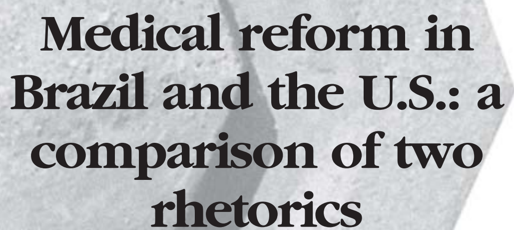

Medical reform in Brazil and the U.S.: a comparison of two rhetorics

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The article examines the genesis of the medical education model proposed by A. Flexner in the United States and compares it with Antonio da Silva Mello's 1930s proposal to apply the German university model to Brazilian medical teaching. The heart of these medical reforms—which sought to introduce the teaching of biomedicine and to boost the esteem of the scientific career—did not depend solely on these two reformers' perfect understanding of the bases of the new model. Each rhetoric expressed a political arrangement wherein any expectations for change in the consolidated educational system depended upon its power structure and upon traditional career expectations.

KEYWORDS: medical education; history; history of medicine; Flexner reform; scientific culture.

Amy Kemp

The Center for Evaluation and Education Policy
509 E. Third Street
Bloomington, IN 47401 USA
(812)855-1074
amkemp@indiana.edu

Flavio Coelho Edler

Researcher at COC/Fiocruz
edler@coc.fiocruz.br

Introduction

English Translation:
Diane Grosklaus

The passage from medicine to modern biomedicine was achieved through Flexner's reforms. This is a common assertion in the history of Brazilian medicine.[1] The statement may indeed be true, in the more general sense that for a brief time Flexner was, in the U.S., the self-proclaimed leader of a movement to reform medical teaching that would later earn him public recognition. Flexner, who was not a physician, had no original ideas about the teaching of medicine (see Starr, pp. 118-20; Wheatley, p. xii). His reforms relied on forces and ideas already present in medical teaching in the U.S. and Germany, but not very often were they put into practice as he hoped (Starr, pp. 121 and 355; Wheatley, pp. 197-9). At the same time, Flexner was a talented administrator—that is to say, a skillful manipulator of organized power. U.S. medical reforms might prove to be a model or ideal for other countries, but the key elements of any such efforts—to wit, to win solid support for these ideas and implement the steps necessary to achieve desired ends—would have to be re-negotiated within every national context. This was what occurred in Brazil, for example, when the Rockefeller Foundation offered to finance construction of the Faculdade de Medicina de São Paulo (Kemp, 2004).

The situation in Brazil was no less complex than the one where Flexner worked in the U.S. In the early twentieth century, medical teaching in Brazil was inarguably shifting much closer towards a university or laboratory pattern. So it is not hard to find people in Brazil who, like Flexner in the U.S., were fighting for similar ideas.

Any analysis of this change in Brazil must take into account the fact that in the early twentieth century and even before, Brazil boasted a rich, complex medical tradition that could not easily be changed at the whim of external forces.[2] Studies that exaggerate the shaping role of guidelines dictated by centers of innovation—like French, German, and U.S. medical institutions, successively—end up minimizing the role of local medical collectivities in interpreting, selecting, and tailoring these models.

For this reason we argue that the crux of medical reforms depended not only on changing physicians' understanding of what would constitute good medicine but rather on transforming the consolidated educational system in terms of its power structure and traditional career expectations. We must therefore investigate the ideas implemented at Brazilian medical schools while bearing in mind the conflicts that arose within each context.

A complete analysis of changes in Brazilian medicine in the early twentieth century lies beyond the scope of this article. We will limit our discussion to the arguments of two reformers:

[1] See, for example, Lacaz, 1999; Marinho, 1993, 1999, 2001; Marsiglia, 1995.

[2] See, for example, Benchimol, 1990a, 1990b; Edler, 1992, 1996, 1999; Ferreira, 1989, 1996; Teixeira, 1994, 2001.

Abraham Flexner, in the U.S., and Antonio da Silva Mello, Brazilian reformer, physician, and professor. Our point is not to show that Silva Mello was Brazil's Flexner; to the contrary, the purpose of our article is to make it clear that Brazilian physicians were familiar with the currents of world and German medicine and, just like Flexner, sought to incorporate many of their features on a selective basis.

Many of Silva Mello's and Flexner's arguments are amazingly similar. But we should state from the outset that Silva Mello, like other leaders in the Brazilian medical field who came before him, was just as critical of the liberality and lack of regulations in U.S. medical education as was Flexner. Silva Mello thus represents a current within Brazilian medicine that wanted to update and adjust contemporary ideas on medical training. He was no puppet of Flexner's ideas. He was a physician who had studied in Germany, like Flexner, and had returned home enthralled with that country's forms and precepts. Silva Mello, also like Flexner, had a thorough understanding of the context of which he was part and of the forces against him. By comparing the rhetoric of both reformers, we can, in the first place, see that German medical reforms were spreading around the world without Flexner's help and that, in the second, these ideas gained quite different forms in the various countries where they came ashore.

European models of medicine and education

In the first half of the nineteenth century, the state of the art in medical education followed the French model,[3] while the influence of German medical and educational traditions gained ground in the latter half of that century. The French anatomical-clinical model relied on teaching through hospital work and research, specialized in the technical observation of the human body. Without a doubt, research and close observation were an integral part of the French model, but the way in which this model combined research and practice differed from the German model. As Bonner states:

> French studies of anatomy and pathological condition, aided by the new technology of monitoring internal sounds, developed swiftly in the post-Napoleonic clinic, whereas those sciences dependent on closely studying healthy organisms and making use of animal experiments, notably physiology, were pursued independently in special scientific institutes that often had little connection with a clinic or a school of medicine. The post-revolutionary cleavage of hospital from academic authority seemed to make inevitable a growing split in France between theoretical and practical science (Bonner, 1995, p. 144).

[3] Many of the innovations and tendencies that seem to have originated in the German universities after 1870 were already present in the French post-revolutionary scientific tradition. Even the secularized nature of teaching and the professional focus of the scientific career could already be found in the first decades of the nineteenth century, when France was the center of science. Around the 1860s, however, sharp complaints about French scientific institutions intensified, while admiration was growing over advances achieved by research schools at German universities. Any interpretation of Brazilian medical history would be incomplete without an understanding of the French influence. Further on this, see Ben-David, 1984; Crosland, 1975; Edler, 1992, 1999; Maulitz, 1993.

To bring medical practice and the emerging areas of experimental research together under a new orientation, medical education had to be newly organized as well. After all, since the late nineteenth century, research models could not be separated from the systems of higher education of which they were an integral part.

The model of anatomical-clinical education thus benefited from the close relation between two institutions: hospitals and medical schools. The former afforded a broad research field right at the patient's bedside, in addition to anatomical amphitheaters. Schools could train their students in different diagnostic and treatment techniques, and offer their faculty a diversified field for clinical research. This pattern's success hampered implementation of the German model of medical research, with its penchant for the laboratory, hierarchy, specialization in the emerging areas of experimental disciplines, and the combination of many areas of research in training a doctor.

Like many of the French innovations in the first half of the nineteenth century, German innovations in medical education and its organization were not imported or exported in their entirety. Some of the ideas and techniques then in vogue were: making research a feasible career, independent of personal wealth or rich patrons; a corresponding desire to merit status and recognition for following a scientific career rather than one of the traditional professions; an autonomous educational system, where new research paths could be followed; and the prime importance of laboratory research (Ben-David, pp. 111-24).

What the literature has not emphasized, however, is that there were as many problems with the German system of medical education as with the French. Ben-David noted some of the tensions that surfaced in the late nineteenth century. He called attention to an aspect important to our argument, that is, one of the contradictions that jeopardized the training of students, both those called to the practice of medicine and those pursuing a scientific career. According to this author:

> Those who were to become research workers acquired their specialized knowledge and skills informally as assistants working with professors in the research institutes, usually attached to the chairs, where they had the benefits of doing serious research and of contact with a number of more advanced assistants. The uncompromising level of the degree course was more than the student who did not intend to enter research could usefully assimilate, yet it was not enough for those who wished to enter a professional research career. The training of the latter remained informal. Its main shortcoming was that it was difficult for the student to acquire an all-round training in his field, because he worked with a single teacher. This system also created a situation of dependence on a

> teacher who often behaved in a highly arbitrary and authoritarian manner, and it gave rise to feelings of insecurity among those who aspired to a research career. As long as the student was not appointed to a university chair, he remained an assistant in a bureaucratic framework with little independent professional standing, even if he was an advanced research worker performing important tasks in research as well as in the training of beginners.
>
> For the American and British (and perhaps other foreign) students who went to Germany, all these shortcomings were not obvious (Ben-David, 1984, p. 140).

He contended:

> One of the results of this misconception was that when American or British scholars returned to their countries advocating the adoption of the German pattern, they did not make any distinction between the chair and the institute. Although they knew that the German professors personally acted in a very hierarchic manner, they were unaware of the structural counterpart. They did not see how different the departmental structure was from the combination of chair and institute that they admired and thought they were establishing in their own universities. Nonetheless, the departmental structure eliminated the anomaly whereby a single professor represented a whole field, while all the specializations within that field were practiced only by members of research institutes who were merely assistants to the professor (Ben-David, p. 141).

In this article, our underlying premise is that the medical educational models that guided the behavior of the reformers were expressions of certain political arrangements, whether in the context where they originated or in the context to which they later expanded. Mentioned so often in the rhetoric of reformers, such models are idealizations that must be reinterpreted when applied to concrete cases and that gain new significance and specific contents when they interact with each institutional structure.

In his work, Warner analyzes the import and implementation of European medical models in the context of the nineteenth-century U.S. and shows how different aspects of the French anatomical-clinical model were constructed and mobilized by the medical elites to safeguard existing structures from the onslaught of reforms during the Jacksonian period (Warner, 1992), which opposed professional privileges. The author stresses that with the appearance of the German model in the late nineteenth century, practicing doctors—in alliance with those who had contributed to the construction of their careers, anchored in French precepts and practices—began resisting the new generation's attacks. Imbued with a spirit of confidence in renewal and an interest in specialization, the new proponents of experimental medicine tried

to employ German laboratory knowledge to achieve their entrance into the medical elite. Along these lines, in his analysis of the U.S. importation of the German university model, Veysey points to the same epistemological and generational conflict that Warner had noted in medical education. He argued:

> Hardly had its creation become the goal of foreign-inspired dreams—centered in particular upon Germany—when its early leaders began, with an almost instinctive skill, to move the infant institution onto more familiar paths. [...] But the basic pattern of the university, as it clearly revealed itself soon after 1890, was that of a success-oriented enterprise whose less popular possibilities were deliberately blurred in the words and actions of its leading spokesmen. As more Americans began to accept the new institution, occasions for a measured appraisal of the move toward standardization and assimilation grew fewer and fewer (Veysey, p. 439).

Veysey thus suggests that in the struggle to legitimize and establish these new forms, subtleties often got lost in the midst of rhetoric. A good example were the categorizations and illusions created by Abraham Flexner in his fight to introduce the German style of medical education and the correlate Johns Hopkins style into higher education in the U.S. This is the message that they say was spread around the world. If, however, we take a close look at the evolution of his ideas, we will see that they do not follow a linear path.

The rhetoric of reform

Some of Flexner's first statements on educational reform were against colleges, but they proposed a model of university education quite distinct from the one he himself would embrace later. Flexner stated in *The American college: a criticism* (1908):

> The classic curriculum went to pieces, because it had long since served its purpose. It cannot be put together again; the suggestion is utterly futile. An arbitrary discipline of the classical type is enforceable only where it has an adequate sanction in social regard, and a real point of discharge in the social organization. Men must believe in it; something must depend on it (Flexner, 1969, p. 18).

Here he suggests that the U.S. system of higher education that had ruled prior to the advent of the university was out of date mainly because it did not prepare students for viable careers. As a solution, he proposed a new model of a modern school, which became the model of Johns Hopkins University in his later writings:

> Now, by way of contrast, the modern college is impartial, catholic, democratic. Its concern is the whole field; its responsibility and duty to

> society at large, not to a certain section thereof. It embraces therefore all types of intellectual capacity, all the characteristic processes and activities of social expression and growth: science, industry, trade, laws, institutions are its objects not less worthily than art, literature, philosophy (Flexner, 1969, pp. 35-6).

In his earliest writings, Flexner in fact did not call for the German model. As Ben-David has shown, the German university did not support technical education or the establishment of new careers. Pure research was indeed professionalized but solely as a means of intellectual advancement in and of itself.

In his discourse at the beginning of his career, Flexner was thus not a proponent of specialized education, as he would later be. He often discussed and advocated changes in higher education, because this could help students in their development. For example, "the college is to develop the boy's power, harden his fiber, put an edge on his purpose, and inculcate a usable basis of fundamental knowledge" (Flexner, 1969, p. 161). He also did not agree that the educational system needed to cast aside the ideal of training good individuals in favor of the production of knowledge. He stated:

> It is inevitable that the more recent, vigorous, and clear-sighted department should encroach. The college is not sure of itself; the graduate department knows just what it wants. Hence graduate interests, ideals, methods have tended to prevail; and resources accumulated in the first place for the prosaic purpose of training boys have been diverted through uncongenial methods to alien ends (Flexner, 1969, p. 173).

> Our universities have in general assumed that whatever promoted the interest of the graduate school promoted in equal measure the interest of the college. This was a dangerous assumption (ibid., p. 179).

At the start of his career, his argument was that although colleges offered a new form of school organization, they should be more combative towards the powers of the university. Flexner believed that the training of young people for useful careers at colleges should not get lost in the mad quest for new research and university education. He suggested that research had consumed an unfair portion of the educational system's funds and allocated them to specialized teaching, removed from the interests of most students. He wrote:

> The way out lies, as I see it, through the vigorous reassertion of the priority of the college as such. The point of emphasis must be shifted back. There is the meat of the whole problem. Historically, Yale, Columbia, Harvard, Princeton are colleges. The B.A., not the Ph.D., is, and has always been, the college man. The college has been richly endowed. And it is the college, where a boy may be trained in seriousness of interest and mastery of power, that the nation pre-eminently needs.

> The graduate school is a late development: a proper beneficiary of the college surplus, if such there be, not the legitimate appropriator of the lion's share of its revenues (Flexner, 1969, pp. 216-7).

In a clear anticipation of his future stance, he was already expressing disapproval of the creation of 'new colleges' with poor admission standards, more concerned with commercial gains (1969, pp. 228-31). He reiterates this message at a conference before the Harvard School of Education in 1927. There, challenging the audience, he criticized the spreading of merely ornamental education that would deviate youth from an education focused on developing the capacity for intellectual effort (1927, p. 10).

Nearly twenty years after these first criticisms of colleges, a reversal could be noted in his discourse. Now there were scant references to expanding individual opportunities for U.S. youth; rather, he stressed the need to professionalize the scientific career. Flexner lamented the fact that in the U.S., unlike in other countries, professors and high-school teachers were treated like underlings, and not accorded the respect received elsewhere (1927, p. 12). Furthermore, he also declared that in the U.S., lawyers, doctors, and even businessmen were valued and well paid, which was not the case with those pursuing a university career (1927, p. 16). His proposed solution included full-time posts, good pay, bonuses on the basis of merit, and high standards for everyone:

> The great majority of the academic profession of the richest country on earth cannot live on their salaries, even when they have reached the top; they are part-timers. I cannot over-stress this statement: college and university teachers are largely part-timers. To their proper business of teaching and to the passion for research which inspires the best of them, they can devote only the time that is left after carrying on their academic routine and after earning through lectures, summer work, popular writing, translating, expert service, the sums which they may need to balance the family budget, and, worse still, to carry on their scholarly and scientific research (Flexner, 1927, pp. 31-2).

Far from being relevant only to U.S. academics in the early twentieth century, these issues of pay and esteem were common to groups around the world that were moving towards professionalization. Actually, many of these arguments were also raised by Silva Mello in *Problemas do ensino médico e de educação* (Issues in the teaching of medicine and in education), published in 1937.

After graduating from college in Rio de Janeiro in the 1910s, Silva Mello pursued further studies in Germany. He came back from this experience very excited about the significance and import of German medicine, which was concerned with an education

addressing 'concrete problems' and 'real practice'. For him, the training of Brazilian doctors was "detached from reality and centered on the memorization of minutiae" (pp. 17-22). He further stated that:

> Our Faculdade de Medicina [School of Medicine], in its churlish erudition, went so ridiculously far as to create, within the medical career—the most practical and objective of them all—a theoretical bachelor level, purely baccalaureate, produced in great numbers as off an assembly line, to eke out a living, not rarely almost like a poor wretch, and who, despite having studied much, does not know what he needs to know. The student who labors with the sole aim of passing his exam, and who should not have the right to exist, is a creation of this horrendous organization. But, like the graduate with a bachelor's degree in theory—and even worse than the latter, because he is responsible for his poor training—is the professor, unfortunately so common among us, who does not know his role in teaching and the true purpose of his courses. It is these professors who invent absurd programs, who lose any sense of the relativity of the disciplines they are teaching, who seem unaware of their purpose, the place they should occupy in the student's learning (Silva Mello, pp. 33-4).

Yet Silva Mello was not looking for doctors who had no interests outside medicine, as was Flexner's case in his first writings. Silva Mello was taking arms against what he believed to be the anachronistic forces of death: classic, detached knowledge. But he was likewise concerned about high-school education, about the cultural level of his nation's youth, and, unlike Flexner, advocated better cultural education for doctors:

> A doctor should not acquire scientific knowledge alone, or ponder solely his own culture. He also needs to be familiar with human troubles, to understand a person's suffering and needs, to feel them with love and empathy, to merit the respect and trust that they may deposit in him and that is one of the secrets of his efficacy (Silva Mello, p. 25).

Silva Mello did not want to train physicians who were "walking dictionaries" (p. 26), devoid of any musical or literary interests. Nevertheless, he strove to present arguments against what he deemed a failure in the Brazilian medical education of his day: the fact that medical education was *only* literary or a show of rhetoric. After remarking how wonderful it would be to find a doctor with broader interests and cultural talents, he declared:

> When this happens, the person accomplishes both tasks with equal dedication, answering to an inner imperative from which it would be hard to escape. This differs sharply from the tendency so common among us, whereby the person seems always and only to be playing to

> the crowd. What he typically lacks are the qualities of a physician, and neither can he be saved by the letters or the arts. This type of amphibian, which abounds among us, stands as one of the worst evils of our medicine and perhaps of our letters. So long as universities and academies are steered by such werewolves, of course we shall remain mired in the crassest vaingloriousness (Silva Mello, p. 248).

As we have seen, Silva Mello was not a follower or apologist of U.S. medical teaching prior to the Flexner reform. Concerned about the spreading of medical schools, guaranteed by freedom in teaching and by the federative principle, he declared that "where freedom in teaching led to the greatest monstrosities was in North America, where the most varied and unbelievable medical schools abounded" (Silva Mello, p. 35). In this regard, he was in full agreement with Flexner about the status of medical education in the U.S. prior to the Flexner reforms. Both were ardent defenders of the elite—a new kind of elite in their respective countries. Silva Mello stated:

> The number of persons who are embarking on academic careers today is far and above too great, although the vast majority lack the indispensable intellectual aptitudes. The result of this collective invasion has been the need for a reduction to the lowest common denominator, which has redounded in the training of astoundingly ignorant holders of bachelor degrees and graduates. Here among us, upon graduation most of them prove unable, for example, to write a letter without mistakes in Portuguese, although it is most plainly evident that any person who holds a university diploma should at the very least be expected to employ his native language correctly or properly. Nor do they know anything or hardly anything about art or literature; they read nothing but the news in daily papers and illustrated magazines; they are unable to converse about anything but moving pictures and entertainment; they worry about nothing but wearing apparel, the radio, dances, sports. Of course such persons, so barren and so boring from an intellectual standpoint, complain and consider the simplest studies excessive and extraordinarily difficult (Silva Mello, p. 77).

Or later on:

> The task of universities is not to draw on incapable, inferior persons, to educate them almost mandatorily at the cost of the nation's coffers, to provide them with a diploma that grants them advantages and special privileges in practical life. The population, which has no need of men adorned with titles or diplomas, has the right to demand that their money be invested in a fairer, more economical fashion. Holders of bachelor degrees far from bear the financial burden of their own studies, for each of them costs the country a high sum. It is also in this regard that we have the right to demand that public money be better invested: instead of distributing titles and diplomas to those who are incapable and inferior,

> whose schooling is already paid for in part by the nation and who almost always still need to live at the expense of the government afterwards, holding comfortable, generally well-paid sinecures, instead of this, what we need is to draw on the most capable, the most intelligent, the most studious, the most worthy, who should find ways of accomplishing their studies, always in accordance with their natural tendencies (Silva Mello, pp. 64-5).

The two reformers

Flexner's career in medical reform began when Henry S. Pritchett contracted him to write the report "Medical education in the United States and Canada" for the Carnegie Foundation. Wheatley says that Pritchett intended to use Flexner's report to reformulate medical education. But Flexner didn't stop there: he wanted to frame new structures for professional education. Wheatley states: "Flexner was more concerned with the production of conditions which would make possible the growth of learned disciplines in medicine. The supremacy of the university form was therefore critical" (pp. 46-53).

Flexner drew up plans and maps showing the number, location, and distribution of medical schools in Canada and the U.S. His new proposals were more about cutting schools than increasing their number. He was especially concerned with closing schools that he felt were "unnecessary and inadequate," and he openly affirmed that physicians, notably practitioners, lacked the "scientific spirit" needed to administrate medical education. In the work to reform the old system and build a new one, he clearly advocated a managerial elite, personified in himself (Wheatley, pp. 47-56).

Flexner's chance to become part of this 'managerial elite' came in 1912, when he was offered a permanent position with the Rockefeller-endowed General Education Board. From this post, he broadened his influence and control over U.S. educational institutions, with the support of Rockefeller funds. Wheatley says that "what is certain is that Flexner kept philanthropy in the vanguard of the American organizational revolution by helping to shift its focus from the development and support of institutions to the management of transinstitutional networks" (p. 57). Overall, Wheatley's work demonstrates the difficult reality of the alleged self-propagation of Flexner's ideas. As he suggests, in the early years of U.S. university reform, a small minority led the changes, initially endowed by the Rockefeller Foundation, without need for broader approval from society or the government (Wheatley; Veysey). This situation was markedly different from that encountered by Silva Mello in Brazil in the 1930s.[4] Furthermore,

[4] On the historical context, see Bomeny, 1999; Fonseca, et al., 2000; Hochman, et al., 1999; Lippi de Oliveira, et al., 1982; Pandolfi, 1999.

hard as a comparison may be, it can be argued that although the structures of French medicine had been partly adopted in the U.S., they were the backbone of the medical traditions and might established in Brazil at the time of the Empire.

The anatomical-clinical model, which propagated from Paris to the rest of the world around 1830, guided the whole of Brazilian medical institutions until the 1880s. Its epistemological precepts derived from the sensualism of the *ideologues*, while its clinical practice was grounded in instruments and inspection techniques, including physical examinations (feeling and listening), the stethoscope, medical statistics, systematic bedside teaching, pathological anatomy, and anatomical post-mortems. Out of it grew an entire system of professional authority supported by some institutions: the Academia Imperial de Medicina (Imperial Academy of Medicine), two medical schools, and the Junta Central de Higiene Pública (Central Board of Public Hygiene). However, around 1870, the Empire's key medical authorities began questioning this model as obsolete, resulting in the 1882 Sabóia Reform, of Germanic inspiration. In combination with the inauguration of new infirmaries with clinical sub-specialties, the laboratories that were subsequently set up (physiology, experimental pathology, histology, parasitology), along with their lab tables, microscopes, and crucibles, actualized the new ideal of free, practical teaching—banner of the reformers (Edler, 1992; Sodré, 1929; Magalhães, 1932).

Just as in the U.S., battles begun earlier in Europe reached Brazil later. However, in contrast with the situation described by Warner in the U.S., where French ideas were implemented only feebly and in part, they shaped teaching institutions in Brazil. Accordingly, this legacy would have greater weight here than in the U.S.

When Silva Mello's conclusions on medicine and education were published in 1937, the reforms modeled after the German model of medical teaching had already been underway in Brazil for at least 57 years. However, while many researchers and physicians were changing their ideas about the best science model, changing the structure of institutions deeply influenced by the anatomical-clinic model proved challenging. Silva Mello took this mission upon himself. A full professor who had political contacts with those in power, he made use of these when he tried to reform the country's most prestigious medical school, annexed to the Universidade do Brasil. He faced a situation quite different from that faced by Flexner, who had the support of the Rockefeller Foundation and who led the reforms without needing to negotiate with congress.

The rhetoric of the university

As evident from the work of the authors we have cited and from our references, the changes taking place in medicine in Europe and the New World far from constituted simple matters of fact or of science; they had a direct bearing on the boundaries of the academic world, calling into question existing disciplines, their jurisdictions, the criteria for defining their limits, and scientific authorities and their privileges. Yet in most cases distinctions were blurred by the rhetoric employed in these disputes, producing bipolar positions like 'French versus German medicine', or 'experimental medicine (focused on the laboratory) versus the clinical tradition (focused on hospital wards)'. For both Silva Mello and Flexner, all questions regarding the future of medical education and its progress could be found in one precise formulation, and the answer lay in the complete reform of the school system as a whole. For both men, this overall reform received the magic title of "university." Silva Mello, for example, stepped up to defend his university ideal quite early on in the discussion about medical education:

> We abuse the word University today, even writing it with a capital 'U', as certain spinsters abuse the word Love, as certain esthetes abuse the word Art: precisely because the university—its reality—is missing from our lives, as love is missing from the spinster's life, as art is missing from the life of the false highbrow whose parlor is filled with expensive paintings. A kind of compensation… A great abuse and a mystic use of the word and a nearly absolute absence of university reality, experience, and substance in our lives and in our culture (Silva Mello, p. 6).

Following his initial interest in the college and his confidence in it, Flexner also became an ardent proponent of the research university, which made him famous. In three lectures on universities presented at Oxford in 1928, he repeatedly voiced his classification of universities, referring to the German, English, and U.S. 'types'. His belligerence is made evident in this discourse when he ignores Oxford and Cambridge (as well as Yale and Harvard) as great teaching institutions. His later transformation from proponent of the college model (in 1908) to advocate of more specialized training for students is plain in the following declaration:

> I have not in mind the training of practical men, who, faced with responsibility for action, will do the best they can. That is not the task of the university (Flexner, 1930, p. 24).
>
> A modern university would then address itself whole-heartedly and unreservedly to the advancement of knowledge, the study of problems, from whatever source they come, and the training of men—all at the highest level of possible effort (Flexner, 1930, p. 24).

Silva Mello also used the ideal of the Germanic university as a weapon against mediocrity, which he saw in this light:

> We are fed up with hearing that the university problem is a problem of culture, which is meant to develop intelligence, refine mental faculties, prepare for the study and comprehension of all questions concerning man and nature. The university spirit should be characterized by the superior qualities of the human spirit in the intellectual and moral realms. [...] This, for example, was exactly the feeling recently conveyed by the speeches traded by Francisco Campos and Affonso Penna Junior, upon the occasion of the induction of the new rector of the Universidade do Distrito Federal. To create the University among us! But this has become a veritable obsession, which is spreading like mad throughout the country. [...] What we have here is perhaps merely the sweet naiveté of ignorance. We are often the victims of words, of illusions, of superstitions. We have in recent times been dominated by this idea of university and we believe that at its expense we can solve all our problems. We fail to realize that labels and names cannot magically create content, and that our endeavors can barely move beyond simple phraseology. It is not, in fact, by artificially transplanting into our midst ancient institutions from the old world that we will succeed in finding the precise path to solving our problems. What we lack, first of all, are elites, but real, capable, superior elites (Silva Mello, p. 187).

As Ben-David pointed out, the German model of medical education and research, as proposed by reformers like Silva Mello and Flexner, hardly resembled the true state of higher education in Germany. Flexner's statements about German education were generalizing and scant in specific examples. Silva Mello presented a portrait of French, English, and German medical education with broader nuances. But both men transformed the realities of Europe's systems and enmeshed them with the (political and educational) needs of their own countries.

The two reformers' statements on medical education inside and outside their respective countries should be read as political statements or ardent outcries in favor of reform. Both had used their time in Germany to good advantage and praised the intellectual atmosphere they had experienced there as visiting scholars. Both realized that the world was changing and felt they could provide a vision that would bring their respective nations in step with these new tendencies.

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