precaution and distancing. At the same time, Machado made it clear that the history of epistemology was not exactly that of the historians. There seemed to be a chasm separating the two perspectives.

As can be seen, Motoyama's interpretation of the history of this discipline was that of its development in the USA. His choice of Tannery as the starting point of his history instead of Laffitte, the first ever teacher of "The General History of Science", at the *Collège de France*, clearly denoted the trajectory and affiliation he intended to trace out in that reconstitution, insofar as it favored historiographic figures who described themselves as "pure historians" of science, that is, independent of science and of philosophy. From Tannery he passed to Sarton who founded his review in 1913 and immediately afterwards at the beginning of World War I emigrated to the USA, and to Mieli who, in 1919, founded the *Archeion* in Italy but emigrated to Paris in 1928 and then, in 1939, to Argentina. Lastly, Motoyama identified the 1930s and 40s as the decades of the emergence, on North American soil, of the internalismexternalism dichotomy, "a polemic that is still open" (Motoyama 1975, 614), and one that delimited "the" theoretical problem of the young discipline.

Without any mediation of the "European" origins of the discipline, Motoyama jumped straight to its history on the other side of the Atlantic – Sarton became a professor at Harvard but that did not serve Motoyama as a thread of continuity between two periods or connection between two spaces, as it was disconnected from the dichotomy that was more important to him. It meant that, without any justification, he abandoned any analysis of the sequence of the discipline's historical development in Europe without even problematizing that option. When Mieli arrived in Paris, his project was immediately hosted by the *Centre International de Synthèse* of Henri Berr who had instituted a History of Science Section in it (Blay 1997; Salomon 2017) and there was a series of initiatives in course directed at institutionalizing the history of science. A year earlier, Mieli himself had founded the International Academy of the History of Science, an initiative designed to congregate all historians of science and technology around the world. 1932 would mark the beginning of its university institutionalization with Abel Rey creating the History of Science and Technology Institute at the Sorbonne which would in turn launch the means of publicizing it, the *Thalès* Review (Redondi 1986).

I am not endeavoring to point out flaws or gaps in Motoyama's analysis with all that has been set out above, but merely to underscore that the choice of names, dates, tendencies and places woven into his account enable us to discern how the history of science that arrived in Brazil was the one produced in the North-American context. The fact that



Motoyama frequently referred to the history of "science" in the singular, an English language habit, rather than in the plural, as is usual in French, is another indication of that. That history then, was divided into poles to which it was possible to ascribe and register all the work in course.

It is not only the fact that Motoyama took as his reference Canguilhem's text based on the French edition of 1968, considering that in 1972, the Althusserians of Rio de Janeiro published a special number of the *Tempo Brasileiro* review on epistemology, which carried a translation of the article *O objeto da história das ciências* [*The object of the history of science*] and it had tremendous repercussion and circulation and was a great sales success. A barrier impeding any kind of dialogue seemed to arise. Another equally notable fact is that Motoyama ignores Canguilhem's argument about the lack of conceptual rigor and meaning of the internalism-externalism dualism, in the view of that historian and philosopher of the sciences of life. Indeed, his argument explains why that particular historiographic notion seems not to have carried the same weight in France and to have actually been scorned in the Rio de Janeiro reception of those authors. Furthermore, Canguilhem was quite harsh in his criticism of the North-American historiography founded on that cleavage and he made it clear that it was a discussion that belonged to the Anglo-Saxon world.

He defined that externalism as "a weakened or rather, impoverished Marxism, current in the rich societies" and suggested a text of Koyré himself for a critical reading respecting it. It is, however, important to underscore how, for Canguilhem, that opposition stemmed from a basic conceptual problem that transformed it, at the outside, into a theoretical question devoid of any historiographic meaning: "It is evident that one or the other position [externalism and internalism] are equivalent to assimilating the object of the history of science to the object of a science" (Canguilhem 2012 [1968], 8).9 A science worthy of that name, to the director of the Sorbonne Institute of the History of Science and Technology, began exactly with the definition and delimitation of its object. In his view the North-American historiography did not even manage to differentiate the object of their discipline from the objects of those disciplines whose history it intended to write. As can be seen, Motoyama skirted that criticism and without any ado inscribed figures like Bachelard, Koyré and Canguilhem in the North-American historiographic cleavage. That helps to explain his critical stance in regard to Canguilhem's perspective. On the other hand, that kind of criticism shows how, on the European or French side, it made little sense to take that kind of problem into consideration which allows us to imagine that the Rio de Janeiro 'epistemologists' viewed the historiographic discussion of the opposition between internalism and externalism as being the fruit of a lack of philosophical rigor.

Final Considerations

In the 1960s, Koyré disembarked in Brazil via Galeão [Rio's main airport] and Cumbica [a São Paulo airport], partly bound to distinct histories and stemming from distinct intellectual contexts. It is true that I have exaggerated and caricatured somewhat in my way of presenting things. In the early 1980s, the philosopher Hilton Japiassu presented a Koyré in the framework of French epistemology but at the same time alongside Bachelard, as an adept of an internalist conception of the history of science (he absolved Canguilhem and Foucault of that sin). He integrated the discussion on epistemology to that on the history of science but presented the latter based on the externalism internalism opposition; he even mobilized Needham to explain the internalist conception using the traditional arguments against it. My study here, as can be seen, is not exhaustive and does not set out to

⁹ That book was published in a collection coordinated by Manoel Barros da Motta.



reconstitute the history of the introduction of Koyré in Brazil rather, it endeavors to present two of its major lines.¹⁰

The study of the international circulation of ideas is very interesting in relation to this case. Koyré the historian à la São Paulo was an author whose original field of the production of ideas had disappeared on crossing the Atlantic and disembarking in North-American soil; at the same time it was epistemologically inscribed and naturalized in a context unlike the one that had given rise to its ideas and which was structured on the internalism/externalism dichotomy. Pierre Bourdieu noted that one of the first 'structural factors' of the international circulation of ideas was "the fact that the texts circulated without their contexts" (Bourdieu 2002, 3). Such factors are responsible for the production of innumerable misunderstandings such as when Hilton Japiassu (1981, 65) defined Koyré as the master of internalism. Thus it is not only the ideas that circulate internationally, but also the *idées reçues* (Bourdieu 2002, 3), the labels, the classifications and certain categories of understanding produced in certain intellectual contexts that end up determining, framing, and limiting the interpretations of a given work in other contexts insofar as they are incorporated by agents in other academic fields.

A supplementary fact or a historical milepost in the introduction of those two Koyrés in Brazil sprang to my attention when, many years ago, I perceived how many of my university colleagues all over Brazil pronounced his name, not as Koyré as he himself pronounced it in France, but, instead as 'Kuare' as it was pronounced in the USA which clearly indicated a cultural appropriation of his work and of its circulation in Brazil.

¹⁰ It would be necessary, for example, to investigate his presence in the USP's department of philosophy. Gérard Lebrun was familiar with Alexandre Koyré's work and cited it in texts and interviews. In the Faculty of Education, he was most certainly read by students, given that one of their lecturers on the history and philosophy of education, José Eduardo Rodrigues Villalobos, had translated one of Koyré's texts for the department's review in 1979 (Koyré 1979, 55-70). In the same way, it would be necessary to accompany the ramifications of the Rio side of the discussions on the relationship between epistemology and the history of science such as can be seen in the work of Japiassu.



¹²



Alexandre Koyré

Alexandre Koyré is not a historian-philosopher well-known to the general public in Brazil. There are few registrations of his name in the archives of Brazil's major newspapers. There is only a simple review of a book he wrote published in the main media. In those few registrations he is always portrayed as a French philosopher and historian which, to me, indicates that the North-Americanized, internalist Koyré remained restricted to a small circle. It was only in 2002 that the *Folha de São Paulo* dedicated a text exclusively to him but one which, curiously enough, was not written by a Brazilian. It was written by the Argentinean essayist Juan José Saer and devoted to analyzing the political text that Koyré had published during the World War II and which at the time of the essay, had recently been published in France. The image, based on a fairly well-known photograph was prepared by the São Paulo newspaper's Art Editors to illustrate Saer's text. It seems never to have left the pages of the São Paulo newspaper.



References

- Almeida, Tiago Santos. 2018. Canguilhem e a gênese do possível: estudo sobre a historicização das ciências. São Paulo: LiberArs.
- Althusser, Louis. 2005 [1965]. Pour Marx I. Paris: La Découverte.
- Althusser, Louis. 1973. Lire le Capital I. Paris: Maspero.
- Azevedo, Fernando. 1943. A cultura brasileira: introdução ao estudo da cultura no Brasil. Rio de Janeiro: IBGE.
- Azevedo, Fernando. 1956. As ciências no Brasil. Volumes 1-2. São Paulo: Editora Melhoramentos.
- Barros da Motta, Manoel. 2006. "Apresentação Alexandre Koyré: revolução e verdade na história do pensamento científico e filosófico". Do mundo fechado ao universo infinito. 4ª ed. Rio de Janeiro: Forense-Universitária.
- Blay, M. 1997. "Henri Berr et l'histoire des sciences". In: Biard, A.; Bourel, D.; Brian, E. Henri Berre et la culture du XXe siècle. Histoire, science et philosophie. Paris: Albin Michel.
- Bourdieu, Pierre. 2002. "Les conditions sociales de la circulation international des idées". Actes de la recherche en sciences sociales, vol. CXLV, décembre.
- Canguilhem, Georges. 2012 [1968]. "O objeto da história das ciências". Estudos de história e filosofia das ciências. Trad. Abner Chiquieri. Rio de Janeiro: Gen; Forense-Universitária.
- Garcia, João Carlos V.; Motoyama, Shozo; Oliveira, José Carlos de. 1979-1980. "O desenvolvimento da história da ciência no Brasil". In: Ferri, Mário; Motoyama, Shozo (orgs.). História das ciências no Brasil. São Paulo: EdUSP. Vol. II.
- Japiassu, Hilton. 1981. Questões epistemológicas. Rio de Janeiro: Imago.
- Japiassu, Hilton; Marcondes, Danilo. 1989. Dicionário básico de filosofia. Rio de Janeiro: Zahar.
- Koyré, Alexandre. 1979. "Sobre a influência das concepções filosóficas na evolução das teorias científicas". Trad. José Eduardo Rodrigues Villalobos. *Revista da Faculdade de Educação*, vol. I e II, nº 5.
- Machado, Roberto. 1981. Ciência e saber: a trajetória arqueológica de Michel Foucault. Rio de Janeiro: Graal.
- Motoyama, Shozo. 1975. "Algumas reflexões sobre a historiografia contemporânea da ciência". Revista de História, vol. LII, nº 103.
- Motta, Luiz Eduardo. 2017. "A recepção de Althusser no Brasil: o grupo brasileiro da Revista Tempo Brasileiro". Novos Rumos, v. 54, nº 1.
- Pires, Eginardo. 1971. "A teoria da produção de conhecimentos". In: Baeta Neves, Luiz Felipe; Mendonça, Antônio Sérgio. Epistemologia e teoria da ciência. Petrópolis: Vozes.
- Redondi, Pietro. 1986. "Préface". In: Koyré, A. De la mystique à la Science. Cours, conférences et documents 1922-1962. Edited by Pietro Redondi. Paris: EHESS.
- Salomon, Marlon. 2017. "Revolução, crise e o problema da filosofia em Alexandre Koyré no Entreguerras". In: Almeida, Fábio Ferreira de; Salomon, Marlon (orgs.). De Bergson a Rancière: pensar a filosofia francesa do século XX. Goiânia: Ricochete.
- Schenberg, Mário. 1959. "Apresentação à edição brasileira". Taton, René (org.). As ciências antigas do oriente. São Paulo: Difel. T. I. Vol. I.
- Venâncio, Gisele Martins; Furtado, André Carlos. 2013. "Braziliana & História Geral da Civilização Brasileira: escrita da história, disputas editoriais e processos de especialização acadêmica (1956-1972)". Tempo e Argumento, vol. 5, nº 9.
- Vilar, Gilberto. 1979. "A virada filosófica". *Jornal do Brasil*, Caderno Livro. Rio de Janeiro, 9 de junho.

