# On the sociology of science: an essay on bioethical endogeny

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**Abstract**

This essay discusses bioethical endogeny, defining it as a tendency of the field towards a self-centered and self-referenced basis that has dispensed with the theoretical and methodological wealth produced by scientific disciplines that preceded it and that share with it subjects of analysis and investigation. In reaction to this tendency, this study presents ideas and concepts developed by some of the main branches of the sociology of science, seeking to demonstrate the pertinence of these contents for bioethical reflections on scientific practices, and on the generation and dissemination of health technologies. It is concluded that the dissolution of the endogeny will be due to disputes of both an epistemological and political-institutional nature that need to be addressed.
**Keywords:** Bioethics. Sociology. Science. Technology. Interdisciplinary placement.

**Resumo**

**A propósito da sociologia da ciência: ensaio sobre a endogenia bioética**

Este ensaio discute a endogenia bioética, definindo-a como tendência à fundamentação autocentrada e autorreferenciada que tem prescindido da riqueza teórica e metodológica produzida por disciplinas científicas que a antecedem e com ela partilham objetos de análise e investigação. Para reagir a esse movimento são apresentadas ideias e conceitos desenvolvidos por algumas das principais correntes da sociologia da ciência, buscando demonstrar a pertinência desses conteúdos para as reflexões da bioética sobre práticas científicas e sobre a geração e difusão de tecnologias em saúde. Conclui-se que a dissolução da endogenia se dará por disputas tanto de natureza epistemológica quanto político-institucional que precisam começar a ser travadas.
**Palavras-chave:** Bioética. Sociologia. Ciência. Tecnologia. Práticas interdisciplinares.

**Resumen**

**A propósito de la sociología de la ciencia: ensayo sobre la endogeneidad bioética**

Este ensayo propone una discusión sobre la endogeneidad bioética, definiéndola como una tendencia a la fundamentación autocentrada y autorreferencial que ha prescindido de la riqueza teórica y metodológica producida por disciplinas científicas que le anteceden y que comparten con ella objetos de análisis e investigación. Para reaccionar a esta tendencia se presentan ideas y conceptos desarrollados por algunas de las principales corrientes de la sociología de la ciencia, buscando demostrar la pertinencia de estos contenidos para las reflexiones de la bioética sobre las prácticas científicas, y sobre la generación y difusión de tecnologías en salud. Se concluye que la disolución de la endogeneidad se dará por disputas tanto de naturaleza epistemológica como político-institucionales que es necesario comenzar a plantear.
**Palabras clave:** Bioética. Sociología. Ciencia. Tecnología. Prácticas interdisciplinarias.

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Declara não haver conflito de interesse.

It has been widely argued among scholars the way in which bioethics in Latin America, mediated by the tradition of critical thinking in the intellectual production of the region, has proposed the return of the link between politics and ethics, something that seems to be avoided or denied by the hegemonic productions of the geopolitical North.

The eminent American bioethicist Daniel Callahan, for example, in the "*bioethics*" entry of the "*Encyclopedia of Bioethics*", defines it as an articulation between ethics and life sciences, motivated by moral issues arising from recent scientific and technological advances. The author describes as the center of these concerns the *vulnerabilities of nature and of the human body and mind, and about saving, improving, and extending human lives* [1], that is, the understanding of human vulnerability linked to bodies and minds as a universal condition inherent in human existence itself, and without considering the vulnerabilities caused by historically determined social conditions. Now, in the presentation of the "Latin American dictionary of bioethics", the then regional advisor for the Social and Human Sciences Sector of the United Nations Educational, Scientific and Cultural Organisation (Unesco), Alya Saada, defines the action of bioethics:

*It acts first of all to develop universal ethical and legal standards that aim to limit and control abuses in the use of sciences and associated technologies and biotechnologies, limit invasive market trends, promote and protect the fundamental rights of people and their dignity and, finally, to remember the purpose and the primary objective of development, namely, the improvement of hope and the quality of life, the reduction of poverty and the realisation of the personal potential of each and every one* [2].

If the difference in outlook is quite remarkable with regard to the application of bioethics, the same is not true of its rationale and relation to other scientific disciplines. In the "Encyclopedia of Bioethics', the relationship with other fields is described by Callahan as follows:

*It is a field that has spread into, and in many places has changed, other far older fields. It has reached into law and public policy; into literary, cultural, and historical studies; into the popular media; into the disciplines of philosophy, religion, and literature; and into the scientific fields of medicine, biology, ecology and environment, demography, and the social sciences* [1].

That is, from this point of view, bioethics has penetrated the field of other disciplines and produced transformations, but no considerations are made about how these disciplines and sciences penetrate and transform the field of bioethics and whether or not this would be desirable. Position that has not been very different in Latin America.

Moral philosophy and epistemology have been the disciplines most discussed in articles and bioethics books. The first quest, in general, is to sustain its status as applied ethics or to describe principles of action; the second one is used to establish its epistemic structure as a new field of knowledge. Both are important for composing frameworks from which deliberative or analytical models are developed.

The same applies to the training of bioethicists. When examining online bioethics graduate programs in the United States, Europe, Latin America or Brazil, it is noted that the themes of the disciplines dedicated to the foundation of the field focus on the history and theoretical models developed in bioethics. The chosen models vary according to the different political-ideological perspectives between North and South, already discussed, but the self-centred conception of the field does not vary.

The separation is also evident in the production of scientific articles. Crossing the descriptors "*sociology of science*" and "*bioethics*" in the PubMed source, reveals only 10 articles, and only one of them, published 12 years ago, discusses the theoretical relationship between the areas. However, its objective was to investigate the sociological studies on typical themes of bioethics reflection, from which the article advocates greater cooperation between the two fields. The others only refer to the terms when analysing services, health practices, and the performance of technology assessment committees, without any relation to their foundation [3].

However, since the end of the last century, articles in the international literature have emerged from sociology centres that propose the contribution of this scientific discipline to an "empirical bioethics". A 2015 systematic review studied 36 articles available at the time on empirical bioethics and concluded that the proposal is to share general methods of social sciences, such as ethnography, discourse analysis or pragmatic hermeneutics to approach moral conflicts, with various inaccuracies in the definition of the justifications for choosing the methods. There was no proposal to share theoretical foundations [5]. The

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crossing between "sociology" and "bioethics" using Lilacs and SciELO sources, produces thirty articles in the first source and eight in the second but none of them are dedicated to the discussion of theoretical or methodological incorporations.

Thus, all the knowledge accumulated in areas such as philosophy of science, anthropology and sociology seems to be still on the periphery of bioethics epistemology, although bioethics operates in contexts in which it is necessary to recognise the importance of the epistemic limits of sciences in the fulfilment of their objectives; the impact of cultural diversity on conflicts around health practices; the influence of the creation, maintenance and operation of research groups involved in knowledge production; or the relations between state, industry, market and civil society in the development, distribution and access to new technologies.

This position seems to be absolutely incoherent with the consensus of the interdisciplinarity characteristic of bioethics, defined as a field that integrates the contents and methods of several disciplines. The position is even more inconsistent with the perspective of those who consider bioethics a transdisciplinary knowledge where disciplinary boundaries are dissolved [5].

Some effort has been made in this direction, some exercises of foundation based on ideas and concepts of general sociology in theses, dissertations, one or another chapter of books or articles [6-8], but far from representing a tendency to transpose from the interdisciplinarity of principles to a theoretical and practical interdisciplinarity.

This self-centred and self-referential inclination of scientific production, here termed bioethical endogeny, dispenses with the theoretical and methodological richness produced by scientific disciplines that precede bioethics and share the same objects of analysis with it. As a way of reacting to this endogeny, the aim of this essay is to briefly present central concepts of some of the main currents of the sociology of science, in order to demonstrate the pertinence of these contents to support bioethical reflections directed to scientific practices and the production and use of technologies.

## The emergence of sociology of science and its "bioethical" character

Before presenting some currents of the sociology of science, it is important to consider that, as in bioethics, the thought of Potter, considered the founder of the field, can be confronted with other perspectives of global bioethics [9], there are also diverse perspectives, even conflicting, in sociology of science. In this way, presenting some of these currents, establishing dialogue with bioethics, does not necessarily imply my agreement with them.

Nor it is intended to deepen theoretical discussions and internal debates about these currents, but only to demonstrate their main differences and convergences, as well as the relevance of their contents to the foundation of bioethics. Secondarily, it is expected that the work will also serve as a minimum study script for those who decide to investigate a little more thoroughly the proposal presented here.

Concerns about the ethical and social implications of scientific practices precede bioethics. Historical evidence of the use of science to impose various forms of suffering and to dominate and exploit human beings and nature itself has caused more and more historians, philosophers, and sociologists to refrain from directing their investigations to more properly epistemological structures of scientific knowledge, such as the intrinsic logic of truth production or epistemic-cognitive systems, and began to reflect on science as a social practice and cultural phenomenon, influenced by economic and political interests [10].

General sociology, even in the nineteenth century, from classical authors such as Comte, Durkheim, Weber and Marx, already reflected on the influence of social contexts on research interests and on the formulation of scientific theories and methods. It also analysed the social function of science and the cultural and environmental consequences of its practices.

In general, regardless of the diverse currents of thought that continue to feed the sociology of science, the presence of analyses on the behaviour and social place of the scientific community is common to all those currents, as well as the final contents and social impacts of the knowledge produced. That is, the research focus of the sociology of science lies in the social processes that define scientific practices. Thus, the proximity to bioethics is verified, since the ethical evaluation of scientific practices can not dispense with the understanding of the social processes that determine them.

This type of sociology also analyses the spectrum of social conceptions about scientific knowledge. At one extreme are the conceptions of science as a system of theoretical-practical, ethical

and politically neutral knowledge, derived from pure logical-cognitive rationality and sustained in the value of objective truth, immune to subjectivity and external interests. At the other extreme, we find the conception of science as a system of contextual and circumstantial practices of search for knowledge, a practice resulting from the interaction between political, economic and social factors that, therefore, in essence, does not differ from other cultural manifestations, such as religion or art.

Let us begin with the critical theory of the Frankfurt School, a group of intellectuals who sought to apply, interdisciplinarily, Marxist concepts and ideas to various fields of knowledge, and who developed many of their research works on science, even before the conception of sociology of science had been formally established. Many studies have focused, for example, on the investigation of the formation of scientific rationality and the traditional epistemological conceptions of modernity. In general, they sought to demonstrate that, in fact, the alleged ethical-political neutrality of science already mirrored the ideology of capitalist domination and exploitation of human beings and nature [11,12]. This theme was specially approached by authors such as Herbert Marcuse and Jürgen Habermas.

For Marcuse [13], technologies could not be isolated from the interest that motivated their production, as if we could make a value judgement only about their use. The alleged neutrality of science would integrate a system of domination that operates in the elaboration of both concepts and techniques, and this would be the main characteristic of modern technological societies. This symbolic system, founded by values of the capitalist market itself, would colonise subjectivities, producing a unidimensionality of worldview, uncritical and compliant.

Now, Habermas [14] focused part of his research on the external factors that influenced the formulation of questions and solutions by science. In this way, he concludes that, over time, extra-scientific interests were part of the Western concept of knowledge as an act of understanding reality, legitimised only by science. Thus, the hegemony of the positivist method would be responsible for the irreconcilable separation between the fact to be studied and the moral, social or political value of that study, which would have influenced our own conception of cognition and truth.

By categorising scientific interests, Habermas proposes a new science, one of critical nature and motivated by emancipatory interest, which would be opposed to the pure logical-empirical interest of the exact and natural sciences responsible for technological products. This emancipation should also represent progress in relation to the hermeneutic interest characteristic of social and human sciences, centred on the interpretation and understanding of reality. The new critical science would be able to reflect on itself and would be inextricably committed to emancipating people and peoples affected by the deleterious effects of the historical development of capitalism.

Marcuse and Habermas, despite internal differences of approaches not presented here, conclude that the fusion of capitalism and science, the separation of fact and value, and the productivist logic of division of labour applied to scientific activities, responsible for hyper specialisation, have made researchers unable to reflect on the consequences of their own discoveries and inventions. Hence the supremacy of the epistemological, aesthetic, economic, sociocultural and political conceptions related to the scientific, industrial and technological complex.

Here we can already ask some provocative questions. To what extent Habermas's proposition of a critical science, committed to the emancipation of the excluded, is less bioethical than Potter's survival science [15], or Schramm's [16] bioethics of protection, which is primarily concerned about the socially vulnerable? Wouldn't Marcuse's concept of unidimensionality substantiate in bioethics a reflection on the uncritical position of doctors and researchers regarding the problems of the production of new drugs? Wouldn't these subjectivities unidimensionally colonised by the understanding that all industrial production is governed by the laws of the free market, which is why there are few manifestations of doctors and researchers as to the social responsibility of the industry to produce medicines directed to health priorities?

One could question whether the unidimensionality of medical rationality would be the responsible for the belief that every new technological production represents scientific innovation and, seeing the low distribution among doctors and pharmacists of studies demonstrating that innovations in pharmaceutical drugs represent only 3% to 14% of the total production [17,18], or by the lack of systematic reviews proving that clinical trials produced by the industry give four times more positive results than independent trials [19].

The sociology of science is born at the heart of the development of an even broader discipline:

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the sociology of knowledge. Karl Mannheim [20], one of its pioneering authors, produced his major works between 1930 and 1950. He considered that regardless of the category of knowledge (including categories resulting from the natural and exact sciences), production would be invariably defined in the context of a certain existential and historical experience. Therefore, it is not possible to achieve it by an a-historical and universal reason, as the heirs of the Enlightenment tradition, including the positivists, wanted.

The sociology of knowledge proposed to itself a set of theoretical and research tasks that included: 1) investigation of the relations between thought and action; 2) interpretation of non-theoretical factors that determine or condition knowledge; 3) description of intellectual perspectives, at various historical moments, on the social conditioning of knowledge; 4) identification of the social segments that make up the intellectual strata dedicated to a particular issue [10].

In a way, the fulfilment of these tasks would also contribute to analyse possible ethical conflicts in scientific and health practices. Thus, for example, the first one would allow us to understand how the stigmas of race and the pathologising of sexual diversity, present in the rationality of health professionals, are materialised in discriminatory actions in research and health care. The second would allow reflecting on how economic interests have guided the construction of medical knowledge centred on hypermedicalisation; the third, the investigation of the ideological and political connections that determine the hegemony of some bioethics theories. Finally, the fourth one would allow to understand the organisation of the intellectual strata that dominate the decisions in councils and commissions, of public or governmental character, responsible for the regulation of scientific practices.

The American sociologist Robert Merton [21] is perhaps the first thinker to distinguish sociology of science from this broader spectrum of sociology of knowledge. His proposition initially criticises the conceptual deficiency about the term "knowledge" with which Mannheim intended to define the universe of action of the new discipline.

For Merton, it was a concept so broad that it could not distinguish popular sayings from scientific satements, and thus he made scathing criticism of what he called the radical relativism of Mannheim's sociology of knowledge, for which every form of thought necessarily arises from a conception without logical foundation. According to the author, this presupposition would make it impossible to develop and apply any criterion of truth that could be universally accepted.

From this cristicism, Merton suggests a theoretical-conceptual framework capable of distinguishing science from other forms of knowledge while at the same time steering its objectives and methods towards socially responsible practices. Such a framework should, in the author's own words, constitute a scientific ethos, task that can also be attributed to bioethics.

Merton also studied the scientific community as a distinct social group, investigating its way of seeking resources, political-ideological associations, system of prestige among peers, etc. From this perspective, he presents a set of principles that would contribute to making scientific practices more relevant and accepted: 1) universalism: the technical and ethical evaluation of scientific works must meet universal criteria; 2) skepticism: the researcher must be free of prejudices not to reach wrong conclusions about the results when analysing data; 3) disinterest: the scientist should not be moved by any interest other than the expansion of human knowledge and 4) communism: the knowledge generated by scientific research are common heritage of humanity and not private property of individuals or groups.

Irrespective of the controversies between the sociology of knowledge and the functionalist perspective of Merton's principles, it is easy to identify the "bioethical" character of both propositions. The principle of universalism could, for example, substantiate the discussion on the practice of randomised, double-blind, placebo-controlled trials; the principle of disinterest could be used to reflect about ever-closer financial relationships between industry and clinical researchers; and the "principle of communism" that condemns patents for life-saving medicines and the private custody of scientific information useful to communities.

The quarrel between Merton and Mannheim will practically define the two broader lines of theoretical development of the sociology of science: the rationalist empiricist, for which science has its own distinctive and somewhat superior status to seek knowledge, and the non-rationalist, relativist, which understands science as a discursive way of describing reality conditioned by its social environment, as any other cultural production such as religion or art.

It is interesting to note the similarities between the historical moment and the motivations that determined the development of the sociology

of science and the emergence of bioethics. Both events occurred in the 1970s, motivated by ethical, social and political challenges presented by scientific and technological advances, especially the greater economic pressure on the interests of science and the emergence of public and governmental spaces for the regulation of scientific practices, which conferred to new social actors, not belonging to the scientific community, power to influence decisions.

A contemporary current of major importance emerges in this period and is still one of the most cited and discussed today. It is the "Strong Programme in the Sociology of Scientific Knowledge", developed by the Edinburgh School, which is associated with British sociologist David Bloor [22], a researcher who influenced several constructivists. The strong programme attempted to reestablish the place of sociology of science within the sociology of knowledge and therefore turned its attention to some of the assumptions developed by Durkheim and Mannheim.

Durkheim uses the notion of the relation between social and cognitive order, that is, the understanding that human cognition itself, the way in which rationality is organised, is socially defined. This, consequently, implies the impossibility of universal rationalities. This idea is shared by Mannheim, of whom the strong programme also borrows the proposal to study the association between the behaviour patterns of a certain knowledge-holding group and the ideas that this group forms of itself and of the society that surrounds it.

The strong programme also intends to overcome the functionalist perspective of Merton that dominated the discipline, according to which the sociology of science should devote itself to understanding the functioning of contemporary scientific institutions and their social role, leaving the study of the scope, structure of scientific knowledge as a task exclusive to the philosophy of science. The strong programme refutes this functionalist understanding that scientific knowledge, including the "hard sciences" (exact and natural), is structured in the cognitive process of scientific rationality and is not influenced by social contexts. The "strong" designation refers precisely to this change in attitude to address cognitive issues in the hard sciences.

Thus, what the programme recommends, in final analysis, is that scientific knowledge should be subjected to the same analytical sociological processes which are used to analyse the structures of religions and ideologies. One of the first conclusions from this proposition is that science, since it provides socially acceptable representation on the creation and functioning of nature and it structures its practice in a system of beliefs in universal truths, would tend to be involved by a "sacred aura" which would influence both the way scientists act and the social respectability of their practices. This explains the capacity for transcendence and resistance of science and its power to define everything that is not of its scope.

A theoretical exploration of this "sacredness" of science and the belief in the methods and statements derived from scientific dogmas as producers of truths, can support studies on how health professionals analyse clinical trial papers to incorporate diagnostic and therapeutic technological products into their practices.

It should be noted that health professionals no longer control the methodologies and complex statistical calculations involved in these trials and that the pharmaceutical and biotechnology industries do not publicly disclose raw data from which these calculations were made. In addition, there is a systematic obstruction to the dissemination of negative results, and the uncritical consideration that the information contained in articles and advertisement material produced by the pharmaceutical industry are true, reflecting the attitude of belief, characteristic of the process of sacralisation of the scientific communication.

As we shall see below, the four principles established by the strong programme to investigate scientific practices could also serve as the basis for several studies on ethical implications in the generation, testing and incorporation of new technologies.

There are four principles: 1) chance: explanatory theories about the influence of social contexts on scientific knowledge must be based on causal investigation, even if it recognises the action of non-social causes in this process; 2) impartiality: both the results considered true and those that have proved false can support explanatory theories; 3) symmetry: the explanatory patterns must be the same for errors and for correctness; and 4) flexibility: explanatory theories must be applied to sociology itself [23].

The constructivist current of sociology of science gets its name because it also refutes the notion that scientific statements are accurate descriptions of reality resulting from the correct application of research methods. In fact, it understands them as representative constructs of reality that achieve legitimacy, both by the practical applicability of its results and by a complex negotiation network

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involving the relation of its investigations and results with political, economic and social interests [10].

Three main approaches characterise constructivism: 1) ethnographic methods of anthropology applied to the laboratory, which objective is to extract from the daily life of the researchers the understanding of how the scientific statements are constructed and the facts that derive from them (Bruno Latour [24] is one of its main representatives ); 2) understanding of the "expanded scientific community" with the notion of socio technical networks and the actor-network relationship being central to this approach (besides Latour, it had a great contribution by Michel Callon [25]); 3) the approach based on the concept of transepistemic arenas of research (by Karin Knorr-Cetina) [26], which criticises approaches that consider the scientific community as a closed unit of epistemic practice. In this view it is emphasised that scientific practices are defined in arenas of confluence and dispute of different knowledge, since the circumstances that involve the scientific production are traversed by relations with external actors and transcend the places traditionally determined to build knowledge.

It seems clear that the ethnographic approach of pharmaceutical laboratories or groups responsible for clinical trials could generate interesting studies in descriptive ethics regarding, for example, the researchers' conceptions of the influence of the process of ethical review of research in the production of knowledge. In the same sense, bioethics studies based on the notion of socio technical networks or transepistemic arenas could be interesting to analyse decisions about the production and use of new technologies by National Commissions of Research Ethics, *Biosafety* Technical Commissions or Ministerial Commissions of Technological Incorporation.

Finally, the last current presented here is the one developed by the structuralist sociologist Pierre Bourdieu, one of the most studied and debated authors of today, despite the many controversies between his propositions and the constructivist currents presented, whose description would surpass the purposes of this essay.

Bourdieu associates himself with the pioneering perspective of Mannheim, considering that he refutes the empiricist idea that scientific development occurs through the true ideas that science discovers [27]. He is not concerned with studying the internal validity of the ways of verifying the effectiveness of scientific products or the empirical-cognitive rigor of methods, but rather the social use that scientists make of their theories and methods, and the processes by which authorities are established in scientific communities and the application of the information generated. It is from this position that Bourdieu develops his already celebrated concepts of field and *habitus*.

*Field*, according to Bourdieu, is a delimited social space that has a certain degree of autonomy, formed by typical social agents that are in dispute for the directives that guide the operation of the field itself. Thus, in relation to to the scientific area, the theoretical and methodological elements that guide the correct way of doing research are not derived from a reason, as a pure attribute of the human mind, devoid of historicity, but from symbolic disputes within that field. Now, the concept of habitus represents inherited and learned systematisations within the area that determine the ways of perceiving, reflecting and acting of its members.

In this way, the object of Bourdieu's sociology of science is the apparatus formed by the institutions of development and control, the commissions and university authorities that guide the formation and pressure scientists, determining, in addition to research interests, the criteria of competence and prestige of its members. In his lecture "The Social Uses of Science," Bourdieu [28] demonstrates, for example, how the rewards and recognition system works within the scientific community, and how the sometimes hidden internal rules of the field exist to favour individuals who already have more power within it.

Of course, the applicability of these ideas and concepts in bioethics studies that investigate how power games involving the production and publication of papers in academic areas bring ethical implications to scientific integrity. Some examples: studies directed to the perception of the agents of a given field on the contextual conditions that stimulate the falsification of data to obtain expected results; studies on the *habitus* of assigning coauthors to incumbent professors or chief laboratory officers in publications for which they have not produced a single line, thus confirming the existence of "hidden rules" favouring those who already have more power in the area; investigations on the formation of "cartels" in scientific journals, revealing the priority links with some research groups for the acceptability of articles; analyses of the ethical dimensions of the work of the promotion agencies in the attribution of symbolic values that structure a system of rewards and recognition among members of the academic community, a process in which the exaggerated valuation of the production of papers

is highlighted, to the detriment of the production of books or the quality of other activities, such as extension projects and research orientation.

## Final considerations

The brief description of some of the most important classical currents of the sociology of science was intended to open the discussion of the endogenous form with which the field of knowledge is based. Considering that the way of understanding bioethics by Latin American school implies a much broader field of action than that of hegemonic models, this should therefore require more careful foundation.

The relevance of ideas and concepts is defended in order to present the necessary justification, regardless of the fact that many of the currents presented have conflicting perspectives. Thus, of course, the referential choices will be made hermeneutically and will be dependent on the theoretical-ideological affiliations of the bioethical actors who use them.

It was not possible, because of the restricted space of an essay, to describe many other relevant approaches to the sociology of knowledge and science, as well as some relevant perspectives from authors more closely related to the philosophy of science, such as Thomas Kuhn and Karl Popper, who had great influence on the theoretical production in sociology of science. Nor have we discussed the work of some major national authors, such as Simon Schwartzman [29] or Michelangelo Trigueiro [30].

Another critical point may be the absence here of the perspectives associated with the epistemologies of the south and the postcolonial studies as well as the continuity that they gave to the sociology of knowledge, since they are perspectives originated in our local context and are interwoven in the discussion on sociopolitical and cultural games in relation to the production of knowledge.

However, given the counter-hegemonic nature of these formulations, the understanding of their proposals would require a more extensive and focused presentation and discussion, especially of their central criticisms of the concepts of reason and rationality forged in the European modernity and used by all the classical currents of sociology of science, which would not fit the purpose of this essay.

There is as yet no specific study on the contextual influences that have determined the trend towards endogeny in bioethics, but using some of the assumptions presented here, it would be possible to attribute this endogeny to two main causes. First, to the fact that bioethics has developed into a community of biologists and physicians in full professional activity, accustomed to discussions in moral philosophy limited to the deontological perspective of regulation of their practices and distant from the lexicon and systems of thought proper to the social and human sciences. Proof of this is the fact that the theoretical models of bioethics that are best structured and disseminated are those of ethical deliberation for the solution of biomedical and clinical conflicts, whose foundation is based on classic currents of moral philosophy.

The second cause would be the cloistering of the agents of this new field, determined by the need to legitimise it in the academic environment as a new specific discipline that, together with being a recent field, gives to its the pioneer members (of greater power) the privilege of continuing to carry on scientific production within their areas of intellectual comfort.

The tendency for theoretical-methodological isolation remains after all these years since the landing of bioethics on the southern hemisphere of the planet, despite the fact that regional perspectives have achieved greater international recognition, reaching different perspectives that have been called “social bioethics”. As a concrete example, it is enough to analyse the programmatic contents of our post graduation courses and the actors who have been part of the thematic discussions in our congresses in recent years. For all that has already been discussed in this essay, it can be concluded that disputes against bioethical endogeny need to be fought both at the epistemic level and, above all, at the political-institutional level.

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