Teaching, research and extension at the Universidade Federal de Viçosa: origin and institutional trajectory (1926-1988)

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ABSTRACT

This article uses a historical analysis to focus on the trilogy of teaching, research and extension. Its purpose is to situate the trilogy's origin as an institutional practice in the particular context of the Universidade Federal de Viçosa (UFV) and contrast it with its constructed meaning in the national context, as a principle that currently guides Brazilian universities' quality standards. The historical approach adopted in this double analytical bias has made it possible to identify the distinction between the functionality of the trilogy, which is characterized by UFV's original institutional project inspired by land grant colleges, and the social and political significance that the trilogy has for Brazilian universities, starting from its affirmation as a constitutional principle in 1988.

KEYWORDS

teaching-research-extension; Universidade Federal de Viçosa; history of Brazilian universities.

ENSINO, PESQUISA E EXTENSÃO NA UNIVERSIDADE FEDERAL DE VIÇOSA: ORIGEM E TRAJETÓRIA INSTITUCIONAL (1926–1988)

RESUMO

Neste artigo, a trilogia ensino, pesquisa e extensão constitui o foco para o qual se direciona uma análise histórica, procurando situar sua gênese, enquanto prática institucional, no contexto particular da Universidade Federal de Viçosa (UFV) e em contraposição ao significado construído, no contexto nacional, como princípio que baliza atualmente o padrão de qualidade da universidade brasileira. A abordagem histórica feita nesse duplo viés analítico possibilitou identificar a distinção entre o sentido funcionalizado que orientou a trilogia que marca o projeto institucional de origem da UFV inspirado no modelo dos *land grant colleges* e o sentido social e político que a trilogia vem a significar para as universidades brasileiras a partir de sua afirmação como princípio constitucional desde de 1988.

PALAVRAS-CHAVE

ensino-pesquisa-extensão; Universidade Federal de Viçosa; história da universidade brasileira

ENSEÑANZA, INVESTIGACIÓN Y EXTENSIÓN EN LA UNIVERSIDADE FEDERAL DE VIÇOSA: ORIGEN Y TRAYECTORIA INSTITUCIONAL (1926-1988)

RESUMEN

En este artículo, la trilogía enseñanza, investigación y extensión constituye el eje por lo que se desarrolla un análisis histórico, buscando ubicar su génesis, como práctica institucional, en el contexto particular de la Universidade Federal de Viçosa (UFV) y en contraposición al significado fijado a nivel nacional, como principio que direcciona actualmente el estándar de calidad de las universidades brasileñas. El enfoque histórico propuesto bajo estos dos distintos niveles analíticos propició identificar la diferencia entre el sentido funcionalizado que condujo la triología que caracteriza el proyecto institucional de origen de la UFV, inspirado en modelo de los land grant colleges, y el sentido social y político que la triología viene a significar a las universidades brasileñas a partir de su afirmación como principio constitucional desde 1988.

PALABRAS-CLAVE

enseñanza-investigación-extensión; Universidade Federal de Viçosa; historia de la universidad brasileña.

INTRODUCTION

The objective of this article was to present the historical development of the conception of inseparability of teaching, research and extension toward which Brazilian university institutions are directed. In order to do so, we present the trajectory of the Universidade Federal de Viçosa (UFV) as a singular case in the national context. The aspect which particularly marks the original institutional project of this university, based on the adaptation of the American model of land grant colleges, is analyzed by constructing an analytical reference in the history of the principle of inseparability of teaching, research and extension, a legal achievement present in the Constitution of 1988 that represents the struggle for the ideals of a Brazilian university.

The perspective of Saviani's (2013) historical reconstruction¹ is methodologically suitable to introduce, comparatively, elements of UFV's institutional history regarding teaching, research and extension. We show the trajectory that led to the achievement of a principle of inseparability of teaching, research and extension in the context of the constituency of 1987, a process with close ties with the consolidation of Brazilian universities in history (Mazzilli, 1996; Maciel, 2010).

In regard to the relevance of this "reconstruction", this study intends to fill in a blank identified in the historical narrative of this institution. The sociohistorical approach seeks to understand the genesis and development of the teaching-research-extension trilogy within UFV, as well as other Brazilian universities, distinguishing and identifying the social, political and economic processes and interests with which it is associated.

The milestones in UFV's trajectory in the assumption of this trilogy as an institutional project, and the milestones in the national scenario that marked the construction of the idea of "teaching, research and extension" inseparability as a contemporary principle of Brazilian universities, are approached simultaneously, starting with UFV's timeline of institutional configurations. The scenario of its creation as Higher School of Agriculture and Veterinary of the State of Minas Gerais [Escola Superior de Agricultura e Veterinária do Estado de Minas Gerais – ESAV — 1926–1948], its transformation into Rural University of the State of Minas Gerais [Universidade Rural do Estado de Minas Gerais – UREMG — 1948–1969] and the later expansion into Federal University (UFV) in 1969 are distinguished up to 1988, which is when the principle of inseparability of teaching, research and extension for all Brazilian universities was achieved.

The notion of a historical reconstruction assumes the construction of the existing knowledge over the object, which is "but reconstructing it on the plane of thought" (Saviani, 2013, p. 49). In the author's perspective, a historical reconstruction implies admitting the existence of the investigated institution which has a history we must know due to its durable character, a process possible by knowing the effective conditions under which the historical construction of that institution occurred, considering secondary sources that thematized its history as the object of this study.

TEACHING, RESEARCH AND EXTENSION: THE (AMERICAN) MARK OF ORIGIN

UFV's particular history is acknowledged in studies on agricultural teaching in the state of Minas Gerais and in Brazil, due to the implantation of an organizational model based on American land grant colleges², in which "teaching, research and extension" composes the educational proposal considered "modern" for the time. That history marks UFV's image in the past, a sort of origin myth, associated with the teaching of rural sciences and the contribution assigned to agricultural research and to the development of rural extension services in the country.

The ESAV was founded, according to its creation law, as an institution destined to the "practical-theoretical teaching of agriculture and veterinary" and to the execution of "experimental studies that concur to the development of such sciences in the state of Minas Gerais" (Borges; Sabioni, 2010, p. 14). It was created and kept in the condition of an isolated higher school from 1926 to 1948, offering the courses of agronomics and veterinary medicine. Its creation was influenced by the political decision of the then president of the state of Minas Gerais, Arthur Bernardes (1918–1922), who would later become President of Brazil (1922–1926).

In Brazil, the first federal agronomic higher school — Higher School of Agriculture and Veterinary [Escola Superior de Agricultura e Medicina Veterinária — ESAMV]³ — was created in Rio de Janeiro in 1910 along with the institution of rules for agronomic teaching set by the Brazilian government (Otranto, 2005). Gustavo d'Ultra's actions greatly influenced this process. He was an acknowledged professor in the agronomic academic area and the first dean at the school, who believed that agricultural higher education could only be efficient if done in large centers (Otranto, 2005). With the creation of ESAMV, the teaching of agronomics reached a noble status in the country and would follow organization models of mainly European origins.

On the other hand, ESAV was created in 1926 in Minas Gerais' country side. Its particularity lies in its North American teaching model sought by Bernardes, who chose to bring in an American agronomist — Peter Henry Rolfs⁴ — to be the school's technical organizer, in order to ensure that it would hold the looks and dynamics of an American rural college. The decision to follow this model — a symbol for the successful formula adopted by the USA in the educational area

² The schools in this model were built on lands granted by the American government to the states that committed to the creation of institutions intended for practical teaching of agriculture to young people (Ribeiro, 2006). The name "land grant" is allusive to that creation dynamics.

³ Currently Federal Rural University of Rio de Janeiro [Universidade Federal Rural do Rio de Janeiro - UFRRJ].

⁴ An American specialist known for his experience with the land grand system. He graduated from Iowa State Agricultural College, the first institution to practice this model in the United States.

to which its vertiginous growth and development as a world economic potency is attributed (Oliveira, 1987) — represented a demand by the rural elite in Minas Gerais for a more rational and productive agriculture in line with a modern educational frame (Azevedo, 2005), a frame that acted as a way of justifying the aforementioned demand.

In the context of the United States, the land grant college model was established in the 19th century, introducing new ways of thinking the academic system, attempting to respond to the transformations in education demanded by the capitalist and technological development (Santos, 2008). In that regard, it figured as an institution of pragmatic orientation for technical-professional training, seeking to respond to the new challenges posed in the space of production.

The land grant college configuration, upon the establishment of partnerships with a complex of institutions and agencies involved with research (that kept experimental stations) and extension (that granted technicians for the field), settled the characterization for this model based on teaching, research and extension activities, seen as complementary within a system that articulated educational institutions with the country's agricultural and industrial production (Oliveira, 1987).

The influence and significance of the adoption of this model in ESAV's origin must be understood in parallel with the sociohistorical origins that motivated its creation (Silva, 2007), which were connected to the scenario of the reality in Minas Gerais in the early 20th century, a reality that presented sociopolitical dynamics and production conditions that were quite different from the American ones (Coelho, 1992). In that sense, we must consider that the creation of ESAV is related to the project to recover and invigorate the economy in Minas Gerais, outlined by this state and its rural elite, victim to the effects of the coffee crisis (Silva, 2007). In that project, education became important within the ruralist debate at the time, which saw the dissemination of agricultural education as the formula to overcome the crisis in Brazilian agriculture in the first Republic.

The context of modernity was fundamental in how the philosophy of land grant colleges coupled with the objectives of the rural elite in Minas Gerais. The political (and ideological) dimension of the training offered by ESAV is associated to the educational requirements for this "modern" school, explained by its strong relation to the historical constitution of the professional field of agriculture. As such, education at the institution was circumscribed in a new paradigm of how to do teaching in agriculture. It provided the rural field with managers and played a very specific role in the operative project of development to rearrange the strategy of rural elites in Minas Gerais, in order to establish themselves after losing their hegemony to the state of São Paulo (Barbosa, 2004).

The significance of the School of Viçosa did not lie in the introduction of agricultural education at a higher level, once some private schools, subsidized by the public power, were already doing so at a modest scale. What distinguished it, above all, was the fact that it was planned as the basis to a great leap toward the modernization of the countryland, intended by the project for productive diversification (Dulci, 2005 *apud* Silva, 2007, p. 64, translated by the authors).

The School's project was developed inside a program of rationalization of the rural field, with reformist ideological contours, without questioning the agrarian structure and the respective work relations that supported it,

it was a school for "farm owners' kids", not because of a discriminatory intentionality in its conception, but for structural reasons of society itself, making it differentiative and rigid (Coelho, 1999, p. 101, translated by the authors).

In this brief exposition, we intend to distinguish ESAV as a project linked to the dynamic of conservative modernization of agriculture in Minas Gerais (Barbosa, 2004). Modeled after land grant colleges, ESAV's research and extension activities were precociously developed in an institution of higher education and had particularities that would outline a training practice in which theoretical-practical teaching, utility research and extension practice consolidated an efficient structure for action in favor of countryside modernization.

Research in this institution, according to Coelho (1992), was present since its origin and was developed bound to the need for scientific exchange between society in Minas Gerais and the American external incentives. The scientific reference was always an international one, initially with the impulse provided by the Americans that settled in the school and, later, by the school's teachers' training in the USA, reinforcing an influence via acquisition of competences and via effect-demonstration of the institution's teachers, once they would return and take over ongoing investigations at the school (Coelho, 1992). The priority of the researches was the stimulation of agricultural production defined by and depending on the international relations established, a mark of political intentionality that permeated the school's scientific production.

As for the extension activities, we see that the School's structure, in its first years, already meant to interact with the agricultural producers from an area called Zona da Mata in Minas Gerais, with the creation of experimental stations, services of demonstration and utility research practice focused on solving immediate problems encountered. Those activities produced a dynamic typical of extension activities, characterized as actions that formed a support and aid service for producers in the area. The activities with a greater outreach, that marked the continuity of this service and which granted the school's wide visibility, were "Farmer's Week" and "Women's Month" (or Female Farmer's Week). The Farmer's Week started in 1929 as an annual and permanent strategy to diffuse agricultural techniques, an event which offered several different courses taught by the school's teachers and that grew significantly after each edition. This activity became a symbol for the extension activities done during this period, and marks UFV's configuration of institutional identity to this day (Silva, 1995). The Women's Month, dedicated to instructing wives, only had two editions, in 1934 and 1935.

The demonstrative nature of the courses (especially displays of experiments and technological alternatives) in Farmer's Week strengthened, year after year, the notion of extension as a way to socialize technical and scientific production, making it the justifying dimension of the elaboration of knowledge with a pragmatic character which were developed at the institution (Silva, 1995). The ex-

tension justified the utility aspect of the researches, focused on applicability and economical objectives.

ESAV's extension activities and events expressed its commitment to the diffusion of a new mentality in agricultural work, through intense advertising of its products and diffusion of a technical and technological conception as resources for the modernization of agriculture. Those actions preceded the rural extension and technical assistance service later structured in the state of Minas Gerais (Cometti, 2005). ESAV, in this respect, contributed to creating the basis for the official service of rural extension in late 1940's, in a context in which the modernization of agriculture was admitted as the development project toward which the institution was moving. In line with this project, the diffusionist feature of extension at the institution prevailed, despite initial experiences at the school of a more communicative nature and of an exchange of knowledge with the regional producers.

In 1948, ESAV was transformed into UREMG, a university created through a legal act by joining the component Schools and Services: Higher School of Agriculture; Higher School of Veterinary; Higher School of Domestic Sciences; Specialization School; Experimentation and Research Service and Extension Service. Concurring with UREMG's creation, in 1948 a cooperation agreement was signed between the International Association for Economics and Social Development (AIA)⁵ and the state of Minas Gerais, which gave origin to the creation of the official rural extension service in the state and alongside which UREMG would participate effectively. In this agreement, the rural extension appeared as one of the instruments for the transference of American models of diffusion for modern practices in agriculture and educational institutions played a significant role in that task, becoming a basis for cooperation and technical assistance programs⁶. As indicated by Lopes (1995), the creation of UREMG represented the consolidation of the land grant college model, since it was under that new institutional condition that the bonds with the model were strengthened, amplifying the structure in materializing research extension practices.

The UREMG was created during a period of great financial difficulty in the state of Minas Gerais. Through its interaction with international cooperation programs with the USA, UREMG found support for its distinct institutional development, ensuring the allocation of resources for teaching activities as well as for the university's research and extension. Therefore, the development of research and extension at UREMG was related to the establishment of cooperation agreements for technical assistance under the Brazil-USA Agreement

⁵ A private corporation created by Nelson Rockefeller as a philanthropic organization in 1946 that mediated the establishment of cooperation agreements of technical assistance between Brazil and the United States.

⁶ An agreement that resulted from a post-war approximation of the USA with underdeveloped countries in Latin America through technical cooperation in the areas of agriculture and education (Ribeiro, 2007). Those agreements are justified in the Point Four Program, a program for technical and scientific cooperation launched in the late 1940's by president Truman.

in the 1950's⁶. Among those agreements, the ones established with Purdue University⁷ are worth noting.

The Purdue-Brazil agreement (1951–1973)⁸ is considered a successful undertaking of foreign aid for agriculture in the institution's history, responsible for an intense exchange between UREMG teachers and Americans, also providing resources that enabled the organization and structuring of the domestic economy course⁹, training for technicians in rural extension, as well as actions for the institutional development of scientific research (Silva, 2014). In this scenario, it is undeniable that ESAV's creation after the model of land grant colleges allowed for the establishment of an institutional structure that would later facilitate the maintenance of bonds with the USA through those exchanges, establishing itself as a center for the diffusion of the American model⁹ (Coelho, 1999).

In Minas Gerais, the extension service was structured and run, from the beginning, as part of a more comprehensive proposal of development that the rural elites and the state conceived for the country, where the formation of human resources to act on the transformation of the scientific-technological basis of agriculture was among their concerns, a process overlapping a diffusionist ideological content. With those considerations in mind, we must appreciate the role played by UREMG during a period when extension would establish itself as a practice of the State's systematic intervention in the Brazilian rural scenario (Oliveira, 1987), acting functionally with the purpose to stock up the frame of technical knowledges in this area, anchored to the intensive modern pattern in agriculture.

THE TRILOGY AT THE HIGHER SCHOOL OF AGRICULTURE AND VETERINARY OF THE STATE OF MINAS GERAIS (ESAV)/UNIVERSIDADE RURAL DO ESTADO DE MINAS GERAIS (UREMG): CONTRASTS WITH THE NATIONAL SCENARIO

ESAV was born in a context in which the conservative classes saw the ideas of progress, through technique and science, as the solution for the development of the rural space (Coelho, 1999). In this scenario, "teaching, research and extension" appeared as a modern mark of the school's educational project which was integrated with a discourse of consensus in the first modernizing Republic both in the coun-

 ⁷ An American university that stood out as the most influential in diffusing the land grant model in Latin America.
8 The agreement was inaugurated in 1951 to support the creation of the domestic eco-

⁸ The agreement was inaugurated in 1951 to support the creation of the domestic economy course; renewed in 1958 in support of research and post-graduation, extending until 1973.

⁹ The creation of the domestic economy course holds a close bond with the propagation of rural extension services in the country. Through this course, UREMG imported the American teaching model intended for women (home economics), graduating extensionists to act on rural extension, all the while establishing itself as a center for the diffusion of this graduation model for new courses of this kind in Brazil (Lopes, 1995).

tryside, which was desirable by the rural elites, as well as the school itself, sown by those who defended the principles of the New School Movement in Brazil.

ESAV's first extension activities waved at experiences from the school's own dynamic arising from its relations with the area, including generating the development of precursory administrative structures for this activity in institutions of higher education. The incentives given to research, since its origins, enabled it to be perceived as "correlational and necessary to validate the practicality of education and the veracity of knowledges in the practice of extension" (Coelho, 1992, p. 48, translated by the authors). Those initial configurations were intersected by the effects of ESAV's articulation with the development project to which it served, acquiring features that conformed to the goals of agricultural modernization, especially upon its transformation into UREMG.

The imported model of inspiration allowed for the establishment of an institutional structure that facilitated exchanges with the USA and for the maintenance of most of its activities, through cooperation agreements. The precocious development at ESAV and UREMG of research and extension practices (compared to the scenario of other higher education institutions in the country) is worthy of a comparative analysis of the gestation process of Brazilian universities. For the contrast intended here, we start with the consideration that research and extension were part of university practices in Brazil in a procedural and historical manner.

As analyzed by Schwartzman (1979), in the first decades of the 20th century, scientific activity in Brazil was mainly developed outside the higher education system, being more concentrated in research institutes. For this reason, ESAV's research development in the 1920's may be analyzed as an unusual practice compared to other higher education institutions at the time¹⁰.

The concept of university in Brazil started being developed, legally speaking, upon the Francisco Campos Reform of 1931, favoring the formation of a university system by joining professional schools. Although the incentive to scientific investigation was present in this Statute's orientations, research did not receive, until the end of the New State (1945), real conditions to structure and finance its development at existing institutions.

ESAV's first extension activities in the 1920's qualify among the pioneering experiences of extension in Brazil, within an originary branch of the North American extension, and according to Gurgel's classification (1986), it differs from the branch that was influenced by popular European universities. Both branches were present in Brazil in the early 20th century and carry different meanings.

¹⁰ The introduction of scientific practices in universities comes from the emergence, in the national scenario, of the mobilization of intellectuals (especially in the Brazilian Education Association – ABE) around the criticism of the essentially vocational model of higher education in Brazil, during the first decades of the 20th century. Those efforts were materialized with the creation of the University of São Paulo [Universidade de São Paulo – USP], the first university with an organization inspired by the humboldtian model that associated teaching and research and with the institution of the University of the Federal District [Universidade do Distrito Federal – UDF] in 1935 (Luckesi et al., 1987).

The American-inspired extension model influenced countries in Latin America toward a "technical university associated with development programs" (Gurgel, 2001, p. 17, translated by the authors). That branch is also affiliated with the official idea of university extension found in the 1931 Statute of Brazilian Universities, which conceptualized extension as "provision of services", put in operation through courses and conferences (Nogueira, 2005).

Academic extension based on the experience of popular universities is anchored to a paradigm with roots in the student movement at the University of Cordoba (Argentina) in 1918 (Gurgel, 1986; 2001). To that movement is attributed the assumption of extension, by Latin American universities, as a constituent element playing a political role at universities¹¹.

Considering those two branches, we have analyzed that ESAV's socio-economical and educational foundations were of a pragmatic nature for established purposes, articulated with the development project to which the School should serve and upon which it was settled when it transformed into UREMG. In this analysis, extension is the main dimension for the materialization of this functionalization toward which teaching and research already showed signs of direction. We have characterized the teaching, research and extension practices done at ESAV as the first "breaths" of the school's functionalization to the project of intervention and modernization of agriculture in Minas Gerais. Under the condition of Rural University, that articulation was strengthened with the support given to the institutionalization of the rural extension service in the State of Minas Gerais, through the creation of the Credit and Rural Assistance Association (ACAR-MG). UREMG acted to complement the actions done by ACAR: the first formed extensionist technicians and generated technical knowledge to be applied, the second supplied the structure to actualize the extension. In that practice, university extension and the rural extension service were fused and would only be differentiated after this service became autonomous from the university.

As for the particularities in the national scenario concerning UREMG's duration period (1948–1969), we highlight the active process of modernization demanded and experienced by Brazilian universities (Cunha, 1983). In that context, modernization was understood as the adoption of university organization patterns in effect in the USA, an aspect that partially explains the implementation of research as a component of the university's functions¹². In the outline of productive forces that were installed after World War II, under the guidance of the USA's experience, it is possible to see a propagation of the notion of a utility character for university

¹¹ UNE's 1938 Plan of Suggestions represented the catalyst of the presence of the idea of extension developed under the influence of Cordoba's ideas within the Brazilian student movement (Sousa, 2000). In it, the idea of academic extension is associated to matters relative to the university's democratization, autonomy and reorganization of academic life.

¹² The many cooperation agreements between MEC and USAID in the 1950's and 1960's brought the presence of American consultants in outlining the Brazilian educational policies (Cunha, 1983), an action that certainly favored influences in reform actions of Brazilian universities (Vieira, 2010).

institutions, expressed by the intent to articulate the development of science into the organization, in terms of structure and financing for research (Castro, 1985). Post-war, the context was incidental for Brazilian universities, favoring the resonance, in the state financing sphere, of the old aspiration of research as a component of academic practices.

The initiatives intended to enable a structure of academic investigation occurred at the same time as governmental actions to promote research activities in Brazil, having the creation of the National Research Council (CNPq)¹³ in 1951 as a milestone. This agency was created in an exceptional climate in favor of science and technology given the prestige that both activities acquired during this period, its mission being to implement nuclear energy policies and to promote scientific and technological research (Motoyama, 2002). Internally, the incentive to research at the university took place by organizing post-graduation courses to increase the number of specialists and attending to the needs of high-level technological and scientific investigation (Cunha, 1983), a dynamic that was also favored by the National Campaign for the Improvement of Higher Education Personnel (CAPES)¹⁴, created in 1955.

As for extension, during the entirety of the New State up until the 1964 coup d'état, we verified a lack of any original concepts of academic practice, which was limited to promoting courses and conferences that took place sporadically and without any institutional structuring to guarantee the continuity of actions (Sousa, 2000). Despite that fact, university students were the actors that emerged in that scenario, introducing the wave of change for the concept of extension through concrete actions directed toward practices by the university committed to the popular classes (Nogueira, 2005). It is worth noting that the debate around academic extension in Brazil follows the process of political recuperation of the student movement, which started taking more effective actions in 1956, a phase during which the National Students' Union [União Nacional dos Estudantes – UNE] stands out nationally as more political, making the university reform as a specific object of discussion in meetings called for this debate¹⁵ (Sousa, 2000; Vieira, 2010).

In this trajectory, academic extension emerged within the debate of university reform led by the student movement, and in a way that was articulated with the mass mobilizations around the base reforms. The extensionist activities at that time received an idea of political-social involvement, such as the students believed the university should be, as a result mainly of the mobilization of popular education, adult literacy and base education programs. Among the formulations used in this period, and that were characterized, according to Sousa (2000), as academic extension, four reached a higher projection: the Cultural Extension Service (SEC), the Popular Culture Movement (MCP), the Popular Center for

¹³ Currently called National Council for Technological and Scientific Development.

¹⁴ Currently called Coordination for the Improvement of Higher Education Personnel.

¹⁵ During this period we can list the National Seminars for University Reform promoted by UNE in 1961 in Salvador, 1962 in Curitiba and 1963 in Belo Horizonte (Vieira, 2010).

Culture (CPC) and the Flying University (UNE-Volante). That was the context in which a new significance of academic extension arose, with critical contents and potential in orienting a new academic paradigm that would later be smothered by the military dictatorship.

The contrasts in this article referring to the entry of university research and extension in the broader scenario of Brazilian universities defy a questioning analysis on the creation of UREMG. ESAV, upon being transformed into Rural University, enhanced its role alongside governmental programs, becoming a greatly useful institution for the development of agricultural sciences and rural extension service in the country. The search for a university identity was not an issue in this transformation (an aspect that was present in the Brazilian intellectual debate), but rather a noncritical absorption of the discourse of agricultural modernization. Teaching, research and extension, thus, did not appear as practices that promoted a reflection on the significance of this university for society, but rather as functionalized activities with external objectives and that little contributed to its insertion in the broader debate on the matter of universities in the country.

FEDERALIZED UNIVERSITY: UPDATE AND CRISIS OF THE ORIGINAL TRILOGY (1969–1988)

In 1969, UFV was instituted under the form of a foundation, linked to the Ministry of Education and Culture (MEC). In this new condition, it was not called Rural University due to its extension tendencies planned for the institution, which started more directly following the guidelines for Brazilian federal public universities. Federalization took place in a moment of greater investment in universities, along with the modifications imposed by the 1968 University Reform. As noted by Cunha (1988), the mark of rationalization was imposed on restructuring higher education in the medium term. Seen as a technical matter and seeking better articulation between the university and the needs to develop the job market, the rationalization measures were materialized so that a greater number of students would be absorbed (Cunha, 1988). Along with those measures, UREMG's transformation into UFV inaugurated a period of expressive increase of new courses, amplifying the areas of knowledge taught at the university, previously restricted to the area of rural sciences. In organizational terms, the reform advised a structure based on field universality and no longer overlapping schools (Vieira, 2010). As a reflex of this orientation, UFV's first statute (1970) already displayed wider goals, not specifically presenting, such as was explicit on UREMG's statutes, the role of supporting agricultural development in the country.

With the university reform, the slogan "teaching, research and extension" was materialized as discourse in the administrative, structural and organizational scenario of Brazilian universities. UFV integrated that new discourse and practice, making use of orientations provided by the university reform in a way that was associated with following the institution's original practices, promoting a sort of institutional rearrangement to update the original trilogy:

The Universidade Federal de Viçosa, which since its beginning has been oriented by the philosophical spirit of development integrated with teaching, research and extension, has the following goals: administer, develop and improve higher education, aiming the formation and improvement of university level professionals, stimulate, promote and execute scientific and technological researches and experiments; promote the development of sciences, literature and arts, extend teaching activities and research and experiment results to the community in the way of courses and special services (UFV, 1983 apud Silva, 1995, p. 58-59, translated by the authors, emphasis added).

The ideas of modernization of Brazilian universities gained more force with the installation of the military regime and were developed in association with the process of expansion/integration of higher education (Cunha, 1983). More than the expansion of positions and courses, the reform brought the operationalism of university research and extension policies subordinated to the university's role as a propeller for development (Cunha, 1988). Considering that UREMG was transformed into a federal university right at the period of an economical miracle, it is noticeable that it was summoned to contribute to an effective modernization of the national economy, an alignment that would later echo in research and extension activities developed at the institution (Silva, 1995).

The policy in support of research at universities, characterized by state financing, received an impulse with the reform of 1968, once it introduced an official formulation of association between teaching and research at universities, marking a condition in which universities would become a privileged *locus* of the scientific-technological policy of the military government. Among the proposed measures to materialize that association are the institution of post-graduation and the creation of tenure careers, accompanied by the institution of a regime of exclusive dedication (Vieira, 2010). Still directed toward strengthening scientific activity, we may highlight the actions for the creation of the National Fund for Scientific and Technological Development (FNDCT) in 1969, whose applications were coordinated by the Financier of Studies and Projects (FINEP), an agency that became, alongside CNPq, fundamental in financing research in the country (Castro, 1985). In a broader plan, a governmental policy for the promotion of science and technology was being matured, starting the institution of the Basic Plans for Scientific and Technological Development (PBDCT) in the 1970's.

As previously mentioned, up until 1973, UFV was paramount to the influence of Purdue University on relations of training at post-graduation level and on mediating resources for the institution's research. With the end of the agreement, UFV started to interact with the federal research and post-graduation incentive plans, a period that coincides with greater specialization of rural professions and institutionalization of research in the agricultural field articulated with the acceleration of the modernization process of Brazilian agriculture (Silva, 2014). The pioneering development of post-graduation, associated to later incentives coming from military government policies, were decisive to UFV's presence as a strong institution of research in the agricultural field. A symbiosis favored between

the institution and the military regime's development programs, it expressed itself through the university's scientific production, which showed a concept of modern agriculture, aiming to reach productivity levels at a large scale, the main triumph of the modernization discourse and an important guide for agricultural research development at the institution (Silva, 2014).

UFV's actions of academic extension during this period may be analyzed under two perspectives: one relative to rural extension, which historically marked the institution's practice in collaboration with this service's official system, and another relative to the way UFV took part in the official proposals for academic extension introduced by the military government's policies. According to Gurgel (1986), rural extension reached its own configuration during the 1960's/70's, propagating itself without organically amplifying its relation with the MEC. In that condition, its role was merely seen as to disseminate modern agricultural techniques, amplifying relations with the Ministry of Agriculture in the tripod of stimulus, research and extension and unrelated to the educational process. That transition was followed by the transformation of the Brazilian Association of Rural Credit and Assistance (ABCAR) into Brazilian Company for Technical Assistance and Rural Extension (EMBRATER) in 1974, an organization that was structured on business bases through decentralized state units.

Making the official rural extension system at the university autonomous revealed a lack of academic identity of the extension that had been practiced at UFV until that point, which started sharing some official extension programs offered by the government. The governmental discourse on academic extension was absorbed by UFV with the reform of 1968, and was put in operation after mechanisms of institutional support to the university's actions with underserved populations. Since the law decree 252 of 1967, academic extension has been officially considered an exercise of teaching and research, through courses, seminars and provision of services, a formulation that ties extension and internship (Gurgel, 1986). In general, the first experiences stimulated by official policies revealed a concept of extension as assistentialism provided by students, separated from the participation of the staff of professors, while simultaneously establishing students' involvement with the government's developmentalist ideology (Nogueira, 2005). Two programs stood out as examples of this first policy of academic extension: the experience of implementing Academic Rural Centers for Training and Community Action (CRUTACs), that combined student training and assistance to rural communities, and the Rondon Project.

The experience of the Rondon Project originated the creation of "advanced campuses", seen as the Project's more mature stage, installing an operational base of the university outside the city area with a residing professor and rotation of students, normally in an underserved area. Cunha's opinion (1988) was that those campuses brought convened the developmentalist and students' training goals for their professional specialty, representing links of social participation and articulation of teaching and reality, being able to induce a student movement that sympathized with the military government.

Under the influence of those official extension policies, UFV started identifying the practice of extension with internships and training for students, in

mid-1970's and the early the 1980's. Among the experiences developed, we may mention the Altamira Advanced Campus Program, in the state of Pará¹⁶, and the Gilberto Melo Program (PGM)¹⁷. PGM was a proposal that integrated two perspectives on extension: student training, from official policies, and technical assistance to rural communities, linked to a diffusionist conception that founded the historical practice of ESAV/UREMG's rural extension. Given the context of its creation and offering an academic extension able to cover all courses, we can consider PGM as an attempt to attribute identity to UFV's academic extension, to serve a university that amplified its areas of knowledge. Its practice was marked by an operational dynamic in which technicians and students articulated the university with the rural and/or underserved rural communities, thus being an action that was not linked to the staff of professors:

The creation of PGM by means of a cooperation agreement, whose generating document did not rely on the participation of the staff of professors, together with the hiring of a technical staff to execute it, seems to have given it a structural character dissociated from teaching and research (Neves, 1993, p. 194, translated by the authors).

THE CONTEXT OF POLITICAL OPENING: SYMPTOMS OF ACADEMIC POLITICS IN CRISIS

With the decline of the military regime, the academic politics of the 1970's was widely criticized by professors, researchers and students. The political context of the early 1980's, which had already begun the process of political opening, and the ascension of social and political organizations contributed to that criticism (Sousa, 2000).

As a symptom of crisis, in the topic of higher education, criticism emerged directed to academic laws that gave origin to the creation of the Program for Academic Reform and Evaluation (PARU) in 1983 (Cunha, 1997). In this program, criticism was channeled especially to the way the teaching/research relation at universities was in fact done, as law 5540/68 proclaims. According to Rocha *et al.* (1986), the incentive given to research linked to the assumption of the State in formulating and financing a policy for science and technology in the country carried effects of directing academic research toward demands of economical development. In that analysis, promotion agencies strongly influenced the modernization

¹⁶ A program created in 1971 through an agreement between the Rondon Project and the Uberaba Higher Schools (ESUB), wherein UFV, starting in 1974, began to collaborate with activities related to the rural sciences, given the characteristics of essentially rural economy in the region. UFV's actions extended until 1986.

¹⁷ A program created in 1980 and enabled by a cooperation agreement between the Central Bank of Brazil, Caixa Econômica of the State of Minas Gerais and UFV. It was denominated "Program for training students through technical and social assistance of small-scale rural producers and underdeveloped communities".

process at universities, producing inequality among researchers in different areas of knowledge regarding the distribution of resources and stimulating institutions of higher education to adapt to their prioritary demands. The conflicts aroused by this practice made it impossible to integrate teaching and research in all areas at universities, it addition to favoring research only at the post-graduation level, a detour that was also associated to the emphasis given to practices of academic productivity stimulation, an aspect considered controversial within the academic environment (Maciel, 2010).

In the same way, criticism was aimed at how academic extension was being done, seen as a political instrument what was put to the service of the military government (Mazzilli, 1996). As analyzed by Sousa (2000), the military period inaugurates a phase during which the State took over extension, being the student movement's flag in the 1960's, institutionalizing it upon incentive to projects with an assistential ideological basis, within a governmental conception of proposing actions in line with projects for economical development. However, it is worth highlighting that, in the Latin American scenario, academic extension was the target of debate as a component of the process of social change, a discussion that reached its peak in the 1970's (Gurgel, 2001).

In the 1980's the promises of an economical miracle fell apart at the same time that strong criticism was being directed by social movements to professionals and rural extension services in the country. In that context, rural extension, being UFV's historical mark, lived a period of crisis and questioning related to the crisis in rural modernization policies banked by the military government and to which UFV contributed.

From another angle, the 1980's were also a period during which academic extension was assumed by the institutions of higher education in the country, reacting to the military proposals and bringing upon themselves the debate over their institutionalization. As a mark of this process, amidst the realization of several forums during the period of the 1987 constituent, the first Meeting of Brazilian Public University Extension Pro-rectors has taken place, with 33 participating institutions. At this event, a concept of extension was elaborated, conceiving it as a dimension of academic activity that allows for an articulation of teaching and research and the transformative relation between universities and society (Forproex, 2001). It may be noted that, according to this conceptual orientation, the defenses coming from UNE's actions in the 1960's — such as the university's social commitment, articulation between teaching and research and interdisciplinarity — are reinvigorated in the discourse of the academic/university environment.

THE PRINCIPLE OF INSEPARABILITY OF TEACHING, RESEARCH AND EXTENSION: PROCESS AND SIGNIFICANCE OF A LEGAL CONQUEST

The principle of inseparability of teaching, research and extension has its origin in the political and historical context of the 1980's, a moment of great controversy and expectations for changes, given civil society's rise in seeking democratic

rights and freedom. The conquest of the principle is related to the scenario of higher education policies conducted by the Brazilian State, which led to a stronger establishment of research and extension as fundamental in the Brazilian academic scenario, originally based on an education focused on vocational training.

Mazzili's findings (1996) demonstrate that the construction of the principle of inseparability derive from a historical formulation process in conjunction with the constitution of Brazilian universities. It is possible to identify the origins of that trajectory in the efforts of intellectuals since the 1930's, who hoped for the construction of a free and critical academic personality that aligned with the concern to create and grow into an authentic university that was committed to national matters, a process that the now-extinct Federal District University [Universidade do Distrito Federal – UDF] took up as its initial attempt (Luckesi et al., 1987).

The unfoldings of the 1968 reform promoted the debate in the academic environment around the sociopolitical project for Brazilian universities. Among those unfoldings, we can highlight the dissatisfactions concerning the consequences of how research was encouraged inside those institutions — operationalized to development projects and with activities restricted to post-graduation —, as well as complaints on how the proposals advocated by students in the 1960's were appropriated by the official academic extension in a biased way. The political dimensions around that debate were intensified in the scenario of redemocratization that marked the 1980's, especially facing the organization of political-educational movements, fundamental in the context of the gestation of the principle of inseparability of those functions in Brazil.

The chapter that refers to higher education in the constitutional letter of 1988 is a result of the debates that were held among movements, scientific entities, unions and MEC, the latter represented by nominated Commissions to elaborate proposals for the new Constitution. The government's proposals were conceived by work groups, chiefly the Executive Group for the Reformulation of Higher Education (GERES). The organized social movement, on the other hand, gathered around the Education Forum at the Constituent that included theses on higher education, most of them coming from the Platform of Higher Education Professors for the Constituent, elaborated by the professors' movement, represented by the National Association of Higher Education Professors (ANDES) (Mazzilli, 1996; Maciel, 2010).

On the official side, GERES' report served as the main reference to a proposal that sparkled controversy and reactions by the academic community, announcing a retrogress in relation to the historical battle of conquests of research as a functional part of academic practices. The document defended a model of university based on principles of productivity and founded upon a conception of evaluating the academic work focused on individual performances, without detailing the concrete and historical conditions, socially and institutionally, of how the evaluation work is done (Mazzilli, 1996). Maciel (2010) indicates that the criticism promoted by GERES' document strengthened the professors' movement, which caused, more pressingly, arguments favoring that the principle of inseparability of teaching, research and

extension be included (Maciel, 2010). Hence, the idea of inseparability of teaching, research and extension grew stronger within debates and the movement promoted by ANDES and by the Constituent Education Forum, being ratified as a principle that guides the quality of Brazilian universities, present in an article on the Federal Constitution along with university autonomy¹⁸.

Despite mostly appearing in the constituent as a fight of the professors' movement, defending the inseparability of teaching, research and extension within the university has its roots in the "political heritage forged in the fights of the student movement" (Maciel, 2010, p. 118, translated by the authors). In the opposite direction of university functionalization, that principle relates to a new university paradigm which qualifies it as an institution that contributes to critical thinking and to the transformation of society. In this signification, the meaning of academic extension, with a critical and political role, is what gives a social sense to the principle. Under the light of a historical analysis of the gestation of this principle, Mazzilli (1996) identifies it as a synthesis of the historical fights of social movements (educators, professors, scientific community, students and civil society in general) in defense of an ideal pattern for quality reference for universities:

the principle of inseparability of teaching, research and extension was historically generated by social forces that incorporate the counter-ideological discourse, seeking to build a project of a socially referenced university (Mazzilli, 1996, p. 120, translated by the authors).

In this scenario, we can relate the assumption, on behalf of public universities, of academic extension as an integrating component of their identity with the creation of the Brazilian Public University Extension Pro-rectors' Forum (FORPROEX) in 1987, which has assumed an important role in supporting conceptual and practical changes of extension at Brazilian universities (Nogueira, 2005).

In the topic of academic practices, the incorporation of the principle of inseparability is referenced as a quality criteria in concretizing the academic work. Thus, the principle carries an utopian character of an ideal to be followed, based on a social and political academic project, its materialization standing as a challenge within academic practices.

TEACHING, RESEARCH AND EXTENSION: SIGNIFICATIONS IN TRANSFORMATION

Teaching, research and extension constitute an expression of what has been present in the institutional discourse at the UFV since its origin, in the 1920's; an aspect that has always been proclaimed and reverenced in the university's official

¹⁸ Art. 207. Universities will enjoy autonomy of teaching, scientific, administrative and financial and patrimonial management, and will obey the principle of inseparability of teaching, research and extension (Brasil, 1988).

historiographic production. The characterization done in this article allows us to realize that the trilogy practiced at ESAV/UREMG, which was updated during the military period, carries a different sense from the one advised in the constitutional principle ratified in 1988. ESAV was developed from the adaptation of the philosophy of land grant colleges and committed to the rural development project in the State of Minas Gerais, introducing new methods and the American work style, producing, throughout its trajectory, a modern pedagogical concept in which the trilogy contributed to the pillars of the State's rural and political strategy through practical-theoretical teaching, utility research and rural extension practices (Silva, 2007). Teaching, research and extension appeared as activities that were integrated in the project of adaptation into a model of institution that longed to be effective in the country's economical project. It was not in the horizon of the adaptation of this model that there would be a reflection on the role of an academic institution, especially because the adaptation of the model was done still in the molds of an isolated higher school.

Having been gestated in a different context, the principle of inseparability of teaching, research and extension, advocated in article 207 on the 1988 Federal Constitution, comes from a long process of debates questioning the strictly vocational role of higher education in Brazil, consolidating it as a principle that currently distinguishes an academic institution/university from other institutions of higher education. Hence, this principle may be interpreted as an achievement resulting from a systematized proposal for universities, historically generated by social forces that incorporate the counter-hegemonic discourse toward the project of a socially referenced university (Maciel; Mazzilli, 2010).

Contrasting with the functionalized practice of the trilogy, the principle of inseparability of the functions carries a sense that was built on Brazilian soil, serving as an utopian source and theoretical and political instrument to think about the social sense of the university before society. And, in this aspect, academic extension, within a branch of thought that originated under the influence of the Cordoba movement and that was updated in Brazil by UNE in the 1960's, it is its dynamic role that enables us to notice the difference between the trilogy in the past and in the present, as stated in the Federal Constitution. When assumed in its technical character, the extension that marked UFV's past favored a conservative project for the identity of academic practices. At the present time, facing the constitutional challenge of the practice of inseparability, extension takes on a critical and transformative role in the institutional project of Brazilian universities.

We understand that ESAV/UREMG's original trilogy, updated in the context of the 1968 academic reform upon its transformation into federal university, experienced a state of crisis in the context of political opening, once the achievement of the principle of inseparability is related to the criticism toward a model of university that is functionalized to the government's purposes as oriented by the military dictatorship. The verification of this crisis, in reality, is a metaphor built in an attempt to translate the institutional reconfiguration that the current constitutional principle urges this university to practice the historical and social sense of those functions. Thus, we also understand that, since 1988, UFV has been

mediating the two senses hereby referred, one from the past and the other from the contact with the national debate, based on the inseparability of the functions of teaching, research and extension and that compose the institutional project in favor of a transformative relation between university and society.

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