The impact of the Cabanis reform on the historical formation of the Argentine university and on higher education in health

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ABSTRACT In this essay, we seek to evaluate the impact of the Cabanis reform on the configuration of the health education model that became hegemonic in Argentina. First, we analyze the restructuring of the French educational system triggered by the revolution of 1789, primarily in its political and institutional dimensions. Second, we briefly discuss the process of the social, ideological and institutional reconstruction of the health system in post-revolutionary France. Third, we introduce the Cabanis reform, a proposal for medical education based on professionalism, disciplinarity and specialization that resulted in a higher education system without universities, looking into its main curricular and pedagogical aspects. Finally, we evaluate the sequence of events and processes that, throughout the 19th century, with strong Cabanisian influence through the Idéologie, shaped both the principal features of teaching health and medicine and the higher education model based on faculties currently predominant in the Argentine Republic.

KEY WORDS Health education; History of Medicine; French Revolution; Argentina.

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RESUMEN En este ensayo, proponemos evaluar el impacto de la reforma Cabanis en la configuración del modelo de formación en salud que se hizo hegemónico en Argentina. Primero, analizamos la reestructuración del sistema educacional francés desencadenada por la revolución de 1789, principalmente en sus dimensiones político-institucionales. Segundo, discutimos brevemente el proceso de reconstrucción social, ideológica e institucional del sistema de salud en la Francia postrevolucionaria. Tercero, introducimos la reforma Cabanis, propuesta de enseñanza médica basada en profesionalismo, disciplinario y especialización que resultó en un sistema de enseñanza superior sin universidades, e indagamos en torno a sus principales aspectos curriculares y pedagógicos. Finalmente evaluamos la secuencia de eventos y procesos que, durante todo el siglo XIX, con fuerte gravitación cabanisiana a través de la Idéologie, conformaron los rasgos principales tanto de la enseñanza de la salud y de la medicina como del modelo de educación superior basado en facultades que actualmente predomina en la República Argentina.

PALABRAS CLAVES Educación en Salud; Historia de la Medicina; Revolución Francesa; Argentina.
INTRODUCTION

Between the 17th and 18th centuries, a model of higher vocational education took hold in the entire Western world. Its mission was to train professionals capable of managing the affairs of the modern absolutist State. In the history of ideas, this period was a time in which the institutions called universities became more conservative and resisted science, heavily influenced by religious power. Paradoxically, this was so despite the great advancements made in scientific knowledge around the world. In the context of the profound economic and political transformations brought on by the emergence of a new mode of production, the rise of formerly subaltern social classes, and the appearance of new forms of government, these now secular institutions of knowledge faced a series of crises with respect to their identity and to their social ends. When the National Assembly abolished French universities, the French Revolution produced a radical political solution to this crisis in a moment of great political turbulence and rapid social change. In contrast, the German solution to overcome the crisis, along with the later Anglo-Saxon one, implied an active return to the original principles of the university as a strategic political concept, with the creation of the model of research universities with Humboldt’s reforms after 1810.

As detailed in the *rapports* of Mirabeau and Condorcet, the restructuring of the educational system in post-revolutionary France was profoundly influenced by the philosophy and political work of Pierre-Jean-Georges Cabanis [1757-1808]. Modeled on the *Idéologie* and put in place by the Napoleonic reforms, the French public school system emerged as a paradigm for other nations under the powerful cultural influence of France throughout the 19th century. With the end of the model of universities as training grounds for leaders of the aristocratic Nation-State ensured by the French Revolution and Bonaparte’s educational reforms, a realignment process initiated in the respective models of higher education in the entirety of the cultural space under French intellectual influence, primarily in Southern Europe and countries that had recently cast off the yoke of colonialism.

In the case of Latin America, Gregorio Weinberg has distinguished the Hispanic model of colonial education policy from the Lusitanic model. According to Weinberg, Spanish colonization promoted the founding of universities as a strategy for political and religious control of their vast territory, which was subdivided into numerous provinces that were very distant and different from one another. This policy was substantially different from that of Portuguese colonization. However, it was not necessarily less effective, considering that Brazil – the geopolitical unit of its principal colony – was able to impose a rigid ideological and intellectual monopoly by prohibiting the press and higher education for three centuries. To the extent that they are representative of two different versions of the Mediterranean model of higher education adapted to different post-colonial contexts, two countries merit special attention: Brazil and Argentina.

As the situation of Brazil is analyzed elsewhere, in this essay we attempt to evaluate the historical roots of the model of health education that became hegemonic in Argentina. In order to do so, we first analyze the restructuring of the French educational system triggered by the revolution of 1789, primarily in its political and institutional dimensions. Secondly, we briefly discuss the process of social, ideological, and institutional reconstruction of the health system in post-revolutionary France. Third, we introduce the Cabanis reform, a proposal for medical education based on professionalism, disciplinarity, and specialization that resulted in a higher education system without universities, and we examine its main curricular and pedagogical aspects. Finally, we evaluate the sequence of events and processes that – throughout the 19th century and with strong Cabanisian influence vis-a-vis the *Idéologie* – shaped both the principal features of teaching health and medicine and the model of
higher education based on faculties currently predominant in the Argentine Republic.

BACKGROUND

Prior to the French Revolution of 1789, the rule of monarchy was considered divine, educational institutions were the dominion of the Roman Catholic Church, and religion was the ultimate goal of education. In one of its first deliberative acts, the National Assembly took radical action on education policy by putting an end to the clergy’s dominion over education and by abolishing universities. Rather than institutions of learning at the service of an alienated and dilettante aristocracy, the young republic would need efficient networks of public bodies for the political, technical, and professional education of free citizens. In this context, higher education based on prestigious and centralized institutions and composed of an intellectual elite directly linked to royal power, was criticized for its anachronic scholastic tradition and its indifference to (or even resistance to) the advance of modern science.

Education reform and the Idéologie

In 1790, the National Convention established a Comité d'instruction publique [Committee of Public Instruction] to coordinate the re-ordering of education in France. Its primary political priority was to reduce religious influence in the education of citizens. As an initial result of this work, the French Constitution passed in 1791 included education as a right for all, guaranteed by “public instruction for all citizens.” In 1792, the Marquis of Condorcet [1743-1794] submitted a plan for reorganizing the education system to the National Assembly, guided by the principles of the French Revolution. He included an appendix with a proposed budget and a study of the plan’s viability, along with a draft of a legislative decree that carefully detailed everything from a common curricular base to programs for scholarships to promote retention and student mobility. The level of detail evidences the collective nature of this project. Despite all of this, and even though it was presented in the name of the Comité, the proposal was rejected.

With the turbulent policies of the Reign of Terror coming to an end in 1794 and giving way to greater institutional stability, the revolutionary government was finally able to prioritize education reform. François Daunou [1761-1840] wrote a proposal for an organic law on public education, which was submitted to the Convention in October 1795 and later passed. A centralized, partially public model of education was proposed for the entire country, which involved the opening of central secondary schools that included public libraries, botanical gardens, and natural history museums. Despite reorganization efforts, the quality of public education in post-revolutionary France remained poor, and this increasingly alarming situation exposed the failures of a centralizing and focal education policy.

In 1796, Cabanis and his friend Destutt de Tracy [1754-1836] encouraged the association of a group of young thinkers that came to be known as the Ideologues [les Idéologues]. Anticipating the contemporary notion of “cognitive democracy,” the Ideologues put forth the idea that there could only be social progress with intellectual equality for all people by way of wide-reaching access to knowledge through a liberating education. They considered public instruction to be a vital part of a republic founded on the principles of individual liberty and equality, in which all citizens enjoyed adequate fulfillment of their rights and duties, along with the full ability to participate in deliberative processes, the evaluation of political leaders, and the judgement of political representativeness. A new politics, likewise, would require a science founded on revolutionary epistemology, a true “science of methods” that would imply a logic of modes of thought and a physiology of psychic systems. This nuova scienza was first outlined in Destutt de Tracy’s ambitious compendium synthesizing philosophy,
grammar, and logic, along with the development of a moral science based on medicine. Cabanis made a decisive contribution to the advancement of this sensualist and naturalist perspective with an original treatment of the Cartesian mind-body dualism in his work *Science de l’homme*.(12,13) As he proposed approaching complex social interactions from a biomedical perspective, Cabanis did not attempt to reduce the physical to an organic determination of life, just as he did not reduce the moral to a judicial-legal apparatus that would convert it into a normativity of life. From this perspective – not to be limited to the simple study of human physiology and historical inquiry on norms and laws – the “moral point of view” must be understood in a broad sense, far from common sense and moralism or morality.(14)

The *Idéologie* posits that humans are oriented towards *perfectibilité* – a term coined by Jean-Jacques Rousseau [1712-1778] to denote the tendency to search for perfection, something innately shared by all people.(14) This is both natural and cultural, in the sense that constant it entails a constant perfecting both as individuals and as a species (in the lexicon of the times, the term race is used) both in physical and moral aspects. The first of these aspects has to do with evolution of inherited individual capacities, in a clear Lamarckian sense. According to Staum,(15) Cabanis anticipated some ideas and was clearly influenced by his contemporary Jean-Baptiste de Lamarck [1744-1829], known for his theory of the evolution of species by genetic transmission of acquired characteristics, disseminated in 1809.

The inheritance of acquired characteristics meant that human beings would be able to transform their own nature such that, after several generations, “it is no longer […] the same men, or the same race of men, that exist;” social, moral, and political progress would produce great distances among individuals with “equal primitive dispositions.”(12) The second of these aspects refers to the social determination of human perfectibility, made possible by universal education policies, explaining his interest in public education reform.(14)

**Vicq-d’Azyr, Fourcroy, and the reform of the medical profession**

At that time of emergent industrial capitalism, the panorama of French healthcare services was characterized by extreme inequality and social segregation.(6,16,17) People living in poverty had access to healthcare services offered by barber surgeons and pharmacists who would pass through the fairs of the country’s interior performing minor surgeries, reducing fractures, extracting teeth, and dispensing medicine (generally phytotherapeutic). Managed by religious orders, hospitals were places where the dying were received, although they also operated as lodging for travelers and vagabonds, or as insane asylums. In many cases, they served as political prisons, and few were actually dedicated to healing and caring for the sick.(17,18) In this context, clinical physicians (called “physicists”) or surgeons attended to the nobility, providing questionably effective healthcare services with limited coverage to the members of aristocratic courts. In the 18th century, a process of gradual expansion, strengthening, and legitimation of the “corporate medical community” began; this community was defined as a “complex tripartite ensemble of physicians, surgeons, and apothecaries grouped into various legally recognized collectives.”(17)

In 1790, the surgeon Félix Vicq-d’Azyr presented a new plan for the organization of the medical profession in France to the National Assembly.(19) The hallmark of this plan was the definitive unification of Medicine and Surgery – separate since the Middle Ages – meaning that hospitals would need to have *salles d’autopsie* and all deaths would have to be confirmed by accredited anatomists. In dialogue with medical education, he proposed that all knowledge related to diseases and their treatment, not just physiology, should be subordinated to anatomy. In this way, he established on the one hand a practical connection among clinical practice, pathology, and anatomy, and on the other, the importance of comparative anatomy in natural history. Unfortunately, Vicq-d’Azyr did not survive the Reign of Terror and was
unable to complete his contribution to medical reform.\textsuperscript{19}

In 1792, Antoine de Fourcroy – physician and intellectual heir to Vicq-d’Azyr – presented the Convention with a proposal for a higher education system based on the “free teaching of science and the arts,” with a focus on health. He proposed a total restructuring of medical education based on the concept of “medicine in freedom,” substituting medical schools with écoles de santé tasked with training officiers de santé.\textsuperscript{20} Pharmaceutical Chemistry and Public Administration would be essential subjects for an efficient and well-rounded professional training. With respect to its pedagogical aspects, he anticipated an integral perspective in medical training, replacing outdated, lecture-based instruction with practical didactics in the laboratory, based on experimental demonstration. With widespread support of the Revolution’s leaders, the d’Azyr-Fourcroy Plan was passed in February 1794, and was extended to two provincial schools of health in Montpellier and Strasbourg.\textsuperscript{20,21}

The first école de santé, established in Paris, had three classes of full-time students (officiers de santé, chirurgiens, médecins), in addition to auditors (auditeurs libres).\textsuperscript{22} Each student’s class was defined by public examinations, each with a different content: anatomy, operations and remedies, and surgical-medical matters, if the objective was to graduate in Surgery; and anatomy and physiology, medical field, natural history of internal and external disease if the candidate was applying for the Degree in Medicine.\textsuperscript{22} The length of the training varied: three years for an officier de santé, four for a chirurgien, and five for a médecin. For graduates who intended to follow the medical profession, in addition to passing their examinations, they needed to write and defend a thèse de doctorat.

The title of officier de santé – a key element of the proposal – emphasized the practical notion of a positive conception of health, and it is possible that it was initially well-accepted because it helped to move beyond the traditional distinction between physicians and surgeons. The institutional format reproduced military organization – with its uniforms and career hierarchies – which in theory would facilitate its social acceptance during wartime. At the turn of the century, after being in operation for three years, the écoles de santé already had 4,027 registered students, 406 of whom were preparing their theses (thésards) for the Degree in Medicine.\textsuperscript{23} Concretely, the d’Azyr-Fourcroy Plan suffered strategic setbacks that compromised its viability, primarily due to the development of a corporative professional education model organically articulated with the republican political network.\textsuperscript{23}

In 1789, Cabanis presented a projet de résolution to the Council of Five Hundred for the organization of the medical profession and health care, based on a theory of political economy that justified substantial interventions in the burgeoning social network of health services.\textsuperscript{24} Rather than controlling the market or social control, the Republic should organize and provide legislative measures and means of State control with the objective of regulating the production and usage of these processes and products, above all in strategic social spaces such as those that housed medical practices. To move forward with these measures, he proposed two solutions: official certification of the professional army and the recognition of officiers de santé, practical professionals trained during a time of a critical lack of physicians.\textsuperscript{24} Foucault\textsuperscript{18} notes that Cabanis’ proposal was later rejected. Nonetheless, the 1802 regulation of medical practice, put in place by the Napoleonic Consulate and in effect for a half century, incorporated practically all of Cabanis’ propositions. At this moment, pioneeringly, State authority was established along with the concept of illegal practice of the profession, in that any citizen practicing medicine who did not have a license to do so would be punished by fines or a prison sentence.\textsuperscript{18}

Once the failure of the d’Azyr-Fourcroy Plan was evident, an opportunity was opened for the resurgence of the Faculties, supported by empowered societies and corporations which were now independent and free of the centralized control of academies. Taking advantage of his political position in the Council of Five Hundred and later in the Senate,
Cabanis emerged as the most prominent intellectual cadre in this process.\(^{(25)}\)

**THE CABANIS REFORM**

As a general plan, the Cabanis Reform incorporated partial propositions, all of which were transitory in nature, and was simultaneously laden with political significance and a clear practical bias. In political terms, it articulated different reform movements targeting public instruction and the organization of health care that had been devised in the post-revolutionary period, inspired by Cartesian rationalism and its divisions. On one hand, he advocated for a public network of free education at all levels with universal access, which in the realm of higher education would be composed of a great diversity of isolated and specialized organs of professional education. On the other hand, he proposed moving past the notion of university both as a concept and as a coordinating organism, outlining a decentralized institutional structure based on isolated faculties and schools.

As a pragmatic project – synthesized in the *Coup d’oeil sur les révolutions et réforme de la Médecine*\(^{(13)}\) – the Cabanis Reform is expressed in concrete proposals regarding different dimensions and stages of reform of the medical profession and medical education. It comprises five structural elements: a) professional qualification through academic certification; b) a particular mode of institutional organization; c) the redefinition of secular spaces of teaching and learning; d) a new curricular structure; and e) an innovative pedagogic philosophy. Below we will examine each of these points.

**Professional qualification through academic certification**

Initially focusing on medical practice, the Cabanis Reform introduced the concept of “license,” a means off legally authorizing professional practice. The authorization of medical-surgical practice, via the certification granted by accredited institutions of higher education, would allow for greater State control over a crucial arena of civic life necessary to modernize work relations and to protect the health of the populace. Under this arrangement, institutions of higher education had the responsibility of conferring diplomas that would be formally recognized as valid and therefore qualifying for professional practice. The function of regulatory instrument given to the medical diploma was rapidly extended to other professions that implied on one hand civic responsibility and social relevance, and on the other access to labor markets with priority economic impact and greater accumulation of political capital.\(^{(18)}\)

**A particular mode of institutional organization**

Medical education should be carried out in independent units, with as much autonomy as possible from the regulatory State and the centralized university organism with respect to the pedagogic aspects of academic practice and the coordination of training activities. In the model of higher education devised by Cabanis, students would be admitted directly to the faculties or medical schools. In terms of internal structure, the faculties would be organized according to a *cathedra* [professorship/chair] system, defined as the productive unit of the institution, academically and administratively managed by a single intellectual leader capable of mastering all of the knowledge on a particular area (the “chair”). The profile of professional competencies defined by this model comprised diagnostic practices based on semiology, oriented by naturalist scientific knowledge, confirmed by therapeutic responses and anatomic-clinical correlations.

**The redefinition of secular spaces of teaching and learning**

In order to modernize the model of education for health professionals, it was necessary to
redefine spaces of learning to adapt them to a new clinical practice based on systematic nosological knowledge. This was accomplished through the process of secularizing hospitals, which were transformed into healthcare institutions. Therefore, rather than the master-apprentice relationship that was characteristic of an essentially artisanal clinical training model centered around accompanying private physicians on house calls, the Cabanis Reform made it obligatory for professional medical education to take place in hospitals with the invention of the “internship” (internat des hôpitaux), which would later evolve into the modern concept of medical residence. With the unification of Medicine and Surgery, the installation of operating theaters was encouraged, as well as the salles d’autopsie extolled by Vicq-d’Azyr.

A new curricular structure

In the new curricular structure, knowledge was broken down into its essential parts: the disciplines (the cognitive dimension) and the concept of cathedra (the institutional-organizational dimension). In this sense, a discipline was comprised of the body of knowledge and knowhow which could only be accessed by the disciples of the chair of the cathedra. Regarding the operative knowledge of medical knowhow – the original focus of the Cabanis Reform – regarding the curricula, the disciplines should be grouped as follows: natural history (basic sciences), materia medica (clinical and therapeutic sciences), and moral sciences. Additionally, and fundamentally linked to the incorporation of experimental surgical practice, training in human medicine needed to be articulated with education in veterinary medicine. The primary consequence of this model of disciplinary curricular organization with respect to the modes of health care was the fragmentation of practice (initially surgical and later clinical) into medical specialties.

An innovative pedagogic philosophy

The Cabanis Reform implied an innovative pedagogic strategy, which Cabanis called the “analytical method of teaching,” which paralleled the rational analysis of the Ideologues. Scientific knowledge was only valid if it was decomposed and recomposed in Cartesian linear order, from the most simple matter to the most complex, in an act of exhaustiveness typical of encyclopedism. Therefore, analytical pedagogy corresponded to fragmentation, analysis, and the later ordering of content units, modes of practice, and above all memorized, stored, codified, and classified knowledge in accordance with prevailing scientific doctrine. This would require overcoming the model of rhetorical pedagogy, with the corresponding abandonment of Latin as a technical language, codified as an element of differentiation and elitization of professional corporations.

The Cabanis Reform and the Idéologie

The Cabanis Reform came into being at the intersection of clinical practice, politics, and didactics; it also implied a critical change in the pedagogic strategies involved in the formation of the healthcare field, due to the systematic fragmentation of both the education process and the object of teaching-learning. The resulting educational model was based on an apologetics of disciplinarity as a mode of organizing and cataloging human knowledge into a rational and systematic structure. In that spirit, it had the intention of contributing to a new pedagogy necessary for reforming medical education, which was vital to the sustainability of the revolution undertaken in France’s healthcare systems. Therefore, the Cabanis Reform was integrated into the Ideologues’ project of creating a new epistemology for a new paradigm of politically engaged science that favored human progress, on the cusp of the Enlightenment in early Modernity.
between an ideological structure (in the sense of the Ideologues) founded on basic scientific disciplines for medical education and a context of specialized and exclusive professional practice. The primary consequence of this process, at least in the sphere of influence of the French model of education, was the hegemony of fragmented disciplinary training at universities that – while being institutions of science, arts, and culture in a broad and integrated perspective – turned into vocational institutions that promoted specialized technical training vital to the new mode of production based on mass industrial manufacturing. A first hypothesis attributes the emergence of professional specialization to academic differentiation, with the occurrence of subdivisions between scientific disciplines.\(^{26}\) Weisz\(^{27}\) posits an inverse tendency: specialization began in Paris between 1830 and 1850, above all in the professional health field, in the process of accommodation among spaces of professional training, determined by a labor market that was competitive from the start, and therefore led to the consolidation of specialized curricular trajectories.

The spread of the Cabanis model

In just six years, between 1794 and 1800, the ideas, solutions, and actions that made up the Cabanis Reform were put into practice, first with the reorganization of the Faculty of Medicine of Paris, with the active participation of Cabanis and his contemporaries.\(^{18,25}\) In fact, the reform of medical education acted as a model for the entire higher education system in France, which at that time was structured as a network of isolated institutions, such as the École Polytechnique and the École Normale Superieur, which were external to the university system and had the objective of attending to the exigencies of the Industrial Revolution and the demand for leadership in the State bureaucracy.\(^{6,7,28}\) This new arrangement would be consist of higher education dominated by new, legitimized professions and controlled by the bourgeois State, without losing the appeal of the academic tradition, which to a certain extent had been prohibited and would later be rapidly restored by the Consulate and the Empire. The Cabanis Reform put medical schools into place that enjoyed a great deal of autonomy and had the capacity to independently define its norms, disciplines, and courses, effectively displacing the university as the institutional cornerstone of higher education in the emergent social order of capitalism at the dawn of Modernity.\(^{25}\)

Extending this to the health field, the Cabanis Reform was incorporated into the Napoleonic education reform that set the institutional bases for the higher education system installed in France during the 19th century.\(^{25}\) At that time, books, journals, collections, and scientific and philosophical treatises produced in France were exported and later translated to other languages. The work of Cabanis and his reforms were no exception, having been widely disseminated all over Europe from the beginning of the 19th century. The Coup d’oeil, for example, was translated into English and published two years after its first edition. Its first Spanish translation was published in Madrid in 1820, with the title *Compendio histórico de las revoluciones y reforma de la Medicina.*\(^{29}\)

THE PRESENCE OF CABANIS IN ARGENTINA

In 1623, in the Governorate of Río de la Plata and Paraguay – the Spanish colony that after gaining its independence would first become the United Provinces of the Río de la Plata and a posteriori the Argentine Republic – the Papal States authorized the creation of the University of Córdoba at the Colegio Máximo of the Society of Jesus in the city of Córdoba, the center of the Tucumán Governorate. Taking the University of Salamanca as its institutional model, late medieval scholastics as its doctrinal reference, and the Ratio Studiorum as its pedagogical muse, the University of Córdoba was the leading institution of higher
education in the Río de la Plata region for almost two centuries. With the founding of the first *cathedra* of Civil Law in 1791, this house of learning was re-founded in 1808, although it maintained its canonical curricular structure and continued the teaching of Theology, even after the expulsion of the Jesuits by the Spanish Crown in 1767.

In July 1816, on the eve of independence of the United Provinces of the Río de la Plata, three institutions of higher education were founded in the capital city of Buenos Aires, thereby ending the educational monopoly of the Society of Jesus: the Military Medical Institute, the Academy of Mathematics, and the Academy of Jurisprudence. In August 1821, a decree of the provincial government of Buenos Aires created the University of Buenos Aires as the entity that would coordinate and supervise education in the Province of Buenos Aires, with the cleric Antonio Sáenz acting as its primary proponent and first rector.

The installation of a university in Buenos Aires was closely linked to the construction of a stable political regime that formed in 1821 based on the articulation between *porteña* elites and emergent rural sectors in the Province of Buenos Aires, an association usually referred to as the Rivadavia Group or the Rivadavia Movement. The Rivadavia Group was forged through highly ambivalent identities constituted at two levels: one, the members of the recently created legislature and the Ministry of Government held by Bernardino Rivadavia; the other, which included more broadly defined sectors that adhered to a logic of faction politics or circle politics.

During the administration of Governor Martín Rodríguez, an unfamiliar iteration of the public realm appeared: the republican and representative form of government, based on new institutional mechanisms. In the Province of Buenos Aires (unlike the rest of the Provinces) a system was informally consolidated for the legislative branch, as well as a mechanism for the selection of its members. The electoral law passed in 1821 established the “universal” right to vote and incorporated the countryside of the Buenos Aires Province. The right to vote along with the new structure of direct election of deputies to the Hall of Representatives – the provincial legislature created in 1820 and tasked with designating the governor – led to a new conception of the relationship between those who governed and the governed.

Alongside the conformation of the political regime, Bernardino Rivadavia (the Minister of Government to Rodríguez) implemented a wide range of political, economic, ecclesiastical, educational, cultural, and military reforms. The overall objective of these reforms was to make a drastic break with inherited colonial structures and to “modernize” practices and political imaginaries. In this sense, it is clear how the Cabanis Reform was linked to the reform agenda advanced by Rivadavia that sought to shape a model of the citizen based on an “enlightened-republican” conception that was consistent with the new political order. In order to do so, the university appeared as a decisive space for the preparation of professionals and thinkers like Destutt de Tracy and Cabanis and their central references. As previously discussed, this was the Napoleonic model of imperial university, as described by Buchbinder:

The *porteña* institution of higher learning, founded by an initiative of Sáenz, administrated the entire education system that functioned within the provincial State – including basic education – and its creation should be understood within the framework of a wider agenda for promoting the public education system.

It quickly became clear that if the concept of the national flagship university was not even sustained in its country of origin after the fall of Emperor Napoleon I in 1815, there was no reason to introduce it in Buenos Aires. At that time, existing institutes and academies were incorporated into the new university, constituting a structure of *cathedras* organized into six departments that showed similarities with classical institutions of higher learning (Primary Education, Preparatory Studies, Medicine, Jurisprudence, and Sacred Sciences),...
with the addition of a Department of Exact Sciences. However, significant modifications were also introduced, such as the inclusion of new subjects and instructors. The most significant reforms took place in the Department of Preparatory Studies, where new professorships were created: Experimental Chemistry, led by Manuel Moreno (from April 1822 until March 1828); Experimental Physics, led by the Italian physician Pedro Carta Molina (from April 1826 until November 1827); and Ideology, led by the professor Juan Manuel Fernández de Agüero (from March 1822 until December 1823). Similarly, Avelino Díaz [1800-1831] – who had been trained at the Academy of Mathematics with Lanz and Semilosa – taught the two-year long course on Physics-Mathematics after 1821.

The Idéologie at the University of Buenos Aires

It should be noted that an important foundation for the dissemination of the Idéologie in Buenos Aires was the personal relationship that had developed at the time between Destutt de Tracy and Rivadavia. Several letters attest to this exchange, which can be traced back to a prior personal meeting that was the product of the time Rivadavia spent in France (two periods, from 1814-1820 and from 1824-1825).

The majority of the letters have been translated and edited by Ricardo Picirrilli. Others, which have not been edited or translated, were housed at the Mitre Museum of the Argentine Republic. In one of these letters, Destutt de Tracy writes to Rivadavia: “To tell the truth, it makes a beautiful institution to have a Political Economy cathedra and another of Ideology. Regarding the latter, it would please me greatly if my work could be of some use, should no better arise” (Letter to Bernardino Rivadavia from Destutt de Tracy, Paris, November 18, 1822; Mitre Museum Collection of Correspondences of Argentine Public Figures, ref. 1C22C16, Number 1, Page 15925).

Another means of dissemination was the press: this is evident in a number of records and references that appeared in periodicals of the time, such as El Centinela (1822), La Abeja Argentina (1822-1823), El Argos de Buenos Aires y Avisador Mercantil (1824), and El Correo Político y Mercantil de las Provincias Unidas del Río de la Plata (1827).

In that process, a number of intriguing indications demonstrate the intense and surprising presence of French Ideologues, particularly in the professorships at the young university.

Logic, Metaphysics, and Rhetoric was the first cathedra created at the University of Buenos Aires. Its founder, the priest Juan Manuel Fernández de Agüero [1772-1840], a Spanish cleric, defended the unusual combination of scholastic philosophy and the sensualist materialism of Condillac in his work Principios de ideología elemental abstractiva y oratoria (published in 1824). Upon assuming his duties at the university, he renamed his course the cathedra of Ideology, broadening its scope to include a wide range of areas of study in the Humanities (from philosophy, ethics, and logic to history, political economy, and philology), thereby disseminating the thought of both Destutt de Tracy and of Cabanis. Fernández de Agüero closely aligns himself with Destutt de Tracy and Cabanis when he posits:

Therefore, the physical and the moral are confused in their origin, or to put it differently, the moral is nothing other than the physical considered under certain, more particular points of view. Based on this understanding, it would be sufficient to observe that life is a fabric of movements carried out based on impressions received by different organs; and that operations of the spirit or of the soul are equally the result of movements executed by the cerebral organ; and their alterations of impressions received and communicated by sensory extremities of nerves in different places, or excited by this organ by means that appear to operate directly over it.

One impetus for the renewal of de Tracy’s thought was the inclusion of ideology in zoology. In fact, the subordination of Idéologie
as a branch of Zoology allowed for the creation of a preexisting framework for arguing one of the most pivotal elements of his theory: that no qualitative distinction could be made between humankind and the animal realm. Destutt de Tracy holds:

One can only achieve an incomplete knowledge of an animal, as one is unable to comprehend its intellectual capabilities. Ideology is part of Zoology, and it is above all in mankind that this part holds importance and should be further detailed.\textsuperscript{[11]}

Fernández de Agüero indicates that one should “listen to the physiologists and abandon the theologians.”\textsuperscript{[37]} For these and other reasons, the rector Sáenz initiated a number of judicial proceedings – both administrative and ecclesiastical instances – against Fernández de Agüero, accused of scandalous and heretical practices.\textsuperscript{[38]}

The uncertainty surrounding the conclusion of the war with Brazil, the pressure exerted by new rural sectors over the acquisition of positions in public service, the opposition of reactionary sectors to the changes that were implemented (such as those regarding the clergy and the armed forces), the reaction of the Provinces to the Unitarian-leaning Constitution of 1826, among other issues, all led to the fall of the Rivadavia administration in 1827. In Buenos Aires, Manuel Dorrego was chosen as Governor and the principles of federalism were introduced into the provincial landscape. Nonetheless, he was rapidly deposed by the invasion carried out by Unitarian general Juan Lavalle. The death of Dorrego at the hands of Lavalle gave way to a political crisis that allowed the rise of Juan Manuel de Rosas to the provincial governorship.

The principal characteristics of the Rosista political system included continuity in the executive and the centralization of power. Under Rosas’ regime, Argentine society became increasingly polarized according to the level of acceptance or rejection of the administration. It should be noted, however, that the republican and representative structure introduced by Rivadavia’s reforms was not dismantled, but was rather reordered.\textsuperscript{[39]} Therefore, during Rosas’ first and second terms as Governor, the active participation of popular sectors could be observed along with high levels of politicization of society at large.\textsuperscript{[40]} The constant belligerence with respect to the efforts of the opposition combined with the wars waged against foreign powers created a situation of constant political instability.\textsuperscript{[41]}

The academic and intellectual life of the period was circumscribed by these particular circumstances. The politicization of society combined with the internal and external wars during this period had a significant impact on the porteña university, which became a backdrop for multiple divisions, conflicts, and disputing opinions. It should be noted that the institution continued to operate, but at a limited scale given the scarcity of students, factional pressures, resignations and termination of professors, and the lack of government funding.\textsuperscript{[30]} Despite this institutional precariousness, the insights of the Idéologie continued to spread to classrooms under the influence of Diego Alcorta, the physician who would take over the Idéologie professorship from 1828 to 1842.

Cabanis, Alcorta, and medical education

In 1827, Diego Alcorta received the degree of Doctor of Medicine upon completing his training with a thesis titled \textit{Disertación sobre la manía aguda} [Dissertation on acute mania], considered to be the first locally-authored scientific text in the field of psychiatry. This work was strongly influenced by Pinel and Cabanis, especially by their respective studies on the articulations between nosology, physiology, and pathology and on mind-body relations.\textsuperscript{[42]} Similar to Cabanis, Alcorta held that organs attribute sensations to objects – and therefore produce human ideas and feelings – and understood that moral or mental disorders were the product of alterations...
in organs.\(^{(12)}\) In this sense, he posited that “in a large number of comparative dissections it has been discovered that their disorders often entail alterations in moral faculties.”\(^{(43)}\)

To the schematics of sensations that Fernández de Agüero derived from Destutt de Tracy, Alcorta incorporated Cabanis’ contributions, contending that: “each of the stages of life is accompanied by a particular development of some of the intellectual capabilities, as well as certain interior feelings that originate from the current state of the organ systems.”\(^{(43)}\) In this sense, he also held that “any excessively strong impression, whether physical or moral, can lead to mania; however, an individual predisposition is necessary, which can be either inherent or caused by one’s upbringing, age, lifestyle, sex, etc.”\(^{(43)}\) A subject’s organ functions with respect to their behavior is thereby articulated in the following way: mental disorders intersect with moral and physical aspects at the same level.\(^{(12)}\) Alcorta also produced a guide for the recitation of his classes titled \textit{Lecciones de filosofía} [Lessons in Philosophy], published in 1835.\(^{(44)}\) He divided this text in three parts: Logic, Metaphysics, and Rhetoric. Central concepts taken from Cabanis can be identified throughout the \textit{Lecciones}.

Regarding medical education, instruction at the Department of Medical Sciences began in 1822 with a four-year curricular program, which was to be implemented by three professors: Medical Institutions with Juan Antonio Fernández; Surgical Institutions with Cosme Francisco Argerich; and Clinical Medicine and Surgery with Francisco de Paula Rivero. This combination of \textit{cathedras} demonstrates the extent to which a closer union of medicine and surgery was the objective, following the model proposed by Cabanis. Early plans for the curricular program were broader, but economic problems made it necessary to trim it down (in the National General Archive of the Argentine Republic, Room X, Tribunal of Medicine, file 6-2-2, two such plans are present: one with seven professorships, and another that would have lasted six years, involved eighteen subjects, and a yearlong practical course on dissection). Nevertheless, an important advancement was made: in 1822 the Department of Medicine inaugurated its first anatomical theater. It should be noted that an anatomical theater is a spaced designed specifically for demonstrations and teaching purposes. There, dissections were carried out in which a plant, an animal, or a human body was divided into parts in order to examine it and study its organs. The first anatomical theater was constructed in 1594 at the University of Padua.\(^{(45)}\)

Once the course of medical training had been programmed and the process towards the establishment of a licensed medical career with a degree in higher education had initiated, it was necessary to better direct and control the activity of physicians regarding their legal, official, and institutional practices. To that end, the Tribunal of Medicine was formed; its attributes and obligations are detailed in the regulation known as the “Improvement of Medicine,” dated April 9, 1822 (General Archive of the Nation, Room X, Tribunal of Medicine, file 6-2-2). Of the regulation’s ten articles, the first two were dedicated to specifying its functions, which were similar to those of the previous tribunal. In effect, it would be responsible for establishing preventive measures in cases of contagions or infections, for inspecting facilities that provided care, and for recommending physicians for different establishments. Additionally, it was to maintain a registry of degrees conferred to keep record of all of the revalidations that were granted. The Tribunal was not only authorized to deliver verdicts to judges in cases of legal medicine, but was also able to act as judge in cases of abuse, medical malpractice, and folk medicine. The control functions exercised by the Tribunal of Medicine did not only encompass decrees and regulations, but they were also effective in controlling and ordering professional practices; in this sense, an anonymous English traveler\(^{(46)}\) observed the existence of “a scientific body, recently created, that examines the conditions of local physicians, with questions that would put even Asclepius on the spot.”

Physicians provided their approval and collaboration with this dynamic regarding
the appropriation of ideas surrounding health and disease, as they found it to be an effective means of promotion. It is not surprising that the burgeoning medical profession in the Rio de la Plata region directed its attention to the knowledge of the *Idéologie*. It offered on the one hand a physiological theory that connected the functions of both body and mind, and on the other a means of gaining legitimacy as a modern science without the interference of ecclesiastical intervention in the matter. The exploration of this problem revealed the growing influence of physicians in the porteño cultural sphere. By the 1830s, medicine came to be seen as a scientific, academic, and professional activity, and its modernization – which implied distancing itself from its more “superstitious” variety of colonial times – was closely related to the spread of *Idéologie* thought in Buenos Aires, and in particular the ideas of Cabanis.

For over a decade, from 1824 to 1835, that pioneering and particular departmental system was able to expand. This resulted in the proliferation of professorships that were highly fragmented, often showing a great deal of overlap and embroiled in fierce territorial disputes, leading to a series of crises. In this process, the demand for higher education diminished, evasion grew, and the Department of Sacred Sciences was almost entirely deactivated due to a lack of enrollment and the Department of Exact Sciences was divided into three areas: Pure Mathematics, Applied Mathematics, and Natural History. These crises continued to worsen until 1852, and culminated with a mass exodus of professors from the Department of Medicine, intending to construct an autonomous Medical School. The newly reformed institution had decentralized governance and an organizational structure composed of five faculties: Humanities and Philosophy, Law and Social Sciences, Medical Sciences (reinstating the Faculty of Medicine), Physical and Natural Sciences, and Mathematics. The immediate effects of the reform have been discussed by Buchbinder:

The university was therefore no longer seen as a Unitarian institution and was transformed into what could be described as a federation of faculties. The aforementioned administrative order set the stage for a new system of governance at the institution, which would last until the early years of the following century. It established that the governing body of the institution would be a Superior Council headed by the rector and would count among its members the deans and two delegates representing each of the faculties. Therefore, responsible academies would now govern universities, in addition to establishing their internal regulations and courses of study.

**Diversity at the Argentine university**

It was not until March of 1874 that the University of Buenos Aires was restored by means of an administrative order issued by the provincial executive, thanks to the intensive political labor of rector Juan María Gutierrez. The newly reformed institution had decentralized governance and an organizational structure composed of five faculties: Humanities and Philosophy, Law and Social Sciences, Medical Sciences (reinstating the Faculty of Medicine), Physical and Natural Sciences, and Mathematics. The immediate effects of the reform have been discussed by Buchbinder:

Based on a legislative bill proposed by Senator Joaquin Gonzalez, the Congress of the Argentine Republic ratified the creation of the National University of La Plata, a small provincial university that had been founded in 1897 in the Province of Buenos Aires. Gonzalez was named its first rector in 1906. The objective of this new university was to “train educators for schools and colleges, scientists for the development of the sciences and industries, and philosophers for the guidance of the Republic.” Its institutional plan was modeled on the Anglo-Saxon system of colleges, following the examples of Oxford and Cambridge, and the Humboldtian model from Germany, with museums, laboratories, and observatories for advanced training in the sciences. It possessed a National College that admitted all of its new students into a course of general studies, some taking residence in campus dorms. Specific scientific
and professional training was provided in courses of university study offered by five large schools: Natural Sciences; Physical, Mathematical, and Astronomical Sciences; Agronomy and Veterinary; Social and Legal Sciences; and Education Sciences. In its first two decades of operations, the National University of La Plata enjoyed the political, institutional, and financial support that allowed it to become an internationally-renowned institution. This was due in large part to the political and intellectual leadership of Senator Gonzalez, who was able to take full advantage of a period of economic development that was based on the exportation of meats and their byproducts.

In contrast to the situation of other Argentine universities of the time, the beginnings of this particular university have been described by Buchbinder:[30]

Academic exchange with European university centers formed another basis for the policy implemented by the institution. [...] A number of European and North American scientists and academics were invited to visit the university and to give courses and conferences.

An extension program included systematic visits by the general public to its libraries, museums, and laboratories, the presence of its professors at primary and secondary schools, an ambitious editorial policy, and above all a plan for public conferences that would be led by special guests alongside the institution’s authorities and professors.

In practice, the Gonzalez Plan suffered setbacks, institutional defeats, and all manners of sabotage due to the reaction of a corporative professional and academic system articulated with national political circumstances. Despite the fact that it put into practice a model for reforming higher education, given its immediate effectiveness and political viability, it was not adopted at any other university outside of the Province.

The philosopher and psychiatrist Alejandro Korn, a critical intellectual of Argentine cultural history, considered that this model of university was a project destined for failure because it was an attempt at an institutional transplant carried out by a generation of “university positivists” imposed upon a context of colonized development, revealing “a disconnect between the University and the national culture.”[47] It has been suggested that shortly after its establishment the National University of La Plata had transformed into a poor fix for the older university located just an hour away. Buchbinder adds:[30]

Therefore, Argentina’s situation at the beginning of the 20th century was somewhat perplexing: it simultaneously possessed a medieval university, a Humboldtian university, and a Napoleonic non-university. In fact, each of its principal institutions of higher learning represented one of the models of higher education that had been established throughout Western history: the University of Cordoba (arcane, medieval, religious, dogmatic); the University of Buenos Aires (Napoleonic, secular, professionalizing, liberal); the National University of La Plata (scientific, vocational, Humboldtian, articulated with the productive system, at the very least as a project).[30,31] In 1918, students at the University of Cordoba – with the support of a small number of faculty members – initiated a general strike that transformed into a societal rebellion against the pedagogical rigidity and academic anachronism, in favor of a university with greater institutional autonomy, participation, and more broadly-defined system of governance.[48] The severe political repression that followed – which was met with the resistance of the university
community and the solidarity of other politically mobilized social groups – gave way to a profound crisis of authority that could only be resolved through academic changes and political concessions in the entire Argentine university system.

The University Reform of 1918 was heralded as a noteworthy political framework in the history of Latin American education. However, today it can be assessed more critically as the active (albeit untimely) incorporation of democratic, secular values of the Bourgeois revolutions of the turn of the 19th century. This occurred alongside the ascendance of an organic middle class, product of the model of national development underway at the beginning of the 20th century. (3) This reform reinforced the hegemony of the model established by the University of Buenos Aires, heavily influenced by the Idéologie in its beginnings, and in its implementation dedicated to professional training at the expense of an academic, scientific education. (30,31) It should not be forgotten that the university had a minimal role in this system, given that it granted a great deal of power and autonomy to the faculties that trained liberal professionals, in particular Medicine and Law.

FINAL COMMENTS

Undoubtedly, Georges Cabanis was a man of his times, and held political viewpoints that would today be considered conservative. Nevertheless, the Cabanis Reform was revolutionary for its time, over two centuries ago. In effect, Cabanis was one of the most influential intellectual and political leaders active in the aftermath of the advancements of the French Revolution of 1789, as part of the process of recuperating the values of the European Mediterranean cultural tradition. He adopted a pragmatic politics during the reconstruction of France, aligning himself with the moderates under the post-revolutionary regime. However, he later adopted a valiantly critical stance, positioning himself as part of the disenchanted opposition to Napoleonic authoritarianism. (10,14,15) Nonetheless, the model of education conceived by Cabanis and the other members of the Autueil Circle was completely absorbed by Napoleonic educational reform, which formed the basis for the system of higher education established in France over the course of the 19th century, extending it further than the limited sphere of higher education in health. The demonstration of how a sectorial reform of health education was able to lead to deeper changes in higher education as a whole does not only apply to post-revolutionary France. One century later, the reform of medical education carried out by Flexner in the United States resulted in an overhaul of the country’s university system. (49)

The initial examination of the process of construction of the dominant model of higher education in Argentina presented above reveals the organic presence of indirect effects of the Cabanis Reform. The question that must be considered, therefore, is not whether the origins of Latin American higher education in health can be traced to the French model of education, but the degree to which it is a result of this historical process, mediated by the gravitation between Idéologie (Argentina) and positivism (Brazil). The assessment of the hypothesis that Latin American universities retain traces of the Cabanis Reform involves verifying the concrete and effective presence of a number of structural elements in establishments, programs, and courses of study. These include: (i) professional university; (ii) structured in faculties; (iii) interventionist training; (iv) discipline-oriented; (v) system of linear progression; (vi) analytical pedagogy; (vii) segregated by profession; (viii) tending toward specialization.

A relevant and opportune program for systematic research could include the verification of the continued presence of these elements at the majority of universities in other Latin American countries. Without a doubt, case studies on the institutionalization of higher education and medical training directly or indirectly influenced by French culture have produced volumes of knowledge and information with little systematization,
and awaits a methodical, systematic organization and analysis. Nonetheless, in order to appreciate the sociopolitical and institutional dimension of this, it would be most appropriate to conduct comparative analyses of organizational structures and the regulatory framework of institutions of higher education, with the objective of producing a typology capable of capturing the different formats that the Cabanis Reform took on in different cultural, geopolitical, and historical contexts.

Lastly, we also consider the following hypothesis to be plausible and robust: Latin American universities (in particular Argentine universities), apart from their underlying and often overlooked Cabanisian roots, still remain tied to the Bonapartist Restoration after all these years. If this were indeed so, the Latin American context would prove to be an intriguing case (perhaps even a historical enigma) as it would reveal the continuation of different varieties of a model of higher education (geopolitically referenced – French, liberal, bourgeois – and ideologically dated, precapitalistic) that to a large extent was abandoned in its European origins. An understanding of this supposed anachronism, however partial or limited, may reveal the contradictions of Latin American universities, in their organic articulation with political and institutional processes tending toward the reproduction of economic inequalities and social inequities, only made possible by the complicity and active involvement of institutions of higher education in the countries of the region.

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