INTRODUCTORY STUDY*

GABRIEL RODRÍGUEZ. POLITICAL ECONOMY OF THE LIBERAL DEMOCRACY IN 19[™] CENTURY SPAIN**

SALVADOR ALMENAR PALAU

PROFESSOR OF HISTORY OF ECONOMIC THOUGHT AT THE UNIVERSITY OF VALENCIA AND A CORRESPONDANT MEMBER OF THE REAL ACADEMIA DE CIENCIAS MORALES Y POLÍTICAS

* Traducción al inglés de Muriel Feiner.

^{**} I would like to express my profound gratitude to Professors Pedro Schwartz, Alfonso Sánchez and Pablo Cervera for their support and comments, as well as Amalia Gil's generous assistance.



Central photography of the picture composition entitled "To the illustrious speaker Mr. Gabriel Rodríguez from his admirers" (April 1871), surrounded by signatures and the text of his parliamentary proposition regarding the abolition of slavery in Puerto Rico and Cuba. Copy of the lithography in Rodríguez Vilallonga (1917: 279).

PREVIOUS NOTE

The leaders of the *Sexenio*, the six-year democratic period (1868-1874), have had an unequal and fluctuating historiographic fortune. The most fortunate ones included, without a doubt, several members of the provisional government who posed, with a rather theatrical attitude, for the photographer Jean Laurent in December 1868. It is highly likely that at same time Gabriel Rodríguez y Benedicto (1829-1901), sub-secretary of the Ministry of Finance with Laureano Figuerola, was drawing up some of the financial or customs reforms which had in fact transcended its epoch. However, Gabriel Rodríguez's figure, who was almost always on a secondary plane at the time, had begun to fade away by the 20th century, except for the occasional attention furnished by several economic and engineering historians, and the more recent studies of his ideas as a noteworthy member of the "economist school".

Soon after his death, several of his friends (Segismundo Moret, José Echegaray, Gumersindo de Azcárate and Felipe Pedrell) rendered tribute to him in the *Ateneo of Madrid* (Moret, 1903). However, the main systematic effort made to recover Gabriel Rodríguez's importance, and on which we still rely, is a book published by his son Antonio Gabriel in 1917, which included several brief biographic comments and a full review of a variety of documents (together with other unrelated testimonies, correspondence, writings and speeches), intended to highlight his most important activities and contributions "as an engineer, politician, lawyer, polemicist, publicist, member of the *Ateneo*, economist and musician" (Rodríguez Vilallonga, 1917: 7). This filial tribute tried to portray all the virtues of the individual, his multiple abilities and competencies (intellectual, organisational, professional, oratory) and, above all, to draw attention to his strict and absolute moral integrity, the most outstanding trait of his character and his life.

Gabriel Rodríguez's image as a "highly diversified" person has also prospered due to the wide assortment of activities he carried out, the considerable dispersion of his contributions in the form of speeches, articles and reports, and the somewhat limited publication of any long works by him.

After the valuable testimony of his disciple and friend José Echegaray (1903; 1917), a professor of the *Escuela de Ingenieros de Caminos* (Civil Engineering School) Carlos de Orduña (1924) pointed out the importance of Gabriel Rodríguez's *Apuntes de economía política* in order to understand the mathematical perspective in the orientation of economic studies in this School. Perhaps that forgotten trail marked the path which led Professor Gabriel Franco to highlight the innovating role of those *Apuntes*, within a panoramic view of the situation of Spanish economic literature, which he published in German in 1927. The language barrier delayed the spreading of this interpretation until fifty years later (Franco, 1927 1972), and during the period in-between a very few studies appeared, such as that of Demetrio Iparraguirre on Gabriel Rodríguez's anticipation of the concept of economics put forth by Lionel Robbins (Iparraguirre, 1952).

It is well-known that from 1960-1970, an extraordinary expansion of the economic historiography on the industrialisation and economic development in Spain awakened a sustained interest in the 19th century, the contemporary economic policies and, occasionally, the "economist school". However, Rodríguez's special attention was focused in another timing. I should highlight both Fernando Sáenz Ridruejo's biography (1990; 1996; 2005), based on new documentation about his activities as a civil engineer and professor, as well as Eloy Fernández Clemente's important study of Gabriel Rodríguez's life (2002). We should also mention Camilo Lebón and Rocío Sánchez-Lissen's specific work (2000), which focussed on Rodríguez's defence of free trade during the Restoration period.

Other contributions on Rodríguez are found in broader studies, such as Rocío Román's book (2003) on the "economist school" in general. The relationship between the "economist school" and Krausism has attracted the attention of different investigations, such as the pioneering and systematic studies by José Luis Malo Guillén on Economic Krausism (2001; 2005), while Gonzalo Capellán's work on "harmonic liberalism" (2007), and Román Miguel González's (2007) about "demo-liberalism" or the individualist democracy, have clarified some movements and trends in which Gabriel Rodríguez carried out a barely recognised role up until just a short while ago.

A last group of contributions has reconsidered the interpretation presented by Gabriel Franco in 1927, after decades of unsuccessful searches to locate a copy of the *Apuntes de economía política*, 1887-88. Professor Manuel Martín has reconstructed as part of a splendid study on teaching economics in the *Escuela de Caminos* (2006b: 14-36), the fundamental lines of Gabriel Rodríguez's initial economic thought, claiming his unlikely authorship of the *Apuntes* cited by Franco, due, among other reasons, to the fact that Rodríguez was already retired at the time. Furthermore, it was also improbable that the author would have dictated or inspired them if we bear in mind his previously declared economic ideas, a quite elementary set of thoughts closely linked to Frédéric Bastiat's postulates, which were used to spread and defend the concepts of general economic freedom, free trade and social harmony, regardless of any theoretical pretensions.

Soon after, Rocío Román (2008) located and attributed to Gabriel Rodríguez, *Apuntes para la clase de Legislación, Administración y Contabilidad de las Obras Públicas, Curso de 1889-90,* with a mathematical economic and graphic content, inspired by French engineer and economist Jules Dupuit. As for me, I found a copy of the *Apuntes de la clase de economía política,* corresponding to the course of 1880-81, when Gabriel Rodríguez was still the professor of these teachings and I verified the similarity of this early copy with the description furnished by Franco in regard to those of the 1887-88 course (Almenar, 2012: 176-7).

This brief list of works shows that after the initial contributions of the years 1910-1920, the recovery of forgotten but essential information or documentation as well as the appearance of some general views on Gabriel Rodríguez have abounded over the last two or three decades. The result has been an increased knowledge about this person, his ideas and his public and professional history, even though the consideration of Rodríguez as a relevant member of the "economist school", a tenacious organiser of the Free Trade Movement in Spain for forty years, a follower of Bastiat and of the liberal economic thought has been highlighted but with limited analytical height. At the same time, some fragmentation has been maintained between the different activities or specialties which he developed, especially everything between economic and political areas.

The location of the *Apuntes de economía política* and its characterisation as a direct transcription of the lectures given by Rodríguez during the 1880-81 course was the starting point for a reconsideration of the author's economic thought, which will be developed in the present introductory study. In the course of the work, several of his studies written prior to 1881 were recovered, which question Rodríguez's interpretation as a mere spokesman for Bastiat, especially after 1863. All of this encouraged us to cover an integrating and updated reconstruction of his intellectual development, despite the gaps which still exist, together with the analysis of his diverse economic contributions.

The current introductory study is an intellectual biography of Gabriel Rodríguez up until the beginning of the decade of 1880, which has been updated with new documentation and oriented towards the aim of following his social ideas until the period in which he taught the lectures covered in the *Apuntes de la clase de economía política*, corresponding to the 1880-81 course. The textbook is transcribed in this volume, in order to facilitate the specific study on this work of synthesis and its relationship with the author's precedents as well as with the contemporary thought.

The Beginnings. The Engineer and the Economist of Public Works

The information available on Gabriel Rodríguez's childhood and adolescence are unfortunately very limited. He was born in Valencia on 9 December 1829, the son (apparently the only one) of Alicante-born Rita Benedicto Sevila and Antonio Rodríguez Fernández, from Betanzos, and an employee of the Treasury Office. A few months after Gabriel's birth, the family settled in Madrid. According to Gumersindo de Azcárate, who surely repeated a family tradition, passed on orally: "He knew how to read and write at four years of age, studied Latin at seven, and completed his Civil Engineering studies at twenty-one..." (Azcárate, 1903: 8).

José Echegaray related a violent discussion which took place between Gabriel Rodríguez and Manuel Becerra, both still very young, about the competency of their respective mathematic professors (1903: 17). Beyond the mere anecdotal nature, we can assume now that Rodríguez's mentor had been Ángel Riquelme, who had a great deal of experience in teaching mathematics, a Geometry professor in the *Conservatorio de Artes* and afterwards in the *Real Instituto Industrial* (Cano Pavón, 1998: 42-43). He also taught private preparatory classes for admittance into the civil engineering schools, had been a member of the *Milicia Nacional* of Madrid in 1841 and frequently attended the opera. However, there are some traits of this person which are still unclear and might be reflected in Gabriel Rodríguez.

In addition to Mathematics, Rodríguez also studied music enough to undertake an early adventure of composing "melodies for canto and piano", following a trending genre and highly accepted at the time, from the *romanza* to *lied*. Between 1846 and 1852, which roughly coincided with his engineering studies and first professional practices, eleven pieces based on poetry written by Luigi Carrer and Victor Hugo are conserved, together with some popular songs. The set of poems selected reveals an aesthetic orientation and sensitivity very similar to the main trends of romantic lyricism popular in Southern Europe, although the music follows more closely Schubert and Schumann's canons, according to the arguments of young pianist and composer, Enrique Granados¹. However, at the same time, according to Felipe Pedrell: "That collection is a process of intimacies: of expansions and consolations (...); confidences of a soul" (Pedrell, 1903: 26).

Gabriel Rodríguez's studies in the *Escuela Especial de Ingenieros de Caminos, Canales y Puertos* lasted for five academic courses, from 1846 to 1851. The School had been re-founded following the French model although it toughened the conditions for admittance, adopted a rigorous discipline and placed strict demands on the students, although a certain automatism was added for the few graduates in their entrance into the body of engineers. The teachings included Administrative Law applied to Public Works (classes taught by the lawyer Tomás Vizmanos), but still no Political Economy. When Rodríguez completed his studies in 1851 (the 4th in his class), he was appointed to the Barcelona District (first in Gerona and, as of July 1852, in Tarragona) where he assumed responsibility for several highway projects.

It became the custom in the School to occasionally appoint to the professorial staff some of the new and most noteworthy engineers. On 26 January 1853, Rodríguez was appointed professor of Administrative Law, to cover a vacancy and soon after, he was named School Secretary. In April, he married Delia Vilallonga Peralta and they had a large family (eleven children, six of which survived).

He joined the School at while other young colleagues arrived immediately launched a number of initiatives such as the creation in May 1853 of the *Revista de Obras Públicas*². The journal was made up of:

¹ These compositions remained unpublished for a long time, but the author eventually published them anonymously and without dating in a volume entitled *Colección de Melodías para Canto y Piano*, which was distributed among several of his friends. Their response helped us to date the publication in 1894 (Rodríguez, 1894). The aesthetic similarity between Rodríguez and Schubert and Schumann is reflected in a warm letter written by Granados (10 July 1894) and reproduced in Rodríguez Vilallonga (1917: 124).

² This brief synthesis on the period 1846-1853 is based on the monographic works of Fernando Sáenz Ridruejo (1990: 231-5; 1996: 75-9; 2005: 204-5), Rocío Román (2008: 37-40), and the more general study drawn up by Marc Ferri (2015: 71-86).

A circle of us engineers... Through this circle, I became interested in politics: it enabled me to meet Sagasta and Elduayen personally. Also attending every night were Gabriel Rodríguez, Morer and many other engineers who began to show an interest in economic studies (Echegaray, 1917: 292).

It is not easy to reconstruct the specific intellectual links which would facilitate their approach to Political Economy even though the signs available suggest that the economic relevance of public works was a decisive factor. This is how Rodríguez's suggestion can be interpreted in regard to including the teaching of Political Economy in the School during the 1853-54 course, limiting Administrative Law to a single year under the new plan of studies (Román, 2008: 39). That initiative is related to the translation and the inclusion in the *Revista de Obras Públicas* (July 1854) of the summary of a recent session of the Society of Political Economy of Paris which had dealt with the "exaggerated development" of public works and its effects. It went unnoticed that Rodríguez had added to the translation (from the Journal des Économistes) twenty-one notes where he discussed the speeches of Charles Dunoyer, Michel Chevalier, Jean G. Courcelle-Seneuil, Jules Dupuit and other speakers. Among the causes for the increase in the infrastructures, Rodríguez separated the "excessive" investment and the scarce social utility of certain public works, he established a clear distinction between the "natural monopoly" and the "legal" one, and showed a wide knowledge of French economic literature on this subject, quoting texts from the Journal des Économistes and works by Dunoyer, Chevalier and Molinari (Rodríguez, 1854). In his comments, he advocate for private initiative (which may make mistakes) as compared with public initiative (whose errors and "industrial incompetence" are greater), free banking as the better system for financing the construction works and his preference for agreements between the construction companies and the land-owners as compared with the process of forced expropriation, which should never be delegated to private companies. In general, these are parallel conclusions to those defended by the French liberal economists (Breton et al., 1991), but quite different from those of Chevalier.

Rodríguez's appointment to the new staff of the *Dirección General de Obras Públicas*, catapulted by the revolution of July 1854, could have contributed decisively to consolidating his interest in economic matters. From that August until October 1856, he served as official of the *Ministerio de Fomento* with increasing dedication to railroad matters, for by 1855 he was

designated head of the office "of studies, concessions and construction of the iron roads"3. It was, as we know, a decisive period during which concessions were revised which the progressive advocates deemed to be irregular, and with the General Railroad Law of June 1855, a new plan was established for classifying the lines of a system of concessions, biddings, awardings, tariffs, technical specifications and tax exemptions, especially relevant to importing railroad material (see a synthesis in Comín Comín et al., 1998: 55-61). The boost to construction was immediate and Gabriel Rodríguez was part of the commissions for awarding the bids in the tenders corresponding to designs and delineations of great importance and he appeared in the reports as "Head of the Railroad Office"⁴. The General Director of Public Works, Cipriano Segundo Montesino (nephew by marriage of General Espartero), was a Mechanics Professor at the Real Instituto Industrial (from 1855, at the Escuela de Ingenieros Industriales) and so he was a faculty colleague of Ángel Riquelme's. He published an annotated translation in 1855 of Principles of political economy, by John R. McCulloch, "in order to have the young people in my country become more familiar with the fine economic doctrines of the liberal school", and he would be one of the promoters of the Sociedad de Economía Política of Madrid at the end of 18565.

An additional example of the orientation undertaken was Rodríguez's translation, in 1855, of the "Péages" entry, written by engineer and economist Jules Dupuit for the *Dictionnaire de l'Économie Politique*, edited by Charles Coquelin and Gilbert Guillaumin (Dupuit, 1853 1855). The author presented here, in an arithmetic fashion, the influence of the tariffs on the amounts demanded and the yields collected, as well as on the conditions for competition and the differentiation due to the quality of the shipping services, an analytical innovation which, nevertheless, did not reveal his own, innovating contributions to the theory of marginal utility and the demand, published in the *Annales des Ponts et Chaussées* and the *Journal*

³ His appointment in the R. O. of 9 August 1854 (Francisco Luján) and his dismissal by R. O. of 22 October 1856 (Claudio Moyano). His adscription to the head of the office in the *Guía de forasteros de Madrid* (Imprenta Nacional) 1855: 531; and 1856: 553.

⁴ In the *Gaceta de Madrid*, the tender of the Valladolid to Burgos route (24 February 1856), from Madrid to Zaragoza (12 March 1856), from Sevilla to Jerez (23 April 1856), from Madrid to Valladolid and from Burgos to the French border (21 October 1856).

 $^{^5}$ In the prologue by McCulloch's translator (1855: iv). The original text corresponded to the third English edition.

des Économistes. As we will see later on, the idea that the receipt of a railroad company would grow with the increasing of the tariff rates to a maximum and would then drop, could suggest the notion of optimal tax custom duties from the point of view of the fiscal revenue.

These first incursions by Rodríguez into the economic literature in the professional field led the way, however, to a new projection in a more general sphere, through the journalistic media.

THE JOURNAL *EL ECONOMISTA* AND THE PREACHING OF FREE TRADE

On 5 February 1856 appeared the first issue of *El Economista, periódico quincenal dedicado al examen de las teorías y cuestiones económicas* [fortnightly periodical devoted to the examination of economic theories and matters]. The prospectus distributed in advance declared that the failure of previous political economy journals was not an obstacle for persevering because "only the economic principles can resolve most of the socially important matters"⁶.

El Economista did not publish the name of its director and collaborators in the beginning, but different contemporary reports refer to Gabriel Rodríguez and José Echegaray as the directors, the latter being a student and colleague of the former at the Engineers School since 1855⁷. Both signed the farewell message to the readers in the last issue of the journal in July 1857.

The editorial in the first issue summarised in just a few pages, the importance of the *natural economic laws* and the adverse social consequences of ignoring or contravening them. The journal main mission was to reveal the principles of the Economic Science, abridged in the motto: "Freedom and property invariably united". The conceptual density of this programmatic text contains, line by line, the main arguments for defending the thinking of French economist Frédéric Bastiat, without expressly mentioning him.

⁶ Perhaps the publishers were aware of the brevity of the two periods of the *Revista Económica de Madrid* (in 1842 and 1847), but above all they bore in mind the short life of a journal, practically forgotten nowadays due to its peculiarity, entitled *El Economista. Revista de administración, economía política y jurisprudencia*, directed by Antonio Hernández Amores, with the collaboration of Juan López Somalo, published between May and October 1854 in Madrid. It appeared five times a month and gave its subscribers free works published in instalments.

⁷ For example, a note of the daily newspaper *La Iberia* (1857/01/30, p. 1) summarised a meeting of the Society of Political Economy of Paris where Joseph Garnier: "Also announced with satisfaction that the Spanish *El Economista*, founded by Messrs. Rodríguez and Echegaray, continued defending sound economic doctrines".

The editorial began with a creationist expression of human nature and the relationship between the available means, the work and the satisfaction of needs as the object of the political economy. Knowing and respecting the natural economic laws contributes to the economic and moral progress of humankind, while its ignorance, erroneous beliefs or biased interests could delay or even destroy the still highly insufficient progress made. The recognition of the substantial principles of individual interests, freedom and property only limited by the freedom and property of others, leads to circumscribing to the State's actions in order to prevent any invasion of everyone's freedom and property. However, when the public powers, stimulated by private interests or mistaken beliefs (such as Communism and Socialism), exceed those limits with privileges or interventions, they can cause damage and conflicts which "are not easy to distinguish" at first (the "labyrinth of sophisms"), because the profits of a few are evident, while the damage which affects the whole of society are greater but more widespread and hence, diluted. In order to understand and prevent those artificial trials (empiricism) and the consequential "political unrest", it is necessary to teach and spread the political economy in regard to the advantages of "industrial freedom".

These five pages do not obviously make mention of the specific contents of Bastiat's theories on value, exchange, distribution or the public sector. Free commerce does not even appear. Even though there is a reference to the "economic organism", a relationship with Krausism cannot be concluded in an isolated manner, for Bastiat also used that concept. However, the mention to "absolute perfection" of man and the government's "sphere of action" are too many coincidences to ignore them. What is really missing, however, is the notion of the harmony of the social interests. The editorial commitment with this line of thought initiated the second and more intense wave of spreading of Bastiat's texts in Spain between 1855 and 1861, during which a special receptiveness was noted within the progressive and democratic intellectual spheres.

The spreading purpose of *El Economista* was horizontal, for citizens. It was aimed at an educated, but not professionally specialised public, such as the target audiences of the *Revista Minera* or the *Revista de Obras Públicas* (Chastagnaret, 2001). It soon became an instrument for confrontation and an agglutinative for a very small opinion-setting and socially influential group in relation with the defending of economic freedom in every

area, but above all in regard to free trade and the customs reforms, matters to which almost all of the space would be dedicated. However, they did not neglect to comment on the liberalisation of the loan market and interest rates, criticism of the public subsidies (to theatres) and to the system of military conscription, and on behalf of free banking and emissions.

At the beginning, the journal combined articles from its writers with translations of Frédéric Bastiat, and from his followers Roger de Fontenay and Gustave de Molinari, but the International Congress for Customs Reforms held in Brussels in September 1856 took on special protagonism immediately. The connection with *L'Économiste belge* directed by Molinari was reinforced. The magazine reproduced the preparatory circulars and reports on the Congress, and the role carried out by the official Spanish delegates (Laureano Figuerola, Manuel Colmeiro and Gabriel Rodríguez). At the same time, the space dedicated to the controversy between the Spanish prohibitionists and protectionists was expanded (Juan Ferrer y Vidal, the first Ramón de la Sagra, the *Revista Industrial* of Barcelona, and the *Eco de la Ganadería* of Madrid), and to the founding of the *Sociedad de Economía Política* of Madrid at the beginning of 1857, of which it became momentarily its official representative as it published the summaries of their meetings.

It is impossible to cover, in this study, other specific aspects of the more than 600 pages of *El Economista*. It was not a publication for spreading economic theories because the goal of the publishers was to discuss solutions for institutional reform and the classification of private and public activities, in accordance with some general economic, universal and simple principles: "Our journal is just a periodical of economic propaganda" (*El Economista* I: 344). The most immediate model does not seem to have been the format of the *Journal des Économistes* directed by Joseph Garnier (then a very extensive and carefully documented monthly publication), but rather Molinari's lighter and combative biweekly *L'Économiste belge*, that appeared a year earlier, in January 1855.

The journal ceased publication in July 1857, due to "causes beyond our control", according to the editors, (II: 225), a discrete reference to the new print shop legislation, which that same month required editors to deposit heavy sums of money in order to be able to pay possible sanctions. To a

lesser degree, mention should be made of the competition from *La Tribuna de los Economistas*, as of its appearance in February, under the protection of Luis María Pastor.

It is necessary to highlight Gabriel Rodríguez's strategic contribution to the organisation of the new free trade group, based on an analysis of the formation of the collective action in Spain, covered in an article published in the journal (whose authorship does not offer any doubts) in June 1856, several weeks after the preliminary centrist grouping of the Unión Liberal (Rodríguez, 1856).

The author felt that the political parties in Spain identify themselves with different forms of government and relegate to a secondary level the primal matter of the "limits and attributions of the government", which should be explained first in the scientific terrain, by the Political Economy: "The form of Government is dependent upon the attributions which they want to give to it". In Spain, an inverse order has been historically followed by all parties (absolutist, moderate, constitutional), whereby the form of State is prioritised as a differential element. Consequently, there are "thousands" of possible and different economic solutions within each party which reveal a fragmentation and lack of internal cohesion, accentuated by regional and local diversities. It results at the end in a serious and permanent political instability that diminishes the rate of economic development and the continuity of the liberal system. The solution would lie in a change in the parties themselves and their organisation, but this reform "is almost equivalent to the substitution of these parties with other entirely new ones". Sooner rather than later, a transformation would occur "because the current parties, with the exception of the democratic one, whether they want to confess it or not, are becoming old and discredited". And finally he stated his wish that in this evolution, "the political parties would come to the point at which the matters of government [attributions] would be discussed and to the point at which the English parties have been moving increasingly closer, ever since the famous Cobden League".

Rodríguez's plan to form a transversal group with a favourable opinion towards economic freedom and in particular to free trade, appears not only as an imitation of the free trade formulations of Cobden and Bastiat, but also as a solution which would contribute to orienting the crisis of the political party system in Spain, by setting up some new bases for the collective choice. The founding of the *Sociedad de Economía Política* of Madrid on 2 January 1857 tried to carefully attend to the inclusion of members from the different parties and political families, by issuing at the very beginning an invitation to the protectionists (the presidency was offered to Alejandro Mon, who refused it) and by renouncing their original purpose of forming an exclusive, free trade association as was agreed upon in Brussels. That division, as it is known, faithfully followed the French-Belgian model and was effectively produced with the founding on 25 April 1859 of the *Asociación para la Reforma de los Aranceles de Aduana* (Association for the Reform of the Customs Duties), with the participation of 7 moderates, 14 unionists, 5 progressists and 13 democrats, classified according to their opinions, rather than to their actual party membership (Rodríguez, 1895 1917: 509-10).

In both organisations, Gabriel Rodríguez acted as the strategist, promoter and organiser, maintaining a strict conciliation between his societal responsibilities and the open defence of his own doctrinal and tactical positions. Some current studies often describe the *Sociedad* and the *Asociación* as surrounded by an apolitical halo, which extended to Rodríguez himself, but contemporary references deny it. The project of making noteworthy professionals and politicians come together "from all of the parties" was initially looked upon with some mistrust as an unusual way of intervening in public life, for example, in *El Clamor Público* (allied with the Unión Liberal), while the democratic *La Discusión* reported on some meetings with accuracy and sympathy⁸.

The same Order which dismissed Gabriel Rodríguez from his post in the Public Works Ministry, appointed him once again as a professor of the *Escuela de Caminos* in October 1856, soon after he returned from the Economic Congress in Brussels. He taught Administrative Law and Political Economy Applied to Public Works between 1856 and 1860 (Martín Rodríguez, 2006b: 28; Sáenz Ridruejo, 1990: 236-8). Lithographed fragments of some of the summaries of his Law lectures are conserved (Rodríguez, 1857; 1859b), but no material traces have been found about the contents of his lectures on Political Economy.

⁸ El Clamor Público, 1856/12/30, p. 3, tried to ridicule the planned session for the founding of the Sociedad de Economía Política by saying that "this Sociedad would probably divert into merely performing charades".

References exist on two courses on Political Economy Applied to Public Works, taught by Rodríguez (Román, 2008: 41-50). The first one was given in the Ateneo of Madrid in 1854, according to Labra (1878 2010). But Rodríguez did not become a member of the Ateneo until two years later and, above all, he does not appear on the roster of professorships for the 1854-55 course⁹. In addition, we know that a course with that same title was taught there by Práxedes Mateo Sagasta in 1856¹⁰. On the other hand, Juan Arespacochaga (1965: 184) highlighted "a lost detail" in Rodríguez's biography, for he could have participated in a cycle of fortnightly conferences in the Escuela de Ingenieros de Caminos on "Political Economy Applied to Public Works" during the 1856-1857 course. A similar statement, made without any documentary basis or proof, seems to be corrected by the evidence that Rodríguez appears on the roster of professors of the Ateneo for the 1856-57 course, to teach "On the communication routes as considered from the economic viewpoint", on Saturday nights from 9 to 10 (after the course taught by Figuerola)¹¹. But there is no information on its curriculum.

We know that the author considered the construction of the railroad as a process of liberalisation, due to the entrance of capital and the importing of railroad construction material, "without analysing for now the matter of the subsidies" (*El Economista* I, 55-6). In May 1857, he participated briefly in the *Sociedad de Economía Política* in order to express a contrary theory: "One cannot say that the cause of the agricultural backwardness [in our country] is due to the lack of adequate communications channels, but rather the lack of these channels is due to the backwardness of the agriculture"¹². Expressed more explicitly: "In Spain there are still no traffic elements to justify the use of the capital which the immense number of railroads granted would require, intended for the most part not to go beyond the drawing board, as Time will tell" (*El Economista* 1857/07/10, II: 225).

 $^{^{9}}$ Roster of professorships in the Gaceta de Madrid, 1854/11/27 p. 4; and El Clamor Público, 1854/11/25 p. 3.

¹⁰ The source is the most reliable, the *El Economista's* editorial office: "The young and distinguished engineer Mr. Práxedes Mateo Sagasta, a member of the Cortes, explained in the Ateneo on the first day of this month [February], the second lesson of the course on Political Economy Applied to the Public Works. In this second lesson..." (*El Economista* 1856/02/05, I: 20). The list of professorships of the 1855-56 course in *La Iberia*, 1856/01/12 p. 4., where Sagasta appears, but not Rodríguez.

¹¹ In El Clamor Público, 1856/11/12:3.

¹² La Tribuna de los Economistas II (4), May 1857, p. 51. With another expression, in *El Economista* 1857, II: 187.

Gabriel Rodríguez's activities and publications between 1856 and 1860 are numerous. The most well-known part corresponds to the development of the *Sociedad de Economía* and the *Asociación Arancelaria*, but we do not really know the work he carried out in the *Junta Consultiva de Obras Públicas*, in which he had been appointed as third secretary by Moyano in August 1857.

Rodríguez seems to show at this point a priority concern for defending political-economic solutions for Spanish society, in detriment to the initial attention to the development and spreading of political economy in its applied scientific aspect. In many of his speeches in the course of the discussions held in the *Sociedad de Economía Política*, he adopted a general point of view, which was concerned exclusively with the organisation of the economic activity and the legitimacy of the public regulations. His position about to the freedom of teaching is a real symbol of his priority focus on the legitimacy of liberal policies, the use of a strict logical deductive method (practically without references to the contemporary reality), which led him to adopt a negative stance on the obligatory nature of primary education and, of course, on its gratuity, in concordance with Frédéric Passy, but discrepant with Molinari¹³. Rodríguez shared this position with Echegaray and Félix Bona, but not with Figuerola, Colmeiro and Carballo, who argued back with their own reasons.

Rodríguez contributed to the revitalisation of the *Ateneo de Madrid* with a cycle of "lessons on commercial freedom" in 1857, in which "with a strict and elegant wording, a facility of speech and a didactic style (...), he belongs to the school which openly loves freedom with all of its logical consequences". The first lesson focussed on the principles of freedom, property and the sphere of government action. The second dealt with the justice of free trade¹⁴. He was the Secretary of the *Sección de Ciencias Morales y Políticas* in the *Ateneo* and he re-baptised his course as an "Examination of the systems contrary to commercial freedom" during the 1858-59¹⁵ academic year, while he continued as the Secretary of the *Sociedad de Economía Política*.

 $^{^{13}}$ La Tribuna de los Economistas, 3 and 24 March, 7 and 15 April 1858, t. V (15): 325-62, t. VI (16, 17, 18): 82-96, 178-219, 361-76, t. VII (19, 20): 93-121, 178-203. I wish to thank Dr. Susana Martínez for furnishing me with these complete materials.

¹⁴ A note published in the democratic *La Discusión*, reproduced in *La Época* and copied in the monarchical *La Esperanza*, 1857/11/26 p.1-2, with the ironic apostille of suggesting that it was a matter of "a new era of Vicalvaristas". A praising report of the second lesson in *La Discusión*, 1857/12/19, p. 2.

¹⁵ La Discusión, 1858/11/04 p. 3, 1858/11/25, 1859/01/11 p. 2, 1859/01/21; La Época 1859/01/14.

In a brochure on the cereal trade, Rodríguez (1858b) postulated that an extension to the free importation of grain was necessary in order to avoid the repetition of the severe crises of subsistence of the last years. In order to overcome the instability of the markets, it was necessary to establish free importation in a permanent way, derogating the prohibitionist system established in 1834 and which conditioned everything to a higher domestic price. This freedom would benefit the consumers and far from endangering internal farming, for the importations would only reach one-tenth of the Spanish production, it would assure the provision of subsistence and would reduce wage costs (including those of the cotton industry). The classic arguments for free trade seemed to proceed directly from Molinari's articles and a book by Léonce de Lavergne (1857), a publicist of the Guillaumin group.

Some controversies maintained by Rodríguez revealed at the same time his desire to participate in public life and a strict sense of doctrinal coherence. We should, therefore, recall his criticism of the system of military conscription, which advocated the suppression and the instauration of a system of volunteers which paradoxically clashed with the desire to reduce public expenditure in Spain (Rodríguez, 1858a). This is an additional example of the continuous imitation of *L'Économiste belge*.

Of another nature was the controversy maintained, regarding the merits of the engineers of the *Canal de Isabel II*, which arose with its inauguration, and on the economic advantages which would result from supplying water to Madrid. It led to a personal debate with Félix de Bona about the use of capacitated but uncertified personnel in the construction, as compared with the legal or facultative competencies which were similar to a monopoly of the civil engineers, according to Bona¹⁶. Rodríguez refused to reply to these veiled accusations.

Greater repercussions resulted from a lateral controversy with Ramón de Campoamor due to his criticism of Emilio Castelar for disqualifying the moderate party, as contained in his book *La fórmula de progreso*. In a public letter, Rodríguez (1859a) rallied with Castelar at the same time that he ridiculed Campoamor's economic arguments criticising free trade. The response from the moderate poet appeared in several articles published in

¹⁶ It began with the criticisms appearing in the *La Discusión* and *El Occidente*. The angry reply of the staff of the *Revista de Obras Públicas* (Víctor Martí, Eduardo Saavedra, P. M. Sagasta, Ángel Mayo and Gabriel Rodríguez) was printed in *La Iberia*, 1858/06/26 p. 2. The subsequent controversy between Bona and Rodríguez in *La Discusión*, 1, 2, 4, 6, 7, 10 and 13 July 1858.

1859, in which he sustained with historicist sarcasm that the Political Economy suffered from epistemological limitations which prevented it from becoming a universal science (Campoamor, 1862: 37-71).

The preparation and organisation of the Asociación para la Reforma de los Aranceles de Aduanas, as an initiative of the Sociedad de Economía Política, implied a persistent activity and a close relationship with Luis María Pastor. In the founding session, held in the Stock Market building of Madrid, on 25 April 1859, when he was elected secretary, he gave a moving speech in which he assumed the commitment of "not neglecting any means and of using all his power" in the battle for free trade, adopting as his models Richard Cobden and Frédéric Bastiat, and he based the potential success of the Asociación on the participation of: "Youth, which has been and always will be the army of great principles" (Rodríguez, 1859 1917). In addition, Rodríguez conducted the course "Examination of the protective system in political economy" in the Ateneo, during the 1859-60 and 1860-61 courses (Fulgosio, 1860: 7; 1861: 11), while as Secretary of the Asociación, he challenged the protectionist representatives and, in particular, the very active critic Genaro Morquecho (1860) to a public discussion¹⁷. In May 1860, the new journal Gaceta economista appeared as the free trade representative, supported by Pastor and flanked by a long list of prestigious collaborators. The protectionist responses did not take long: the short-lived La Verdad Económica and several articles and brochures by Juan Güell (1861).

In 1859, professor Gabriel Rodríguez obtained official permission to give private math lessons (presumably for obtaining admittance to the engineering schools), an activity which he continued until the seventies in order to complement his income. In March 1861, he stopped teaching at the Engineering School and his active service in the Engineers' Corps, when he was hired by the Miranda firm in order to direct the construction of the Northwest railroad in its Palencia-León-Ponferrada sections. He established his residence in Palencia until October 1862 (Sáenz Ridruejo, 1990: 237-41). Before that, he had however protagonized a new journalistic and political experience.

¹⁷ Information on Rodríguez's courses in *La Esperanza*, 1860/01/16, and *El Clamor Público*, 1860/11/10; and one of his letters to Morquecho in *La Discusión*, 1860/04/27, p. 2.

LA RAZÓN, DEMOCRACY AND SOCIALISM

The sudden appearance of *La Razón, revista quincenal científica, política y literaria* in 1860 reflected the convergence of a small group of people who called for a scientific (philosophical) analysis to establish the bases for a new political action which would respond to the depletion of the traditional Spanish parties, affected by their "empiricism". In their initial programmatic declaration, shared by the entire group but drawn up by Francisco de Paula Canalejas, converged the remodelled Krausist vision about the natural grounds for freedom and law with the criticism of the arbitrary invasion of public power in all of the spheres of human activity in society. Gonzalo Capellán defined this *barmonic liberalism* as an alternative to the rest of the contemporary liberal projects (Capellán de Miguel, 2007).

Gabriel Rodríguez was one of the most active founders and writers of *La Razón*. His article on "Democracy and Socialism" (Rodríguez, 1860) analysed once again the political party system in Spain, along with the terms which he had initiated in *El Economista*, but he focussed his attention on the incoherence of the Democratic Party. He felt that from its foundation in 1848, coexisted respectful trends with "individual autonomy" (unlegislable individual freedom) with other "socialist" orientations which trusted in State intervention, over natural law and justice. The coexistence between both trends had led the way to a clarifying confrontation (between *La Discusión* and *El Pueblo*) and, finally, a truce or commitment by which a fixed nucleus was set up (individual freedoms and universal vote suffrage) and different opinions were admitted "in philosophy and in economic and social matters". Rodríguez felt that the incoherence persisted and that the truly liberal democrats who had not subscribed to the agreement (that is, Castelar) should have to fight it.

The commotion was immediate. *La Discusión* considered that the "rationalist" group advocated for political "indifferentism" and aimed at dividing the democratic party. Rodríguez replied in letters to the newspaper and articles in *La Razón*, denying that he was indifferent in regard to politics, but he refused to adopt the term "democrat" in order to avoid confu-

sion with a contradictory party. He insisted on the impossibility of reconciling the "autonomy of the personality" with socialist proposals from the democratic program, such as free and universal primary education, State professional schools, and "the reforms of the customs duties especially in regard to the poorer class". Castelar withdrew his support to the journal and feeling betrayed, he announced an angry separation from his friends. In the meantime, the leader of the democratic party José María de Orense initiated a friendly exchange of public correspondence with Rodríguez, in which he warned him about the difference between a political party and a philosophical school, and reminded him that "all the 'colours' can fit into the circle, the school, or the economist party, if they accept free trade" (*La Razón* I: 247). This led to a number of replies. Between December 1860 and February 1861, the original title of "La Democracia y el Socialismo" labelled a series of five of his articles (*La Razón* I: 27-42, 146-58, 236-47, 323-36, 415-25), aside from many letters and press releases¹⁸.

In addition, he contributed with three more studies to the journal, but of another nature. One of them was intended to refute a possible legislative modification of the regulations on rentals (Rodríguez, 1861c), with the supposed purpose of protecting the tenants (merchants) who had acquired a new clientele located near the property. This situation which suddenly emerged was the result of a lack of foresight on the part of the tenants: the exception was inadmissible because it would attack property rights. He defended the maintaining of the freedom and stability of the contracts.

The article "The just and the useful" is Rodríguez's explicitly harmonist declaration (1861d) in *La Razón*. "The principle of the harmony of the natural laws of the social order (...), between *justice* and *convenience* or *general utility*", stands out here, for the "harmonic doctrine" reconciles the legal science and the political economy (that is, the Krausist principles and the Economists ones). To simplify everything to the absurd, he presented two extreme cases, with a predominance of utility or freedom (justice), respectively. In the first case, the government would be responsible for the general utility by means of complete interventionism (beliefs, markets, prices...), but a paralysis of individual actions would completely "destroy society" and lead to despotism. In the second case, in which freedom would predomi-

¹⁵ In addition to the first volume of *La Razón*, in *La Discusión* of 13, 14, 23, 25, 27, 30 December 1860, and 1, 12, 13, 17, 18, 19, 20, 22, 23 January 1861.

nate, if the "personal interests" were not limited by the right to prohibit "plundering", the end result would be chaos. The reader will have recognised Bastiat and Molinari's characteristic arguments on the logical impossibility of statism or socialism, as well as the absence of a legislative government, without any Krausist embellishments in the areas of human development. The title of the article had been used by Henri Dameth and Jules Dupuit (1861) among others, but I think that the closest link was the recent *Traité élémentaire d'économie politique* by Charles Le Hardy de Beaulieu (1861b: 9-11), a mining engineer, an economics professor and a collaborator of the free trade newspaper *L'Économiste belge*, with which Rodríguez was personally familiar¹⁹.

The last and apparently simple article puts forth a personal view on "the property of inventions" (Rodríguez, 1861b)²⁰. The author confessed having written his note for Le Hardy, with a new interpretation for "it had not expressed this view yet in any other work of consideration" (p. 458)²¹. In my opinion, Rodriguez's argumentary starting point was the same *Trai-té élémentaire* by Le Hardy (1861b: 121-4), and the article 'De la propriété des inventions', by Gustave de Molinari, re-published in a recent book (Molinari, 1861: II, 339-75). However, the classification of the inventions and the conclusions of the Spanish economist differ from both. The subject continued to be the object of a great deal of discussion (Garnier, 1860: 602-4).

The author groups these controversial economic doctrines into three "theories": (1) inventions are a full property for its use and transmission; (2) inventions cannot constitute a property when they are made public; and (3) inventions belong to the discoverer and to society, which usually leads to temporary privileges.

¹⁹ *El Economista* (1857, II: 228-31) published in its last issue a letter from Le Hardy on free banking. Apart from their previous relationship, established in the Congress of Brussels of 1856, Rodriguez and Le Hardy coincided in Madrid during the first months of 1861. Le Hardy attended in January and April 1861 two sessions of the free-trader *Asociación* in Madrid, and he praised Rodriguez's oratory capacity in *L'Économiste belge* 1861, VII: 123-4. He probably finished gathering information for his essay on the commercial future of Spain during his trip (Le Hardy de Beaulieu, 1861a).

²⁰ Published also in *Gaceta economista*, I (5) September 1861: 321-33.

²¹ L'Économiste belge published between February and March 1861, a terminal debate between P. Paillottet (VII: 57, 67-8) and Le Hardy (VII: 83-84, 92-3) on 'La propriété des inventions. Discussion', in which the latter one reiterated his idea of the temporary "natural monopoly" of the inventions. Le Hardy's part was translated in the *Gaceta economista*, I(8), December: 602-10.

Rodríguez considered the third theory as unsustainable, because if we accept the fact that knowledge accumulated by society ("a common fund") detracts from the grounds for the inventor's personal rights over his work, the end result would be "the negation of all properties". The first theory also seems incorrect because it infers property for an inventor's work, but ignores the fact that it is necessary for the product of this work to be appropriable and with an "exclusive nature". In addition, as in inventions, "the product of the work can be at the same time enjoyed by all men, without the enjoyment by one harming at all the enjoyment by another; and so, the product cannot belong to anyone" (p. 460). The text is sufficiently precise so as to affirm that Rodríguez characterised a frequent type of invention due to its nature, such as non-exclusive and non-rivalling goods, which seems to coincide with the criteria for pure public goods, established by Paul A. Samuelson, but for private provision. The circumstance which determines that nature is what ceases to be secret and can be imitable.

After rejecting the first and third theories, the author reaffirms his position. Most inventions cannot avoid imitation and, at most, they can represent a temporary "natural monopoly" but, due to their non-exclusive nature, they do not possess grounds on which to base the natural right of property. This process of imitation brings his concept of innovation closer to Paul Romer's notion about technology as a non-rival and partially exclusive asset²². In fact, in a customary manner:

An invention is created when a principle is discovered, like when one finds a way to obtain useful results from it; an invention is created when a new way to do something is discovered, like when a *better* raw material with which to work is found; an invention is created when a speculation is combined with a new way of obtaining credit; *an invention is always created*, then, (...) when something that may have been invented before, appears to be completely new for the worker. (Rodríguez, 1861b: 465, cursive lettering from the original).

We should point out a similarity between this explanation with what was employed years later by Joseph Schumpeter (1912 1976: 77) to describe the main types of innovations.

²² I appreciate the suggested relationship with Paul Romer to Professor Pedro Schwartz.

In any event, Rodríguez concludes that the legal protection ("privileges", patents) would be "unjust" according to natural law, and "prejudicial", for it would delay the progress of humankind without offering any "decisive rewards" (another implicit discrepancy with Molinari). The author concludes by insisting on the fact that the origin of the controversies lies in not having understood that the right of property is based on the "natural assimilation that the personality makes by means of human work (...) with the character of exclusiveness" (p. 468). The "ideas, ways of working", like "scientific laws and principles, [are] non-appropriable due to their nature", and they proceed in the end to the "common fund" of humanity's knowledge. This is a much more precise conclusion but with a similar starting point to Mathieu Wolkoff's explanation (1849: 34-8), developed in his more recent *Lectures d'économie politique rationnelle* (1861: 36-52)²³.

At the end of the note, in order to present Le Hardy to his readers, Rodríguez mentioned his recent *Traité élémentaire*. His early familiarity with this book, surely because it was a gift from the author, coincides with its use as a textbook in the *Escuela de Caminos*, when he left his teaching post on a leave (Martín Rodríguez, 2006b: 28, 32-3). It is a synthesis of Bastiat, Dunoyer and Molinari's contributions (Erreyguers et al., 2012: 217-8). In turn, Le Hardy included the French translation of Rodríguez's article on inventions in another one he published soon after in the *Journal des Économistes*, a partially anonymous international projection that had gone unnoticed (Le Hardy de Beaulieu, 1862: 79-86).

²³ Rodríguez's article was published at the end of September. Wolkoff's book was published in June of 1861, because it appeared mentioned in the bulletin *Bibliographie de la France*, 1861/07/06 p. 328. Soon after, Henri Baudrillart dedicated a vitriolic recension to him in the *Journal des Débats*, 1861/07/29, indicating that it had just been published.

THE "ECONOMISTS": THE GROUP, THE SCHOOL, THE PARTY

Even though *La Razón's* editorial staff blamed the difficulties with the censors to justify the voluntary shutting down of the journal in September 1861, that same organising staff (Canalejas, Morayta, Alzugaray) immediately created the *Revista Ibérica*, insinuating that it was going to be a continuation of the first publication. Canalejas signed, as the director a programmatic "Warning", advocating the reinforcement of the liberal tradition shared by all the parties, whose differences were more personal than essential (1861a). A precedent for this position, which softened the differences, was put forth in *La Razón* on the occasion of the peasant rebellion in Loja (Canalejas, 1861b). In fact, the new journal invited writers from all the sectors to participate. Gabriel Rodríguez (from Palencia) commented on this supposed continuity because: "In *La Razón*, as of volume II, two social and political trends were revealed, which were quite different, and in some points contrary to one another", and the disagreement (which he does not explain) led to the end of the journal (Rodríguez, 1861a).

Lacking in more details, we wish to remember that Colombian José M. Samper (1861: 227) had distinguished three opinion groups within the "Spanish democracy": the militant *political democrats* (Orense, Rivero, Garrido, ...), the *philosophic democrats* (Castelar, Canalejas, Morayta) and the *economist democrats* (Bona, Carballo, Rodríguez, Moret, Echegaray)²⁴. This interpretation seems closer to the one furnished by Rodríguez himself in two new rectifications published in 1863 in relation with a declaration of the staff writers of the *Revista Ibérica* in which they criticized the electoral reserve proposed by the progressists and democrats²⁵. In his first letter, he confirmed that the fracture within *La Razón* was the reason for its

²⁴ Very similar to the classification from Echegaray in his *Recuerdos*. "The political democrats, the philosophical democrats, or, let us say, the Krausists, and the economists" (1917: 353-4).

²⁵ This new controversy was developed in *El Contemporáneo*. It began with a declaration or manifesto from the staff writers of the *Revista Ibérica* (15 September 1863), which provoked a criticism of the newspaper (the 16th), G. Rodríguez's first letter (the 18th), a response from Miguel Moray-ta (the 20th), and Rodríguez's second letter (the 24).

disappearance and that the new journal had a "very different purpose than the one which had existed when the first one came into being", and he expressed his favourable opinion on the electoral reserve (Rodríguez, 1863a). In his second letter, he offered a full clarification, which we should reproduce here, where he began by denying the idea that "the *economist* fraction" had gone over to the side of the *Gaceta Economista*:

There is a regrettable confusion here between the people who carry the general title of *economists* and the fraction or particular political group which has adopted it or rather *received* the same name from their adversaries. This fraction or group, which gave its first signs of life in *El Economista* from 1856 and 1857, and which then played a very important part in *La Razón* (...) could not be grouped together once again under the *Gaceta Economista*, because it never was, either before or after 1860, represented by said periodical (...), [that] is a *non-political* journal in which men of all parties who defend liberal ideas on economic matters (...) have always written and still write today.

The political group, called *economist*, (...) ever since *La Razón* ceased to be published, lacked its own representative in the periodical press. The ideas of this political fraction, which are based on the principle of the autonomy of the human being, and with this principle, they created a complete, *radically* liberal, political and economic dogma. They are represented and they can be sought out and judged in *El Economista* from 1856 and 1857, in *La Razón* (that the economist group wrote, together with what we will call now the *Revista Ibérica*) and in some isolated writings and speeches given in the sections of the *Ateneo de Madrid*.

In addition, in order to avoid confusion (...), I plan to publish together with several friends, next winter, a political journal, which will continue the work initiated in *El Economista* from 1856 and 1857, and then, with the cooperation of some of the current writers of the *Revista ibérica* in *La Razón*, we will present our doctrine with absolute clarity. As we have said in the last journal, it constitutes the dogma of a true democracy, radical and free of socialist elements, which unfortunately denaturalised from the very beginning the doctrine of the Spanish democratic party (Rodríguez, 1863b: cursive from the original document).

An additional proof of the importance which the author granted to a correct interpretation of his position in those debates was a new rectifica-

tion (Rodríguez, 1864), this time to the democratic leader Nicolás María Rivero in May 1864, because he had stated, in the controversy between *La Razón* and *La Discusión*, that: "He made his adversary shut up". Rodríguez pointed out that after 13 January 1861, the democratic newspaper unilate-rally terminated the controversy and he reiterated: "My sympathies lie and will always be with those who fight socialism".

These answers, which had been ignored for some time, furnish some very interesting interpretative ideas. In the first place, *La Razón's* fracture (recognised by both groups) indicates that the suggestive doctrinal unit of *harmonic liberalism* as a convergence of Krausists and Economists (Capellán de Miguel, 2007) seems to be a fragile guide for understanding a single central line of thought and, above all, of political action between Krausists and Economists until the Restoration period. Wiser still is the proposal to consider this journal within the complex evolution of the diverse cultures and the heterogeneous democratic political organisations existing in the sixties (Miguel González, 2007).

And at second place, the crisis of La Razón allows us to consider, at least, three different societal levels in the new liberal economist movement. which was developed as of the Progressivist Biennial and the crisis of the dynastic parties. Between the two organisations with members of diverse opinions or parties (Sociedad, Asociación), who coincide with the broad acceptance of the term "Economist School". Although we should distinguish functionally, on one hand, the Sociedad de Economía Política as a more general and plural scope of the economic debate. While the Asociación para la Reforma de los Aranceles was constituted as a more homogenous opinion group, focussing on its goal of free trade, the formation of public opinion and the applying of pressure to the institutions, thus assuming the political heterogeneity of its members. On the other side, in a much lesser known level, we find the economist group led by Gabriel Rodríguez, in which we can place José Echegaray, Joaquín María Sanromá, Segismundo Moret and Benigno Carballo (as effective collaborators of La Razón), with a political-economic nature defined by the defence of the autonomy of the personality (unlegislable rights), of the political democracy and of economic freedom.

The important interaction between these different groups, between the distinct personalities and statuses within the academic world, the philoso-

phic orientations, the parties, societies, newspapers, offices and companies, which we still only partially know, recommend that we broaden the strictly economic perspective in the study of the spreading and influence of their economic ideas.

The uniqueness of Bastiat's reception by the *El Economista* group lies in the acceptance of the general philosophic framework, its hard teleological nucleus (Solal et al., 2000), the anchorage of the absolute principles of the nature of the human personality created by God, whose development demanded freedom and property and the strictly guarantor nature of the State's activity. Bastiat's influence is not explained only by the suggestive didactic or the ironic style of his writings, or by the standard of free trade, as it constitutes the reformulation of an *iusnaturalist* (natural law) social philosophy which, axiomatically, founded and limited the margins of the new democratic liberalism from the Political Economy, while it set up insurmountable conceptual barriers against the potential relativism of several orientations of contemporary social philosophy, such as doctrinal eclecticism, utilitarianism and the diverse interventionist and socialist formulations (Rodríguez Braun et al., 2011). The communication and intellectual collaboration with the followers of another idealistic philosophy such as Krausism was facilitated by a concordance in some fundamental aspects, as José Luis Malo pointed out (2005: 18-26), although disciplinary epistemological differences subsisted in the view of society and politics from the angle of the Philosophy of Law or from Political Economy. The priority attributed by the economists to the problems of the natural legitimacy of the public regulations, without considering the historic aspects of the social spheres (towns, provinces, States) considered by the Krausists, seems to have constituted a factor of customary discrepancy between both views.

FREE TRADE IN THE ATENEO

We wish to remember that Gabriel Rodríguez remained involved in the construction of the North Western railroad between March 1861 and October 1862. During his stay in Palencia he met his professional obligations, continued his collaborations in *La Razón*, expressed his discrepancy with the intended continuity of that publication in the *Revista Ibérica*, and began a new series of musical compositions²⁶.

When he joined the engineering corps, he was assigned to the *Junta Consultiva de Fomento*, where he remained until the Revolution of 1868. In the Junta, he created or contributed to important undertakings, such as the drafting of the Spanish railway network, although did not return to his teaching of Political Economy in the *Escuela de Ingenieros* but from 1873.

Despite his absence from Madrid, he went in March 1862 to make a presentation in the *Ateneo*, as part of a large cycle of free trade conferences organised by the *Asociación para la Reforma de los Aranceles de Aduanas*, which had started in December 1861. The initial project foresaw the participation of seventeen orators from the Board of the *Asociación* who discussed every week (on Fridays) different general and specific subjects related to free trade and protection²⁷. This cycle represented an attempt to raise and diversify, with an academic presentation, the repercussions of the periodic meetings of the *Asociación* in the former building of the Stock Exchange, which had a new format imported from the *meetings* (like the Anti-Corn Law League), but with a meticulously ordered debate. Several interventions in the cycle were published in the *Gaceta Economista* and the favourable journalistic comments on the conferences increased, but so did the criticism, in each speech, coordinated by protectionist agronomist Genaro Morquecho and a group of collaborators of the "Círculo económi-

²⁶ When he voluntarily quit his job, he did not accept an extraordinary severance pay from the company, according to the 'Memoria del Consejo de Administración a la Junta de Accionistas' of the Palencia-Ponferrada Railway, in the *Gaceta de los Caminos de Hierro* 8 (26), 1863/06/28 p. 402-5. His son maintained that Rodríguez left because he did not accept the presumed irregularities in the set-tlements of the construction work (Rodríguez Vilallonga, 1917: 14).

²⁷ List of subjects and speakers scheduled in the Asociación para la *Reforma de los Aranceles de Aduanas (...) session on 1 December 1861*, in an Appendix to the *Gaceta economista. Periódico.*

co español", first in the daily paper *El Reino* and afterwards in a compiled volume (Morquecho Palma, 1862).

The success obtained by the first cycle of conferences advised repeating it during the 1862-63 course, when Gabriel Rodríguez had returned to Madrid, even though there were fewer repercussions. Most of the conferences of the first cycle were assembled in the book *Conferencias librecambistas* which included eighteen speeches, with the inclusion of a new few ones (Pastor, 1863). The group was a mosaic of "varied and also opposing political opinions", from the elderly Antonio Alcalá Galiano to Emilio Castelar, from Gabriel Rodríguez's group to Canalejas, together with Pastor, Figuerola, Bona, and two other Political Economy professors, Madrazo and Carreras, among others. It represented the "campaign" for the doctrine of the greater public projection of the *Asociación*.

Gabriel Rodríguez's conference in the *Ateneo* in March 1862 had the same title as that of his classes (professorships) from previous years, and focussed on a criticism of protectionism from an economic perspective (1863c). In his first words, the author highlighted his commitment with the defence of all freedoms, economic, political, religious, etc. even though he considered the selective defence of free trade which the *Asociación* advocated of vital importance ("a true and legitimate coalition")²⁸. According to Rodríguez, Friedrich List's *modern* protectionism, which had several followers in Spain, was based on three main arguments: (1) the distinction between products and "productive forces", (2) the (supposed) advantages of the "variety of productive forces" (diversity) in productivity, and (3) the increase in the productive diversity as a motor for prosperity²⁹.

Rodríguez did not accept the first argument because it was possible to access exterior productive forces through specialisation and free international trade, in a more efficient manner (lower absolute costs) than by forcing

²⁸ I think these words were replied by Emilio Castelar, the only unruly orator who unexpectedly refuted the unitary strategy of the *Asociación*, for he thought it was impossible to separate the defence of economic freedom from the rest of the freedoms and so the preaching of free trade in Spain was ineffective "as long as the current political conditions exist" (Castelar, 1863). This position in the closing conference caused the explicit but elegant reconvention of President Pastor to prologue the texts (1863: ix-xii).

²⁰ List's main text was known in Spain thanks to the French translation by Henri Richelot, *Système national d'économie politique*, with two Paris editions in 1851 and 1857. An advance note of the speech of 1863 is what Rodríguez announced in the *Asociación para reforma (...) session of 20 January 1861*, in a supplement to the *Gaceta economista. Periódico*, as a reply to an intervention from Genaro Morquecho.

the domestic productive variety with customs restrictions, because they would reduce "the absolute productivity", infra-utilise the "natural conditions" and they are based on erroneous elections by the government. The growth was not, as List said, the result of a closer or forced domestic intersectorial relationship, for that facility could be obtained on the foreign market, "coming from near or far". List's main paradox was to accept the advantages of free trade, after the period of protected launching. In the end, List's final argument was for "national independence, as the *classic* protectionism of François Ferrier and Auguste de Saint-Chamans (with which he was familiar second-hand). Here, Rodríguez changed his tone and used Bastiat and Molinari's caustic style (including textually), and he ended with a refutation of the customary protectionist theory, according to which English prosperity had its roots in prohibitions and regulations. Rodríguez felt that that prosperity was the result of the free trade supported by the English League.

The last reasoning, according to the reply from a moderate protectionist newspaper in Barcelona, had another interpretation: lowering the cereal prices to increase England's competiveness was equivalent to increasing its effective protection of the manufactured goods³⁰. On another plane, his criticism of List was classified as presumptuous because he disdained the role of the nationalities in economic life, and ignored the "latent forces" on the domestic market (Rodríguez San Pedro, 1862).

This meditated speech contained, despite its limitations, a very careful synthesis and criticism of List's theories put forth by a member of the "economist school" (Spalletti, 2002). Surely in order to tie up loose ends, Rodríguez offered, soon after, a theoretical criticism of List's industrialism. The supposed advantages of the manufactured goods in the economic growth vanished when a less traditional sectorial classification was considered, based on human needs and on utility, which also included the extractive industries, trade, shipping and the rest of the services³¹. It could not be stated that free trade in Spain would determine an *exclusively* agrarian specialisation because it possessed "excellent natural conditions" and resources of factors for extractive, transformation and service industries (Rodríguez, 1863d).

³⁰ See the editorial of *El Lloyd Español* (Redacción, 1862), which replied to the printing of Rodríguez's article published in the *Gaceta Economista. Revista económico-política*, III (19), November 1862: 347-73, but also published as a brochure in Barcelona (Rodríguez, 1862).

³¹ This classification, put forth by Charles Dunoyer, is synthesized along the same terms that Le Hardy proposed (1861b: 28-29).

DARK TIMES. AN INSTITUTIONAL PERSPECTIVE AND APPLIED ANALYSIS

The content of the cycles of lectures at the *Ateneo* presented a brilliant rhetorical dimension which should not divert our attention in regard to a new reforming, *possibilist* path, on the part of the *Asociación*. The decisive step, a "free-trade spark" according to Pastor, was the admission of the *Asociación* to report in a parliamentary commission of the Congress which dealt with importing print shop paper, in June 1862. It was the first time and it created a precedent. In mid-December, the Board of the *Asociación* made public a Representation to the Queen in support of the Royal Decree on November 27, which it introduced tariff deductions and a promise of general reforms in Parliament. In the *Asociación's* meeting on December 26, within a climate of optimism with the Cobden-Chevalier treaty in everyone's mind, those supports were renewed in an Exposition directed to the Parliament, without knowing that Minister Pedro Salaverría was rectifying the scope of the decree and that he would present on 5 January 1863, a project for customs reforms of a lesser scope than what was expected³².

The *Asociación's* Governing Board elaborated then a declaration for the public opinion, which reflected Gabriel Rodríguez's unmistakable style, in which they admitted some improvements but censured the Minister several unacceptable aspects of the planned reform: its intended definitive nature, together with its excessive period of twelve years, and the maintenance of the prohibition on importing cereals and cotton fabrics. They argued that the transition should have free trade as a final goal, modified only by some moderate fiscal duties, which were necessary³³. Some similar

³² First, the Asociación celebrated the institutional recognition by rendering, in July, a tribute to the then member of parliament Luis González Bravo "in the Lhardy tavern"; in La Época, 1862/07/05 p. 3, El Clamor Público and La Iberia, 1862/07/06. See the documents published separately in the Gaceta Economista. Periódico: Representación que la Junta Directiva de la Asociación para la Reforma de Aranceles de Aduanas ha dirigido a S. M. con motivo del Decreto Real de 27 de noviembre último [15 December 1862]; and Asociación para la Reforma (...), sesión pública (...) 26 de December de 1862 (it contains the Declaration to the Parliament, approved in that session).

³⁵ Observaciones sobre el proyecto de reforma arancelaria, presentado a las Cortes en 5 de enero, dirigidas al público por la Asociación para la Reforma de los Aranceles de Aduanas, Madrid: I.

arguments were declared by several members of the Board in the Parliamentary Commission, Rodríguez among them. The *Sociedad de Economía Política* held nine meetings between January and March, in which it was shown that the reform was rejected both by the free traders as well as by the protectionists. And the *Asociación* requested in April the withdrawal of the project or its replacement with another one, with new bases³⁴. Despite the rectification, the *Asociación* (which was known for its doctrinal radicalism) had projected the idea that it accepted a scaled transition over time towards the fiscal tariffs.

When Salaverría's reform was withdrawn, the later governments did not take on a general customs duty reform and, consequently, the Asociación did not carry out a similar and noteworthy activity as an agent involved in the customs duty reforms until the Informative Commission, created by Manuel Alonso Martínez in 1865, to discuss the differential flag duties, expanded to include iron, coal and cotton. Pastor and Rodríguez, in the name of the Asociación, then presented their respective reports and reaffirmed their positions, which were anti-prohibitionist and in favour of a strong customs duty reduction, based on selected statistical information³⁵. This set of declarations and reports brought Rodríguez closer to the institutional, technical and political process for the Spanish customs duty reform that affected specific sectors and activities. Together with the widespread argument as to the general advantages of the division of labour, he insisted now on the importance of forward linkage effect from lower the cost of the raw materials, the capital goods and the wage goods in order to develop the importing sectors.

Manuel Galiano, 1863 (signed on 31 January by L. M. Pastor and G. Rodríguez), reproduced with the title of 'Economía Política' in *La Iberia*, X (2675-2677) 27, 28 and 29 March 1863. The authorship of the declaration would be recognised cryptically by Rodríguez himself (1895 1917: 513). On Salaverría's reform, see Montañés's study (2009: 232-43).

³⁴ Sociedad de Economía Política, Extracto de las sesiones extraordinarias celebradas para examinar y discutir el proyecto de reforma arancelaria (...) en 5 January1863, Madrid: I. de Manuel Galiano, 1863; La Época 1863/02/11, and the Asociación para la Reforma (...) reunión pública (...) 6 de April de 1863; enclosed with the Gaceta Economista. Periódico, IV (150), 1863/04/06.

³⁵ See the answers and reports presented between February and April 1866 by the Asociación (signed by Pastor, as president, and Rodríguez as secretary) in *Información sobre el derecho diferencial de bandera y sobre los de aduanas exigibles a los hierros, el carbón piedra y los algodones*, Madrid: Imprenta Nacional, 1867; Volume I. *Derecho diferencial de bandera* (pp. 131-9), Volume II. *Hierros* (pp. 203-9), Volume III. *Carbones* (pp. 113-7), Volume IV. *Algodones* (pp. 179-85). On this Commission, see Montañés (2009: 269-74).

In addition to his dedication to the *Asociación*, most of Gabriel Rodríguez's activities up until the revolution of September 1868 were also influenced by a preferential attention towards the most immediate problems of Spain's economy and politics, in detriment to the more general theoretical or philosophical discussions of previous years. The evolution of the Isabelline regime, the confluence of progressists and democrats, and the successive restrictions on freedom of assembly and press surely played a complementary role.

Rodríguez formed part of a mixed commission appointed by the Minister of Public Works for the unification of the maximum toll prices and the perception of the railway tariffs³⁶. In May 1864, he was appointed Secretary of the Commission in charge of studying the general railroad plan, the result of which was the *Anteproyecto general de ferrocarriles*; between September and October he travelled first to Benasque, and then to Paris, to cover the connections between Huesca to France³⁷.

We would like to recall that Rodríguez promised, in September 1863, to publish a "political journal" to defend "the dogma of a true and radical democracy, free of any socialist elements". Everything seems to indicate that he did not fulfil his goal. Apart from the new cycle of free trade conferences, in December 1863, he began giving a course (chair) in the *Ateneo* entitled "*Estudios políticos*", whose contents we do not know in detail, although it occurred after the reservations of the progressists and democrats in the October elections³⁸. In his closing speech-summary before the Moral and Political Sciences section, which had debated "the philosophic principles that determine the idea of nationality", he also explained his own individualist position (Rodríguez, 1864 1903). He put a clear distance between himself and the most customary Krausist plan, for he did not admit that nationality (and implicitly "the family, the village" as well) possessed a personality or awareness equivalent to that of the individual. It was only a historically transitory condition, for individual rights and free-

³⁶ With the concessionaire company of Madrid to Zaragoza and Alicante. La Época, 1863/12/02; Gaceta de los caminos de bierro, 1863/12/06.

³⁷ La Época, 1864/05/24 p. 3; El Clamor público, 1864/09/01 and 1864/09/07, La Época, 1864/10/21.

³⁸ The title in quotation marks in *La Correspondencia de España*, 1863/11/30. As regards the contents, *La Iberia*, 1863/12/09, indicated that "his course will cover three parts, referring the first to a fundamental question or to the fundamental principles; the second to the question of form, and the third to the ideal of political behaviour. The attendance was numerous".

dom. He sustained now that human behaviour "is powered by two natural and indestructible motives: interest and sympathy". Compared with the regulating Krausist "spheres" which wanted to control individual activity, he expressed his preference for "free association".

Other works by the author have been practically forgotten but they deserve to be rescued. A debate maintained in the Senate between Luis María Pastor and the Minister of Finance Manuel García Barzanallana, in December 1864, provoked an interesting note from Rodríguez (1865b) on the errors made by the Minister, in the midst of a serious budget and financial crisis³⁹. The first of "the largest sophisms" was that Barzanallana identified the decline in the amount of money in circulation in Spain with the exporting of currency caused by the negative difference between the exports and the imports. Rodríguez pointed out that the foreign trade statistics (in which the Minister was presumably an expert) did not calculate the freight, surcharges and commercial profits, nor did the Minister understand the role of the returns on the international monetary adjustment.

The Minister's second theory was that the expensive Spanish wheat could not be exported. Here Rodríguez replied with a simple version of the international trade theory according to comparative advantages, resolved by "the Mill economists (father and son)". With a numeric model from two countries and two commodities, he determined the extreme trade relations and concluded that "an intermediate relationship would be established between the two countries (...), which would put an end to the status of equilibrium, in which there would be an exchange of articles between the two nations, even though in one, the wheat, would cost four times more". It should be pointed out that this is one of the few expositions of the comparative advantages in contemporary Spanish economic literature, surely inspired by the new books by Antoine Cherbuliez (1862: I, 375-91) and by Antoine-Augustin Cournot (1863: 337-40). The third error lied in the preference shown towards the consumer tax because, according to the Minister, "they would make life less expensive" than the territorial tax and because the subsequent wages increases would compensate for the loss of purchasing power. Rodríguez responded with the wages-fund theory and the continuity of the wage rate "until the capital is increased, or the number of workers decreased". "Poor country", he concluded.

³⁹ Diario de Sesiones de Cortes – Senado (DSC-S) 1865/01/13 p. 76-90.
In the debate with Barzanallana, Pastor analysed the causes for the concentration of the holders of the bills before at the doors of the *Banco de* España in order to obtain cash, during the monetary and financial crisis of 1864. A decision issued by the Audiencia de Madrid confirmed afterwards the executive nature of the bills, but the Bank requested a decision contrary to the sentence, from a team of famous attorneys, which was made public⁴⁰. Among the authors was Laureano Figuerola, to whom Rodríguez sent a painful reminder of Horacio's warning: "At times even the good Homer sleeps" (1866b). He replied to the judicial arguments of the sentence and at the same time, analysed the evolution of the Bank's emissions and the portfolio in order to establish a relationship between the Bank's issuing monopoly and its anomalous financing to the Government as the cause for the excessive amount of bills in circulation. He presented his central arguments on behalf of convertibility without delay, free banking (the disappearance of the monopoly) and the settlement of the public debt with the Bank. In summary, this was a practical exercise of the arguments of the Free Banking School which Rodríguez postulated, at least, as of 1857 (El Economista 1857: II, 228-31). It is not an accident either that the previous year, Pastor had published his essay on La libertad de bancos y cola del de España (Pastor, 1865), for the intellectual relationship between the two was already very tight. Rodríguez was very specific in his praise and recognised in his obituary: "The intimate friendship I had with Pastor brought us together; the almost filial respect which we professed in turn towards him; the community of ideas, of work and of hope in which we have lived with him since 1859 (...), an authorised teacher and a friend" (Rodríguez, 1872c).

Another example of that harmony is found in two more articles in 1866 published in the *Revista Hispano-Americana* (edited by Félix de Bona). These articles tried to warn about the dead end towards which the politics and economy under the Isabelline system were heading and which were written with an anguished and premonitory perspective. The Spanish political crisis was due to "the break in the link between the ideas and the facts"; it was necessary to close the constituting process of 1808, but the political parties, due to their own evolution, did not have a "political ideal for a new organisation which would replace the previous one", nor was

⁴⁰ See (Report, 1866) and the study on the "Santa Marta case" within the more general paper by Clementina Ródenas and Segundo Bru (2006: 560-4).

its internal structure prepared, nor did its influence on public opinion have sufficient moral force. Perhaps the "autonomist fraction" of the democratic party (referring to the agreement supported by Castelar in March 1865) "came close", but it still lacked clarity, unity and the ability to influence the people:

Perhaps by giving the government to the democratic party, which it would divide itself when exercise the power, breaking it down and breaking the country into pieces, with the different and contradictory elements making it up today, it would be possible a shameful and terrible domination of a Caesar for some time? (Rodríguez, 1866a: 380)

He feared that the situation would grow worse and that it would lead to "the arrival of an armed revolution" or that the parties would end up being led by "military chiefs": "the cataclysm is imminent". A necessary condition to avoid that end would be the reestablishment of the freedoms of expression, assembly and association as a bridge for the moral renovation of the parties and public life (where "everything is sold and everything is bought, votes, applause, mercies and consciences"). And he concluded with a crucial question: "Will we obtain that political freedom using peaceful means? Will there still be time (...)?"

In another article, he felt that the "financial question was no less serious and dangerous" (Rodríguez, 1866c). The evolution of the ordinary revenue had been based on "finding money", because "the system is the same as in 1845", while the duplication of the expenditure from 1850 has caused a recurrent deficit consuming an enormous amount of "capitals" (disentailment, debts, *Caja de Depósitos*). Now "all of the extraordinary resources have been exhausted", the revenue has dropped, the debt markets are blocked, the effective deficit persists and the financial burden could reach 800 million. In order to analyse the perspectives for a solution to the crisis, the author resorted to an exploration of the recent policies of the now ex-Minister Alonso Martínez (the failed "flood plan" of authorisations), the alternatives which Salaverría's return could represent (a renewed increase in the expenditure⁴¹) and in the event of the rise of the moderate party, Claudio Moyano's solution was linked to the protectionism and

⁴¹ Special mention of the public works of O'Donnell's long government: "Spending a large sum of millions on railways, on many kilometres of highway where nobody travels ..." (Rodríguez, 1866c: 608)

his loyalty to the tax figures established, which would prevent reaching a sustainable sufficiency with an expenditure cut of only 300 million. As a theoretical solution, he suggested a combination of dismantling state monopolies, a suppression of consumption taxes and lotteries, a reduction of the expenditure (in the maintenance of the Church and the army), and a "very liberal" reform of the tariffs. Neither the Unión Liberal nor the Partido Moderado, "as we find them constituted", could confront the problem and avoid bankruptcy.

Rodríguez entered the study commission to reduce "the expenses for the establishment of the second ranking railroads", the future economic railroads. They concluded their report in November 1866, and the Appendix in the following year, but the study was published much later (González Arnao et al., 1869).

Other writings by the author possess a different dimension, such as the joint praise of "Cobden and Bastiat", which formed a part of the volume on Richard Cobden backed by the *Asociación* in his memory⁴². In 1865 and 1866, he inaugurated the cycles of conferences of the *Asociación* in the *Ate-neo* "as in previous years"⁴³, but within the new political context, they no longer had the same repercussions as before. He contributed to the founding of the Association for the progress of Social Sciences and, above all, the Abolitionist Society⁴⁴, in addition to the International Peace League, and collaborated with the *Sociedad Económica Matritense*, while the political confluence of the opposition to the Isabelline regime was being reinforced.

He surely collaborated in 1868 in *El Imparcial*, a daily newspaper founded by Eduardo Gasset in March of the previous year with a camouflaged democratic orientation⁴⁵. The newspaper published in 1868, despite the prohibitions by public censorship, between one and four editorial articles a day, with a large number referring to economic matters, in which the

⁴² Other versions in (Rodríguez, 1865a; 1867).

⁴³ La Correspondencia de España, 1865/01/05 and 1865/01/15, La Iberia, 1865/01/05. La Soberanía Nacional, 1866/01/02.

⁴⁴ La Discusión, 1865/12/12, p. 2-3.

⁴⁵ The explanation is found in an informal autobiography of Rodríguez published in *El Globo*, 'Los candidatos de El Comercio', 1881/08/15, p.1: "collaborating in *El Imparcial*, during 1868". Regarding the newspaper, see (Sánchez Illán, 1996). José Echegaray published and signed a series of articles in 1867.

free importation of cereals was defended, in order to deal with the subsistence crisis, the suppression of consumption taxes, of *fielatos* (internal customs), and of the differential flag tariffs. The general economic freedom was sustained, the liberalisation of iron imports, the necessary public works, free association and free banking, while there was constant criticism about the fictitious budgets, the growth of the real deficit and the Debt. It was a censured anticipation of the revolutionary economic program. They were anonymous articles because, as of May 1867, the writers had stopping signing individually in order to avoid legal imputations. A laborious reading of the first nine months of 1868 makes it possible to highlight several articles which corresponded most likely to Gabriel Rodríguez, due to the information furnished, the way of reasoning and the style. However, many others could have been written by Rodríguez or by journalists Ángel Castro y Blanc, A. Lassala, or J. M. Alonso de Beraza, because the ideas expressed coincided mostly and they furnished El Imparcial with a defined editorial guideline. In those articles of highly probable authorship by Rodríguez, he used select statistics on wheat, deficit, Debt, trade, monetary emission, etc. in order to denounce (with great tact in the language employed) the worsening of the crisis due to the government's policies, and to suggest alternatives.

THE REVOLUTION OF 1868. The democratic constitution, The monarchy and the social question

The news on Rodríguez, during the first weeks of the pronouncement and revolution of September 1868, associate him with an official trip to France⁴⁶. On October 9th, Laureano Figuerola, the Minister of Finance since the previous day, sent him a letter to present the following dilemma: "Do you want to stand beside me as the Sub-secretary of Finance or do you want to be Director de Public Works with Mr. Ruiz Zorrilla?"⁴⁷. The next day he took possession of his position in the Ministry of Finance and remained in the post for four months, until he presented his resignation at the beginning of February 1869, when the electoral results were published and his parliamentary seat for Ciudad Real in the Constituent Cortes was confirmed.

During those months, a variety of reforms were decreed, such as the monetary, credit and loans and banking ones (including the *Caja General de Depósitos*), taxation (consumer tax and the bases for Personal Tax), the suppression of the Madrid Customs, of the differential flag tariffs and of the state monopolies. The desired Customs duty reforms were also drawn up. However, in addition to the initial reformist block, the Ministry had to face the most urgent budget difficulties, worsened by the general economic crisis and the obligations inherited from the last Isabelline governments (among them, the subsidy to the railroads). These tensions transcended to the public opinion in different ways, including with a humorous note:

The Minister of Finance, Sr. Figuerola, is a wise economist. The sub-secretary of Finance, Sr. Rodríguez, is another wise economist. Thus, two wise economists. Let us assume that they are seated in front of one another in

⁴⁶ A trip to study the "international railway" in the Central Pyrenees, designed by French engineers. *La Correspondencia de España*, 1868/09/10 p. 3, reports that he had left on the 8th day. The *Gaceta de los ferrocarriles*, 1868/09/20 p. 615, states "He left for France"; while *La Época*, 1868/09/23 p. 1, writes that "he has returned to a Madrid, but will leave again for France soon".

⁴⁷ Letter included in Rodríguez Vilallonga (1917: 43-44).

the Ministry of Finance, and surely they will look at each other and say with a smile: 'We are the wise men'. But then the Treasury Director comes in with a distraught look and says to them in turn: 'Gentlemen! My God! How the Treasury is overflowing with wisdom!'⁴⁸.

In reality, the financial difficulties reached their limit at Christmas 1868, with the payment of 100 million which expired at the end of the year in Paris. Figuerola literally contemplated "suicide, and my loyal friend Gabriel Rodríguez was the man who calmed me down with a single word ..."⁴⁹.

Gabriel Rodríguez's political career during the *Sexenio* is defined to a great extent with his adscription to the sector of democrats, not republicans, called "*Cimbrios*", and whose main leaders were Nicolás María del Rivero and Manuel Ruiz Zorrilla. Other democratic "economist" friends such as Moret and Echegaray followed a similar course within the coalition which would lead to the "radical party" headed by Prim. Other initial progressists, Figuerola and Madrazo, also assembled there.

Rodríguez was a parliamentary representative for Ciudad Real for three years, from 1869 to 1871. During the constituent legislature, he stood out as an orator in the debates on the Constitution and the Customs reforms, and due to his proposal to audit the management of the mercantile companies. He acted several times as spokesman for the Budget Commission, refused a ministerial position and was briefly Vice President of the *Cortes* (January-March 1870), at the same time that he consolidated his role in the political coordination of the party as a democratic leader. In the 1871 legislature, he participated in particular in the discussions on the *Internacional* (International Workingmen's Association) and on the abolition of slavery in the Antilles, and was a staunch defender of the individual rights before Sagasta's restrictive position, a discrepancy which precipitated the division of the party in October 1871 between "sagastinos" and "zorrillistas"⁵⁰.

Even though Rodríguez publically expressed his support of Ruiz Zorilla's democratic-progressist party, he did not concur in the elections of 1872

⁴⁸ La Gorda, 1868/12/02: 4.

⁴⁹ See Figuerola's moving confession before the criticism of Parliament Member José Elduayen, in *Diario de Sesiones – Cortes Constituyentes (DS-CC)* 1870/12/25, t. XV: p. 9435.

⁵⁰ See a summary of Rodríguez's angry speech before Sagasta in 'Reunión de senadores y parlamentarios progresista-democráticos', *El Imparcial* 1871/10/08.

and he temporarily abandoned parliamentary life for "personal reasons" (we assume that in order to obtain his Law degree)⁵¹. Nevertheless, he was elected Senator for Puerto Rico in April, "against my will", he wrote in a public letter in which he warned, with gratitude, that he would not accept the parliamentary seat again (Rodríguez, 1872a). When he was re-elected in September, he resigned immediately.

In addition to other concerns, Rodríguez was deeply affected by the loss of his son Gabriel, who drowned in El Retiro in March 1873 (Echegaray, 1903). Although he was appointed professor in the *Escuela de Ingenieros de Caminos* in April, he only left his political retirement briefly when he was elected as a member of a commission, together with the old Progressist patriarch Ramón de Calatrava and Ángel Fernández de los Ríos, in order to draw up in September of that same year, the Manifesto of a new Partido Republicano Progresista (which combined the remains of the progressive-democratic or radical party with a republican sector lead by Eugenio García Ruiz), in which they defended their support to the unitarian Republic presided at this time by Castelar "for the defence of the democratic freedoms, threatened then as now"⁵². His deception with the results of the initiative sidelined him from active politics until 1881.

We should remember now, briefly, some of his political interventions, reserving those relative to Customs duty reforms for the next section. From the beginning of the Constituent *Cortes*, Rodríguez carried out the role of a protective barrier against the attacks from the Republican minority. In the discussion about the loan of 100 million escudos in 1869, he tried to convince Pi y Margall of the impossibility of obtaining resources from ordinary taxes because "this is not a normal period", the reduction of expenditure on the clergy and army was not feasible without approving the Constitution and the neo-Proudhonian formula of taxing the interest on the Debt, proposed by Pi, would dissuade an already highly contracted financial market⁵³.

 $^{^{51}}$ La Época 1872/01/28, p. 3, announced that Rodríguez "had stated to his friends his irrevocable decision to retire from active politics". A reasoned explanation is found in the Manifesto to the voters of his district (Rodríguez, 1872 1917).

⁵² This comment corresponds to an explanation of his political reservations as of 1873 until 1881, in (Rodríguez, 1881a). The Manifesto of 29 September 1873 by the Partido Republicano Progresista in Morayta (1898: 182-90). His genesis in *La Época* 1873/09/28 p. 4, *La Correspondencia de España* 1873/09/30 p. 3 and *La Discusión* 1873/10/04 p. 2.

⁵³ DS-CC 1869/03/29, t. II: 730-6.

During the constitutional debates, he supported several amendments, regardless of the radical majority, in defence of more complete formulas for freedom of labour and worship. His defence of the monarchy began with an attack of the lack of definition of the generic proposals of the federal republic, and he returned to his theory on the lack of a specific alternative from the Republican group: "You do not have that structure (...); you are not a political party". In contrast with the federative process existing in Switzerland and the United States, the idea was to "de-organise the country, divide it, pulverise it", with the danger of bringing about a civil war and the subsequent "despotism of the Caesars". On the other hand, the decentralisation, stripped of attributions to the State, fit perfectly well into the popular democratic monarchy which Rodríguez felt did not have any practical differences with a unitary republic. However,

I think that the perfection of the political organism would lie in an impersonal body, a body independent of the will of men (...) in order to prevent illegal acts, allowing freedom for all interests (...) How can something similar to that automatic machine be made ...?

In Spain, where there had been a long tradition of "not respecting the law" in every sense, it would be more appropriate to situate the leadership of the State "outside of the Government institution (...); that monarchical power is the fixed point of the machine", while the democratic customs and respect for the law began to take root. Obviously his speech originated a number of replies. Cristóbal Sorní accused the "economists" of having coexisted with the Isabelline regime and of being now an "appendix" of the Democratic Party; Figueras of compromising with reactionary ideas; while Pi y Castelar rejected the moral obligation of presenting an alternative constitutional project, but Orense accepted it⁵⁴.

Rodríguez became famous at this time for defending the right of association of workers and assembly. The relationship began with the attendance of several workers at the free trade *Asociación* meetings in the Stock Market, soon after the reform was approved. A "Mr. Lorenzo" intervened there. He was none other than Anselmo Lorenzo, known afterwards as the founder of the *Internacional* Spanish section, who took advantage of the forum to promote his ideas. Rodríguez tried to define the matter:

⁵⁴ DS-CC 18, 19 and 20 May 1869, pp. 2044-64, 2069-102, 2104-27.

Are you speaking about socialism or association? If you are speaking about association, I am with you. Absolute and complete freedom of association (...) of the workers against the manufacturers, an association of the manufacturers against the workers. Peaceful coalitions of workers to obtain the best salary (...) [as in England] where the worker's situation is better (...) thanks to the coalitions and cooperatives⁵⁵.

Contacts were resumed in 1871 with Rodríguez's attendance at several workers' meetings and his offer to give lessons on social economy, collaborate with the expenses and facilitate the permits⁵⁶. However, in May of that year, the meetings stopped due to police repression (Fernández Clemente, 2002: 613-5). Within that context of alarm and panic subsequent to the Paris Commune, two debates took place in 1871 on the *Internacional* in the Congress.

In the first debate, in June, originated by the governmental prohibitions in Barcelona, Rodríguez expressed (before Parliament Members, Eusebio Pascual y Casas and Baldomero Lostau) his disagreement with the goals and methods of the *Internacional*, his support of the freedom of association and assembly, a proposal for jointly studying the social question in the Parliament, and the strong conviction that the improvement of the working classes would not come from the "war of classes", but from free association, the mixed and voluntary juries of free arbitration (not obligatory, as Lostau and the socialists had proposed), the consumer and credit cooperatives, among other formulas already practised in England⁵⁷.

The second debate, between October and November 1871, lasted for a month, immediately after the fall of Ruiz Zorrilla's government and the split from the "Sagastinos". Rodríguez clearly stated that, in his opinion, the

⁵⁵ 'Reunión pública de la Asociación para la reforma de los aranceles de aduanas", *El Imparcial* 1869/07/07. Lorenzo recorded these discussions in *El proletariado militante*, with criticisms of Rodríguez, as well as suggesting that the *Asociación* wanted to attract the workers to draw them into a possible free trade advocates' demonstration in Madrid which would be a reply to the protectionist one carried out in Barcelona in March (Lorenzo, 1901-23 1974: 65-74).

 $^{^{\}rm 56}$ See the documentation and correspondence assembled by his son (Rodríguez Vilallonga, 1917: 571-92).

³⁷ Within the debate of the reply to the Crown's speech, *DSC-C* 6, 12 and 13 June 1871, t. II. 1468-76, 1586-1600, 1638-53. The first reply to Lostau, isolated from the debate, in Rodríguez (1871 1917). One of Rodríguez's most provocative theories was that socialism was not a result of liberal ideas but of a very old community tradition in which the "Catholic economic-political school" of the Patristics stood out, with their rejection of the interest on the capital and an erroneous theory of property.

Internacional was an "immoral" organisation (in regard to property, family, religion and the State), but he also warned that, in the end, the matter was being used to obtain a vote of confidence for a new "conservative" government. The problem was what interpretation of the Constitution would prevail. He argued that the *Internacional* could not be declared illegal for attacking "public morals", for that matter was the competency of the Courts and the Penal Code, nor was a law of illegalisation justified. The government could not limit constitutional freedoms⁵⁸.

Another of Rodríguez's initiatives was to back an informative commission which would review the possible irregularities of the insurance, credit and railroad companies, as of 1848. His report on *La Tutelar* (Rodríguez, 1870 1917b) showed that the ruinous situation of those companies should not be attributed only to the "general crisis" but to defects in the normative affecting the companies, in the management, in the government's surveillance and in the excessive confidence of the investors. As a noteworthy member of the Commission (which he renewed and presided over in 1871), he had access to many dossiers and specific and micro-economic rulings on the syncopated evolution of the Spanish financial system of the preceding twenty years.

And finally, his defence of the reforms directed towards the abolition of slavery in the Antilles (Rodríguez, 1870 1917a; 1870 1917c) accentuated his abolitionist aureole, but also the acrimony of the slave trading interests, which were very active in the press.

⁵⁸ Rodríguez's specific interventions in DSC-C t. IV, 1871/10/18: 3038-41, 1871/10/24: 3187-202, 3206-08, 1871/10/25: 3221, 1871/11/06: 3434-9, 1871/11/07: 3475.

THE PUBLIC PROSECUTOR OF THE CUSTOMS DUTY REFORM

Let us return to 1869. Did Rodríguez resign as the Sub-secretary of Finance due to discrepancies with Figuerola? The main motivation for resigning was to guarantee his full parliamentary independence, which he considered as a supreme value, but there were also palpable examples of differences in regard to the planned customs duty reforms. His speech at the meeting of the free-trade *Asociación* in March of 1869 awakened a great deal of expectation, even though the reform had not yet arrived at the Congress. Rodríguez did not disappoint anyone because he enthusiastically praised the Minister's decision to undertake reforms and his ability to overcome financial difficulties, even though he stated that:

It is said that the provisional government is not economist; this is true. It is said that the Minister of Finance has betrayed the economist principles, but that is not true (...) Mr. Figuerola has been censured because he has not at least eliminated the prohibitions. I do not know if I am being indiscrete by saying this: but the decree eliminating the prohibitions was extended. Figuerola wanted to do it and he could not. Should he present his resignation as a result? I don't think so. I think that it would have shown a lack of patriotism (...) No, there are no dissidences between the free trade advocates⁵⁹.

In addition, the reform should be decided upon in the Parliament. The *Asociación* decided to request it, by eliminating the prohibitions and establishing a programmed disarm of Customs tariffs, which would enter into force in July.

We should distinguish between three stages in the reforming policy which followed the first measures adopted by the provisional Government: a preliminary one, another parliamentary one and the statutory one⁶⁰. The

⁵⁹ 'Reunión pública de la Asociación arancelaria', *El Imparcial*, 1869/03/02 p. 1. Rodríguez's interpretation was adopted by the newspaper: 'El señor Figuerola', *El Imparcial*, 1869/03/04, p. 1.

 $^{^{\}rm 60}$ A para-official view of the Asociación on the first two stages in Pastor (1869). On the whole, the already classic study of Antón Costas (1988).

preliminary reforming sequence consisted in turn of three specific moments: the Minister's draft, the review by the *Junta Consultiva de Aranceles*, and the decision reached in the Board of Ministers. In this last stage, a substantial modification was introduced, the product of a transaction of General Prim with different industrial sectors, which was aimed at stabilising extraordinary duties (up to 30-35%), and during the first six years, concentrating the gradual reduction towards the fiscal tariffs (up to 15%) during the following six years (the so-called 5th Base).

The *parliamentary* period began in mid-April with the presentation of the draft for the law on the budget for income (where the tariff bases were included), but its prosecution was delayed due to the urgency of the Constitution⁶¹. Rodríguez had transferred the Association's proposal as a proposition before the plenary session⁶², but a newspaper spread the rumour that the deputy intended formulating a special proposition in order not to delay for six years (as the ministerial project established) the first phase of the tariff reduction⁶³. The Budgetary Commission's final decision in mid-June left the bases intact (except for a detail of administrative organisation), and a special proposition was confirmed, headed by Rodríguez, with the support of Echegaray, Moret and other Parliamentary Members, which —without formally stating it— presented a return to the Minister's initial conditions: extraordinary duties up to 25% and fiscal ones up to 10%, as well as a gradual reduction throughout the following twelve years⁶⁴.

The parliamentary prosecution, according to Professor Manuel Martín, was not of great interest for the history of the spreading of the economic analysis (Martín Rodríguez, 2009: 410-21). Why? I feel that the main economic free trade arguments on a long term basis were considered known because most of the orators accepted, *in theory*, the general principles of free trade. The most debated question was the transition towards that horizon of commercial freedom compatible with several customs tariffs with a

 $^{^{\}rm 61}$ 'Proyecto de ley (...) relativo al presupuestos de ingresos, para el año económico de 1869-70' [Draft for the Law (...) regarding the budget for the income for the financial year of 1869-70] in DS-CC 1869/04/19 Appendix to no. 53, t. II.

⁶² DS-CC 1869/04/07 t. II: p. 906.

⁶³ La Época, 1869/04/27; while La Correspondencia de España 1869/05/30 required the proposition in the Customs Sub-commission.

⁶⁴ The proposition in DS-CC 1869/06/19 Appendix, t. V, pp. 12-14.

tax and budgetary entity, at the rate and with the effects of the transition in the regions, companies and workers.

The first total debate presented a paradoxical and rather unique picture: Rodríguez intervened in defence of the Commission's decision (compared with Pi y Margall) when he was also the promoter of an alternative proposition. He reiterated the gradual nature of the tax and customs reforms, "little by little (...) so that they could make hardening the transitions, and that industry which cannot survive nor compete, can be liquidated without a major loss"⁶⁵.

In his defence of the alternative proposition, he referred to the gradualism of free trade advocates since 1859, and the need not to generate a reaction which could abort the reform. He granted a "great deal of importance" to the term and the amount of the duties reduction, bearing in mind the insurance premiums on smuggling and the financial needs. Without the moratorium of the first six years, the collection would go up to 400 million, because trade would increase when the tariffs are reduced and as they are concentrated in fewer sections, "as in England", the question of the fiscal deficit could be "settled"⁶⁶. Considered in perspective, the main difference between Rodríguez and Figuerola seems to lie in this joint priority, tax collective and commercial, of the special proposition, while in the draft of the law, the urgency of the collection was sacrificed on behalf of the social and territorial backing of a customs transaction which would, nevertheless, become the budgetary "Achilles heel" of the Minister.

Having rejected this alternative proposition (with 90 against 57 votes), the continuous participation of Rodríguez, Moret and Echegaray in defence of the project was perceived as an excessive presence of the "economist school". Rodríguez insisted that the problem of the Catalan textile industry was not the whole set of companies, which could adapt themselves and "then introduce all the advancements and improvements", but the backwardness of the small manual workshops⁶⁷. In the end, the amendments of "opportunity" (the revision of the reform and participation of the entrepreneurs in the evaluations of commodities) made Rodríguez recall

⁶⁵ DS-CC 1869/06/21, t. V: 2879.

⁶⁶ DS-CC 1869/06/26, t. V: 3170, 3180-2.

⁶⁷ DS-CC 1869/06/28, t. V: 3267-73.

that the evaluations had been the "back door" to protectionism and he expressed his desire "to remain with the right to be the public prosecutor of that tariff when it is reformed"⁶⁸. More than a declaration, it was a commitment.

In fact, once the Budgetary Law was published with its bases as an Appendix, the *statutory* period was initiated. The decree signed by Figuerola on July 12th (the eve of his "resignation" from the Ministry) appeared on the 27th. The *Asociación's* reaction was a severe manifesto, signed on August 5th by Pastor and Rodríguez, in which they claimed an identical position to the contents of the special proposition, to reconcile the liberalisation and the collection, but they admitted that "the recent tariff reform meant, however, the triumph of the free trade idea", and it had to be scrupulously respected. The published tariff rates meant "progress", but also a return to "the old practices (...), a lack of respect for the law". The Manifesto promised a detailed analysis:

The *Asociación* will prove then that the law has been infringed upon in many points, indicating, of course: some prohibitions which are conserved without good reason; the subsistence of premiums on exports, and the duty for valuation on some articles; as it would prove that many tariffs exceeded the 30 and 35 per cent limit, perhaps due to an exaggeration of the evaluations. There were also several others that were much higher than those which appeared in the old tariff, reflecting a clear and decisive conflict with the spirit of the reform⁶⁹.

And they announced a demand before the Cortes when the sessions were reinitiated to highlight the need to respect the law and the public nature for any modifications of the tariff duties and the evaluations.

On 19th October, Rodríguez presented a proposition in the Cortes for a commission to study the compliance with the reform. Figuerola supported the proposal, but the Minister of Finance Constantino Ardanaz opposed it and considered the matter closed, although he would later approve it. Under Madoz's presidency, the Commission appointed Rodríguez as the speaker

⁶⁸ DS-CC 1869/06/28, t. V: 3280.

⁽⁹⁾ 'Protesta contra el nuevo arancel de la Asociación de la reforma aduanera', *Gaceta de los Caminos de Hierro* 1869/08/15, XIV (33): 514-6.

and he did not conclude his report until one year later, November 1870, at which time the document was passed on to the press (Rodríguez, 1870)⁷⁰.

The report is long, meticulous and precise (equivalent to about thirty pages like the present one). The speaker expressed his proposal to limit himself to a legal and technical, but not a doctrinal examination and he apologised for its delay due to the enormous difficulty in comparing the evaluations of 1865 and 1869 (appearing on 12 September 1869 during Ardanaz's office), in order to determine whether the resulting tax rates exceeded what was established in the bases; a problem made worse by the new grouping of the merchandise established in 1869. Briefly, the new Customs duty meant a "highly noteworthy" advancement, but it contained several errors which should not be attributed to Figuerola's intentions, but to the rapidity with which it was prepared or to criteria unrelated to the law. He stated that perhaps some regulations were "infringements of the law" (premiums on exports of vessels and sugars, and contradictions between the established duty reduction and the bases), overcharged merchandise because of the effect of excessive evaluations or due to the effect of the groupings (mixed fabrics, irons, etc. up until almost fifty items), as well as certain inadequately prohibited merchandise and excessive duties to the few items taxed for exportation (cork). This was practically the same objections as what the Asociación had denounced in a general way a year before, but now it involved several dozen clearly conflictive customs items. The report ended with a draft for a law to rectify these deviations.

This forgotten report confirmed the author's legal skill and competency regarding the details of the complex tariffs and duty technique, within an administrative scope far removed from rhetoric. It seemed destined to incite a specific debate on the compliance with the reform but the serious complications affecting the legislature in its final months prevented this from happening (the election of the new King, trip to Florence, Prim's assassination). However, Rodríguez presented in May 1871, a proposal to Minister Moret to send to the Congress the dossier on the duty, because his report in the previous legislature showed "that almost all the bases for the Customs law had been infringed upon (...) in a protectionist sense"⁷¹. The

⁷⁰ Another edition of the *Dictamen*, in instalments, in *Gaceta de los Caminos de Hierro* 1870/11/27: 730-2; 1870/12/04: 776-7, 1870/11/11: 793-5, 1870/11/25: 825-5; 1871/01/01: 8-9.

⁷¹ DSC-C 1871/05/20, t. I: 971.

accusing tone which was in contrast with the Minister's brief acceptance led to the consideration that it might have been in fact a consensual proposition. Three days before, the Minister had presented the draft for the Budgetary Law for 1871-72, which included a Report on the Customs Duties and a regulatory appendix which rectified the Tariff (Letter G)⁷². I have found with surprise that these documents are an official version of Gabriel Rodríguez's report (if we remove the rough edges and unnecessary details), as a faithful reproduction including his draft for the law which Minister Moret and the government had accepted.

However, the tortuous process to purify the reform of 1869 and eliminate Figuerola's errors or transactions by Ardanaz and Gisbert's evaluations, did not obtain immediate success: Moret's project expired due to the ministerial change. Years later, Figueroa himself admitted those errors and deviations in his book *La reforma arancelaria de 1869* (Figuerola, 1991: 172-3), although he did not mention Rodríguez.

 $^{^{72}}$ 'Proyectos de ley, presentados por el Sr. Ministro de Hacienda, sobre el presupuestos de gastos e ingresos para 1871 a 1872 (...)' [Drafts for laws presented by the Minister of Finance, on the budget of the income and expenses for 1871 to 1872 (...)], in the *DSC-C* Appendix to nº 38, 1871/05/17, t. I, p. 34 (art. 12), pp. 46-50 (Memoria – Aranceles, Appendix 'Letra G. Disposiciones referentes a la Reforma del Arancel de Aduanas').

RESERVATIONS AND RESTORATION. THE RE-FOUNDING OF FREE TRADE ASSOCIATION

Rodríguez's political retirement for personal reasons seems to coincide with indications of unexpected financial difficulties: a position with half a salary as of August 1871, the reopening of his preparatory academy for civil engineers, the beginning of his legal studies, the fast obtainment of the degree and registration in the barrister's body, and the opening of his law office in November 1872⁷³. With his appointment as professor of Political Economy in the *Escuela de Ingenieros* in 1873, he recovered some economic stability which was really necessary for maintaining a large family, but his overwhelming dedication to his office (specialising in contentious-administrative appeals) and in other activities could explain the disturbing absence of any traces of his teaching activity, beyond the mere routine, in the *Escuela* during a period of many years (Martín Rodríguez, 2006b).

Some attention should be paid to his less known collaborations (surely remunerated) in the fortnightly published journal *La América* during the first half of 1872, as the author of the section "Revista Económica", in which Rodríguez reported on the economic situation in the form of an analysis of the evolution and perspectives of the Budgets, about the Bank of Spain, the public funds, France, the International Association and some bibliographic novelties, always based on the statistics or information available (Rodríguez, 1872d). These nine articles reinforced the impression that Rodríguez kept a documented monitoring of the Spanish and international economic situation, and continued defending his theory that the balancing of the budget had to be dealt with, not in an improvised manner, but with a medium-term plan⁷⁴.

⁷³ On the situation of the resignation or expectation of the assignment, *La Época* 1871/08/19 p. 3, and *Guía de forasteros* 1872: p. 729. The news from his private academy in *La Iberia* 1871/09/20 p. 3 and *La Correspondencia de España* 1872/02/27 p. 3. The title of bachelor of arts and of the Law studies in his academic dossier consulted by Martín Rodríguez (2006b: 25, note 61). The announcement on his law office in *La Correspondencia de España* 1872/11/18 p. 3.

⁷⁴ In January 1870, he stated that his goal was "to get the country out of the situation it was in" and that a drastic reduction in expenditure in the budgets would lead to a "ruinous situation". Com-

At the same time, the author did not cease to caution about the uncertain horizon of the Spanish customs reforms within international economic relations and he pointed out the theoretical protectionism of the new French leaders. In order to refute these tendencies, he translated and presented a brochure of the Cobden Club, which showed the advantages of the French-British commercial liberalisation, corrected with updated figures (Rodríguez, 1872b)⁷⁵. His sincere obituary of Luis María Pastor (Rodríguez, 1872c), which was very important for understanding the moderate ex-Minister's evolution towards democratic ideas, was also published in the *Journal des Économistes* (Rodríguez, 1873).

In the final phase of the General Serrano's dictatorship, Rodríguez highlighted the proximity of the fulfilment of the entrance into force of the customs reductions foreseen in the Law of 1969 and expressed his concern⁷⁶. In March of 1875, he openly stated that it had to take advantage of the signing of several commercial treaties to include in them a reference to the customs reforms of 1869, and to thus assure that the Fifth base was complied with in July of that year, without endangering the protectionist pressures (Rodríguez, 1875)⁷⁷. His fears were not unfounded, for a Decree dated 17th June suspended the application of the Fifth Base.

As of 1875 to 1881, Gabriel Rodríguez simultaneously carried out a variety of activities of scientific and cultural diffusion and political debate in three preferential and associated areas: the *Ateneo de Madrid*, the *Círculo de la Unión Mercantil e Industrial* and the *Institución Libre de Enseñanza*.

In November 1875, he initiated in the *Ateneo de Madrid* a cycle of conferences on the "functions and forms of credit" warning about the "dangerous drop [created] with the organisation of the Bank of Spain"⁷⁸. He repe-

pared with the federalist Juan Tutau, he exclaimed: "We should not be frightened by the deficit, let us deal with it bravely (...) in two or three years". *DS-CC* 1870/01/13 t. VIII: 4895-9.

⁷⁵ The original brochure: The Cobden Club, *Commercial Policy of France and the Treaty with England of 1860*, Londres: Cassell, Potter & Galpin, 1871. Even though Rodríguez translated it from the French version revised by the writers of the *Journal des Économistes*, according to the *Gaceta de los Caminos de Hierro* XVII (14) 1872/04/07, 216-8.

 $^{^{76}}$ Summary of an article by Rodríguez, published in the Republican El Orden, in La Época 1874/11/30 p. 1.

 $^{^{77}}$ Surely he covered these matters in a series of articles in the Semana Financiera between May and July 1875, which I have been not able to locate.

 $^{^{78}}$ Very brief news in the press between November and April 1876, the mention in the Diario oficial de avisos de Madrid 1875/11/21 p. 4.

ated the cycle in the following course. After fourteen years of absence, he joined the Section of Moral and Political Sciences with an intervention on "The political constitution in England"⁷⁹ in which he suggested a set of institutional and social conditions for the "stability" and "progress" of the "social and political body", which did not depend so much on the kind of State or on a bicameral system, "but on the efforts, of the institutions of Great Britain (...)", a respect for individual freedom and each social "sphere" and the influence of public opinion. It was necessary that the State did not invade "the rest of the areas of life" in Spain, such as freedom of worship; a controversial matter covered in a series of articles on the writings of Charles de Montalembert on behalf of religious tolerance (Rodríguez, 1876), and in a conference in the *Academia de Jurisprudencia* on the separation of Church and State.

He gave two initial speeches in the *Círculo Mercantil e Industrial* in April 1877 on the results of the Customs Reforms of 1869, a subject which he continued in November with a criticism of the government's policy because it was based on a strategy of Customs reciprocity and reprisals, consecrated in the double column of Orovio's tariff of July 1877, even though he also spoke of the need for a "regrouping" of all the free-traders⁸⁰. This call to unity was repeated with an expression that recognised the disaggregation: "let us reunite, if it is still possible, the dispersed elements of the old Free Trade League". The title of the article, "La reacción proteccionista", would be used by Rodríguez repeatedly as a "battering ram" during the next two decades (Rodríguez, 1879b).

The *Círculo Mercantil e Industrial* was the headquarter for re-founding of the *Asociación* for the reform ("liberal", was added now) of the Customs tariffs in April 1879, under the presidency of Gabriel Rodríguez (proposed by Figuerola), and it became the customary place for holding the Board Meetings. They managed to successfully organise several public meetings in June, September, October (the first in the Stock Market, and after in theatres) around the suppression of the cereal tariffs^{s1}. Rodríguez participated

⁷⁹ Session 25 January 1877. In the Boletín del Ateneo I (3) [May 1877], pp. 147-55.

⁸⁰ This criticism involved the new line of El Imparcial which reacted with a disqualifying reply. Both Rodríguez and Sanromá sent letters to the newspaper: 'Dos comunicados', *El Imparcial* 1877/11/24 p. 1. Over the next few months, the government's daily paper *La Época* tried to divide the free trade advocates between "moderates" (Figuerola) and "absolutes or puritans" (Rodríguez).

⁸¹ A detailed note of the re-founding (officially, reorganisation) in *La Correspondencia de España*, 16 and 18 April 1879. Also in *La Iberia* and *Diario oficial de avisos* of the 18th. Chronicle of the

in an official, informative commission on the classifications and evaluations of the wool fabrics and he continued to give speeches in the *Circulo* (Rodríguez, 1880a). The speech on the wool question⁸² contains an analysis of the growth of consumption, the heterogeneous entrepreneurial structure (manual and mechanised workshops), the excessive productive capacity induced by the protectionist expectations and the potential increase in the fiscal collection with lower customs tariffs (Rodríguez, 1879a).

The *Asociación* thus took on a regular public presence in 1880, focussing, in the beginning, on trade with Cuba. After the summer, they set their strategic goal on incorporating the wine growers' interests, for they were open to a possible commercial treaty with England. A mobilisation of the wine producers and merchants was aided by a pertinent interview with the Minister of Finance (Fernando Cos Gayón), and a general meeting in the Teatro Real⁸³. In a year and a half, the Customs question and the re-establishment of the Fifth Base had created an important opening on the Spanish political agenda.

Sagasta's formation of the government in February 1881 created a new opportunity and the general meetings multiplied in number⁸⁴. The tone of the speeches reflected a direct confrontation between the *Asociación* and the Catalan protectionist representatives. In this context, Rodríguez argued in the April meeting that the tax collection due to the industrial activities in Catalonia was very low in comparison with that of the trade and industry in Madrid (Rodríguez, 1881b).

Before the new elections, several entrepreneurial organisations promoted the candidatures of Gabriel Rodríguez and Domingo Peña Villarejo (Pre-

public meetings in *El Globo* 1879/06/09; and then of the summer in *El Liberal* 1879/09/15 and *La Democracia* 1879/09/16; that of October in the Teatro Capellanes in the extensive chronicle 'Meeting libre-cambista' of *El Liberal* 1879/10/27.

⁸² The night of 22 November, according to *El Liberal* 1879/11/23 p, 3.

⁸⁰ Chronicles of the meetings in the *Liberal* 1880/02/23 p. 1-2, *El Imparcial* 1880/02/23 p.1, *El Globo* 1880/02/23 p. 4; *El Imparcial* 1880/03/15 p. 1. As regards the meetings of the Board, *El Globo* 1880/10/05 p. 3, *El Liberal* 1880/10/11 p. 2, *El Imparcial* 1880/10/19 p.3, *La Época* 1880/10/27 p. 2. Chronicle of the general meeting of November in *El Demócrata* 1880/11/15 p.2. and *El Liberal* 1880/11/15 p. 1-2. The contents of the meeting were published as a brochure (Asociación, 1880).

⁸⁴ In the March meeting, an old conflict was remembered somewhat fondly: "I, who at that moment [1869] had dissociated myself a little from our dear president, Sr. Figuerola, not in matters of principles but in those of procedure, I dared to formulate a personal proposition (...)" (Rodríguez, 1881 1917b: 381).

sident of the *Círculo de la Unión Mercantil*) for Congress, beyond the parties. When Rodriguez accepted the candidature, he warned the proponents that despite his political reluctance as of September 1873, he maintained the "integrity" of his doctrines and stated his desire "to achieve the union and concentration of the forces of democracy, through the means of propaganda and thought" and he reaffirmed his belief in free trade and all the "liberal reforms" (Rodríguez, 1881a)⁸⁵. The adverse electoral results were further incentive to his later devotion to the defence of free trade.

⁸⁵ Among the contemporary data, a presentation of 'Los candidatos del comercio' stands out in *El Globo* 1881/08/15 p. 1, with the biographies and portraits of Rodríguez and Peña, the day on which an electoral rally was going to be held in the Teatro Capellanes. Rodríguez's free trade speech as a candidate in said meeting (1881 1917a).

A DISPUTE ABOUT THE CONCEPT AND METHOD OF POLITICAL ECONOMY

Rodríguez's activities in the *Institución Libre de Enseñanza* were highly varied. They began in 1877 with a really innovative course on the "Nature of music" which incorporated in each conference the performing of several pieces, by composer and pianist José Inzenga. Their great success justified another cycle in 1879⁸⁶. He also contributed with a very critical conference on "the so-called administrative power", understood as a legal-political distortion of the modern States which covered the contentious-administrative instance⁸⁷.

His speech on "El socialismo de cátedra" [The socialism of the chair] on 3rd February 1878 caused a great deal of impact due to his controversial perspective and its subsequent publication in journals and supplements (Rodríguez, 1878)^{ss}. The author recognised that "the subject has not been my choice", but he promised that his belonging to the "liberal economics school" would not prevent him from dealing it with the corresponding rigor. His exposition was divided into two parts, to facilitate the counter-positioning. In the first one, he talked about the "old school" of liberal economists and in the second, the "new school" of socialist economists. The text has been interpreted (Malo Guillén, 2005; Velarde Fuertes, 1986; 2001) as an implicit reply to the critical digressions of Gumersindo de Azcárate on the economist school in his *Estudios económicos y sociales* (1876). Rodríguez himself recognised his debt to Henri Dameth's (1877) retort to chair socialism, from whom he drew the doctrinal criticism of the

⁸⁶ See the chronicles of the *Revista Europea* 1877, IV (159, 11 March): 319-20; (166, 29 April): 543; (173, 17 June): 767-8; (176, 8 July): 64. The following cycle in *Crónica musical* (33) 1879/05/08, (36) 1879/05/29.

⁸⁷ La Época 1877/02/06 p. 3.

⁸⁵ In addition to the volume published by the *Institución, Conferencias pronunciadas en el cur*so académico de 1877-78, Madrid: J.C. Conde, pp. 171-87; in the *Revista de España* and in the *Revista de Andalucía* XIV (4, 5): 153-64, 201-11. His son (Rodríguez Vilallonga, 1917:24) mentioned the existence of "several [articles] published in the *Revista de Andalucía*, in reply to others by Fray Zeferino González, on 'La Economía política y el Cristianismo''. I have not located more than the one which discusses the chair socialism.

main German authors as well as a supposed literal synthesis of the historicist ideas put forth by Émile de Laveleye (1875), the main defender of the School in France. The use of Dameth was almost obligatory because Laveleye's article, in turn, had been included by Azcárate in his book (1876: 185-238) as an example of the new proposals, although detaching in part from his arguments with some annotations.

Rodríguez-Dameth's severe criticism to the historicist inductivism and to the interventionism of the chair socialism is a starting point for the dispute on the economic method in Spain (whose consequences we cannot go into here). This criticism is sustained by a clarifying reaffirmation of Political Economy as a science, contained in the first part, as a reply to Azcárate.

Rodriguez's main statements (1878: 533-8) can be grouped under nine points: 1) Society is a complex "great organism", "It is not a capricious grouping of beings"; 2) The true economic laws are "constant natural laws (...) on all their levels [of civilisation]"; 3) The Political Economy founded by the physiocrats and Adam Smith has made continuous "progress", stating "the best known laws" by Say, Malthus, Dunoyer, Bastiat as well as "Rossi, Mill, Macleod, Bagehot, Stanley [Jevons], Molinari, Garnier, Walras, Scialoja, Minghetti, Wolkoff, Thünen, and many others whom I do not mention" and who "have increased the volume of knowledge"; 4) It is not possible to say that "the Economic Science has been definitively constituted, nor (...) finished"; 5) "The Political Economy is found today on a stage which shows great analogies with that of some natural sciences, such as physics and chemistry", due to a joint process of "condensation" or unification of superior laws and a "differentiation" of specialities, but it is also due to particular developments by means of "mathematical procedures". It is still an incomplete unification, but "I think that it is already close to reaching an agreement"; 6) The maturing of the different Social Sciences can contribute "to placing the first foundations of sociology" even though, up until now, those sciences study the "complex" human relations by means of abstractions which separate "diverse aspects" such as the moral, legal or economic ones; 7) The "economic order" is an aspect, an abstraction, and Political Economy studies human relations "in its abstract aspect from a means to an end relationship (...)". "It only studies the laws, according to which the *means*, driven by human activity (...), produce, furnish, distribute and apply to the ends or satisfactions"; 8) Political Economy "is a

science of the whole social life", but within the abstract aspect of the relations between the means and the human needs, and the accusation of wanting "to cover all the social sciences" is incorrect; 9) There is a continuity between the postulates of "the old-fashioned economists" and the current liberal ones, with the belief in a harmonious relationship between the laws obtained by all the social sciences, and in the practical rule of respecting "the greater individual freedom to determine the ends and obtain the means", and in limiting the actions of the State to a legal sphere.

If we compare Rodríguez and Azcárate's texts, the first two points (organicism and natural economic laws) did not represent a fundamental divergence, although Azcárate had emphasized that the problem was the unilateral *application* of the economic laws without counting on other analyses and political and moral reasons. Points 3) and 4) refuted the idea that the Bastiat school was scientifically depleted, while 5) evidenced an essential difference about the future of Economic Science due to the proximity of the method with those of the Natural Sciences and the use of Mathematics. Points 6) to 8) involved a very general reformulation of the goal of Political Economy, as a science of relations between means and needs and their autonomous nature within Sociology. They responded to the accusation of being a science limited to partial aspects and of being an "invading" discipline, or that it sacrificed justice on behalf of utility. Point 9) confirmed the divergence about the general *laissez-faire* rule.

Professor Iparraguirre (1952) considered the importance of this conference from another angle, its unpremeditated originality. Rodriguez had anticipated two conditions of the known definition of the Economic Science established by Lionel Robbins in 1932, "as the science which studies human behaviour as a relationship between ends and limited means which have alternative uses" (1935 1944: 39)⁸⁹. This was anticipated in the abstraction of the types of activity and in the relationship between the means and the ends, but he did not expressly cite the limited or scarce nature of means. Iparraguirre found that this new view was also present in two other contemporary texts by Rodríguez: his intervention on the wool matter (1879a) and his subsequent article: "Sobre el concepto de la Economía

⁸⁹ The importance of Robbins's book is not due so much to this famous definition as to the disqualification of cardinalist utilitarism as a basis for the economics of welfare. See the monographic volume, on the Robbins's *Essay*, coordinated by Cowell (2007).

Política" (1885). Unfortunately, however, he did not know the contents of the *Apuntes de economía política* mentioned by Gabriel Franco in 1927, nor was he aware of some precedents of the article of 1885, which in my opinion made it possible to bring back Rodríguez's view to a methodological discussion presented by William Stanley Jevons in 1876.

In fact, his speech on the wool industry ends with a reference to the most widespread economic theories and policies, in order to put a stop to the protectionist argumentation that considered the free trade option as obsolete. Within that context, he stated that he was "aware of what was being written in foreign countries on the matter", and he mentioned "Bagehot, Stanley Jevons, Cairnes, Macleod, Spencer (...), all are free trade advocates", as Luzzatti or even Laveleye. Among the new orientations on the science he emphasizes:

"There is also a tendency in economic studies and I do not know if the protectionist gentlemen are familiar with it, and it is the tendency to turn the economic science [economía] into a rational science, by means of the application of mathematics. Works of a great deal of importance have been published recently, such as those by Stanley Jevons and Walras. In all those new studies, in which science adopts a new direction that begins with axiomatic bases, and the application of the rigor of mathematical reasoning, it is possible to demostrate (...) that free trade is the only system with which human societies can live and progress (1879a: 424).

The subjects covered in the conference on the socialists of the chair had continuity in a course of higher studies in the *Institución Libre de Enseñanza*, the "Escuela de Estudios Políticos" (or of "political sciences"), in which Gabriel Rodríguez was the professor of the subject "Principios fundamentales de la Economía Política". Although professor Cacho Víu stated that Rodríguez never began the classes (Fernández Clemente, 2002: 619) I have found at least four conferences between January and March of 1880⁹⁰. The only record, though brief, indicates that those first lessons referred to "the crisis affecting the old Economists School fought by the positivism and by the followers of the harmonic doctrine (chair socialists)"⁹¹.

⁹⁰ The lectures reflected by newspapers were given on 7 and 21 January, 18 February and 17 March: *El Liberal* 1880/01/06 (and *La Correspondencia, El Demócrata, La Discusión, El Fígaro, La Iberia* of the 1880/01/07), *El Fígaro* 1880/01/21, *El Globo* 1880/02/18, *El Demócrata* 1880/03/16.

⁹¹ El Liberal 1880/01/08.

During the last quarter of 1880, the first ordinary classes coincided in the *Escuela de Caminos* (dedicated to the "Concepto de la Economía Política", as the *Apuntes* reflect and as we will soon see) and the publication of the first version of the article "Sobre el concepto de la Economia Politica" (Rodríguez, 1880b)⁹². This new study is a provisional reflection induced by the course given in the *Institución Libre de Enseñanza*, interrupted by "more urgent occupations". It begins very appropriately with a brief reference to the diverging appreciations of the economists present in the meeting convened by the Political Economy Club of London, to commemorate the centennial of the publication of *The Wealth of Nations* by Adam Smith. Those disagreements could be reduced by establishing a more precise framework for the concept and the method of Political Economy (Rodríguez, 1880b: 5).

I have found that these ideas are drawn, although not exclusively, from the pondered speech "The Future of Political Economy" given by Jevons in the opening of the 1876-77 course in the University College (Jevons, 1876 1905), although it is highly likely that Rodríguez used the French translation of the Journal des Économistes. Jevons, rectified Cliffe Leslie and defined thus the purpose of Political Economy: "Les lois de la science économique traitent des rapports qui existent entre les besoins de l'homme et les moyens naturels ou le travail humain qui sont susceptibles de satisfaire ces besoins" (Jevons, 1876 1877: 333)93. The similarity of the first definition by Rodríguez with that of Jevons is better noted in the French version (where the "means" appear), and it is surrounded by a set of additional argumentary coincidences on the complementary nature between the induction and the deduction and the use of Mathematics in Political Economy, as well as the distinction made (not very frequently in the economist school) between the "pure science" and the application. However, we can also see that proximity in regard to other prior definitions, for example, by Le Hardy (1861b: 20) and Figuerola (1991: 47), which lead us retrospectively to Bastiat: "L'économie politique avait pour objet l'homme considéré au point de vu de ses besoins et des moyens par lesquels il lui est donné d'y

⁹² This first version, in addition to being published in *La América* (December 1880) and the *Boletín de la Institución Libre de Enseñanza* t. V (January 1881): 1-3, 9-11, was reproduced afterwards in the Velada of the *Ateneo* (Rodríguez, 1881 1903) and in the book written by his son, Antonio Gabriel (Rodríguez, 1881 1917c).

⁹³ "Now the laws of Political Economy treat the relations between human wants and the available natural objects and human labour by which they may be satisfied" (Jevons, 1876 1905: 196).

pourvoir" (1850 1864: 73). In fact, precisely because Rodríguez developed a slightly more stylised formulation than that of Jevons or Bastiat, which stressed "an abstract and general aspect of means to an end" (1880b: 6), it is wise to moderate the conclusions on originality and Rodríguez's sense of anticipation proposed by Professor Iparraguirre⁹⁴.

The sequence created by the conference on the socialism of the chair, the references in the Wool Commission, the interrupted classes on the "Principios fundamentales de la Economía Política" and his first article on the Political Economy concept form a combined process of updating and disciplinary revision, whose clearest expression are found in the lessons he gave in the *Escuela de Caminos*. This is the time to study the *Apuntes de la clase de Economía Política* of the 1880-81 course.

⁹⁴ I rectify my previous appreciation which attributed to Herbert Spencer the main source in which Gabriel Rodriguez's definition of Political Economy was based (Almenar, 2000: 76).

THE *APUNTES DE ECONOMÍA POLÍTICA* (]): VISION, STRUCTURE AND METHOD

Gabriel Rodríguez's return as a professor to the *Escuela de Caminos* in 1873 lasted for eleven consecutive years until 1884, the longest period of his relationship with the School, although in all that time, he did not leave any substantial vestiges in the form of recommended programs or books on the subject (Martín Rodríguez, 2006b: 28-29).

Therefore, the *Apuntes de la clase de Economía Política* of the 1880-81 course constitutes the *first* testimony of his classes. The copy located in the Biblioteca Nacional is a bound volume of 632 pages written by hand, but mechanically reproduced, as other teaching materials of the School (see more details in the note "Presentación de los textos" which precedes the transcription of the *Apuntes* included in this volume). This version contains a complete course of the materials mentioned.

Even though said *Apuntes* are not strictly a work recognised by Rodríguez himself, we should consider them a *direct* reproduction of the lectures given, for three related reasons. During that academic year, Rodríguez was the professor of the subject in the School. The *Apuntes* contain some unique ideas that the professor had covered before 1880, as, for example, his position on the nature of economic science or on the property of the inventions, in addition to an endless series of analytical and political-economical coincidences, which, as we can see, are carefully covered with semantic fidelity in the text. A complementary criterion that also reinforces the reliability of this testimony is the similarity of the rhetoric style of the classes covered in the *Apuntes* in regard to many other speeches given by the professor. All of this is consistent with the technical hypothesis that it is a copy of what was dictated or a transcription of the shorthand notes of his classes, but they are not a summary or a composition.

The general structure of the *Apuntes* is quite conventional for the Spain of that time. As of the middle of the 19th century, the previous models began to lose their influence on Spanish economic literature. The structure of Jean-

Baptiste Say's treatises (an introduction plus three parts), and the eclectic model (which distinguished a theoretical part and another of application or economic policy) was quickly abandoned in the fifties. The programs of James Mill, John R. McCulloch and Álvaro Flórez Estrada (four parts: production, distribution, change and consumption) lasted for some time, but they were losing ground as the Spanish economists who sympathised with Bastiat focussed their attention on the broad French-speaking group or economist echool. Authors like Joseph Garnier (1846: 1860). Henri Baudrillart (1857 1872) and Charles Le Hardy (1861b) presented their manuals or treatises which also followed a division into four economic steps or aspects, but they altered the order between the circulation and the distribution: production, circulation, distribution and consumption. Or in the case of Antoine Cherbuliez (1862), who also changed the order but replaced the part dedicated to consumption with another pertaining to application. This was a common and apparent minor change in the order of the analysis, which revealed a new view of the economic problems, in regard to the classic British tradition.

This continental economist school (the heir to Say, Dunoyer and Bastiat) disagreed about the pre-eminence attributed from Smith to Stuart Mill, to the conditions of production in regard to consumption in the concept of the economic system. The general economic process should be understood as the adaptation of the economic goods (useful and produced with effort) in order to satisfy human needs. This view greatly altered the same definition of the economic goods (including the services now), the theory of the production and productivity of the factors, and the consideration of the distribution (wages, profits, rent) as a particular although relevant case of the exchange. Thus, the Continental Economist School would first cover the circulation and then the distribution. This small change in the "facade" hid a profound transformation in the properties and functions of the entire "building" of the classical political economy. Even authors who followed Mill-Flórez's formal structure, like Gustave de Molinari (1863), had interspersed a brief introduction in order to put forth the new notion of economic goods due to their use or aptitude for satisfying the needs. The texts of Jean-Gustave Courcelle-Seneuil (1864; 1867) offered the same process for theoretical revision and followed a particular distribution of the subjects.

The structuring of the *Apuntes* follows the afore-cited four-part division (production, circulation, distribution and consumption) supported by the

French-speaking economist school, with two additions: an initial epistemological introduction and a conclusion on the economic functions of the State. Professor Rodríguez developed the course without making much reference to the authors of the theories or doctrines explained therein, and even less, to the authors on which he had based or drawn the special inspiration for his lectures.

The Introduction contains two chapters which were of very recent elaboration. The first is a very similar version to the afore-cited article "Sobre el concepto de la economía política" (December 1880), with many textual coincidences between both. In the *Apuntes*, there is no mention of Smith's centennial and Jevons's arguments are left anonymous, compared with the explicit references to the philosophy of the science and the sociology of Herbert Spencer, the new intellectual star of the moment, whose fame was linked to the theory of the survival of the fittest⁹⁵. Herbert Spencer's vast bibliography, including the re-editions, revisions and translations to French and Spanish, present an almost impossible difficulty to overcome in order to specify the exact works and editions which Gabriel Rodríguez might have consulted. I think the influence of the *Classification of the Sciences* is evident, while for the concept of the organism, I have considered *The Social Organism* as the most probable (1860 1891; 1864 1891).

Rodríguez's strategy was to formally combine Spencer's positivist perspective with Jevons's synthetic suggestion (1876–1905), which reconciled the need for observation and induction with the generalising progress of the deductive, even axiomatic logic, in order to obtain the universal laws of Political Economy. The stylisation itself of the resources-needs as meansends put forth by Rodríguez attempted to facilitate his justification of the use of mathematics, an aspect which clashed both with Azcárate's view, as well as with the mistrust and opposition of the liberal economist school, because that generalised abstraction eliminated the moral aspect of human nature (Breton, 1992; Sigot, 2010). Rodríguez overcame that resistance and, in addition, he rejected the merely descriptive or inductive nature (*concrete*) which Spencer attributed to Sociology: "Spencer's third group does

⁹⁵ We should not forget that Spencer's works were assimilated, in different degrees and aspects, by diverse Krausist authors. The *Institución Libre de Enseñanza* named him honourary professor in 1883, although he encountered some opposition. As regards Spencer's influence in Spain, see Diego Núñez's classic study (1975), and Juan Ramírez's doctoral dissertation (2012).

not exist, and the sciences beyond mathematics and logic are all abstract-concrete" (*AEP*: 14%).

He insisted to his students that Political Economy was one of the most advanced social sciences, which operated under the assumption of the abstraction of a very general aspect of human relations within the "social organism": it is the "social science of the means or elements for the fulfilment of the ends, in other words, the abstract laws of human activity or work" (*AEP*: 21). Consequently, Political Economy studies the relationship linked between the "need", the "activity" and the "satisfaction" (*AEP*: 26). However, regarding this chain we should recall that it is merely a return to Bastiat's classic formula: "Need, effort, satisfaction, it is here the circle of political economy" (1850–1864: 86-7), even though the definition of Political Economy and the triad had been mentioned afterwards by Swiss economist Antoine Cherbuliez (1862: I, 3-4, 51).

The second introductory chapter provides a general presentation of the *economic organism*. Spencer stated that the process of individual differentiation (within the social organism) could be proven through the division of labour, because it was not the result of the legislation nor the goals of the individuals, but rather the consequence of natural and general causes: "Society has become the complex body of mutually dependent workers (...), through the individual efforts of citizens to satisfy their own wants" (Spencer, 1860 1891: 266-7). He considered this process as spontaneous.

Rodríguez adopted the evolutionary version of Spencer's organicism but practically stripped it of its biological perspective, whereby the organism is really a structure or a system of related elements⁹⁷. Most of the time, the organism refers, with the corresponding adjective, to society and to economy, but also to production, distribution, etc. The most frequent meaning considers that the social organisms are "natural" entities furnished with an

 $^{^{96}}$ Hereinafter, for the references to the *Apuntes de Economía política*, I will use the abbreviation *AEP* and the number page(s) of the original that appear between brackets in the transcription published in this volume.

⁹⁷ Geoffrey Hodgson (1993 1995: 133-5) has insisted that this atomist interpretation of Spencer is consistent. A synthetic panorama of the interpretations in dispute on Spencer (holism-individualism) is found in Udehn (2001: 30-2). In the *Apuntes*, there are some biological references (the circulation of commodities and that of the blood, p. 158), which do not become scientific metaphors but merely allegories: the circulation process is not explained biologically but, as we will see, as a balance of forces.

autonomous functioning, compared with the "artificial" social constructions (a fundamental distinction in Bastiat). He also considered the individuals as complex, differentiated organisms, conceivable only in society.

Rodríguez understood society's "economic organism" as a complex system subject to a "natural coordination of individual economic elements. This coordination or set of laws is the object of our study" (*AEP*: 28). However, in contrast with Spencer (which diverted the attention towards his biological analogies), Rodríguez explicitly stated that the main inter-individual factors of coordination of a commercial society are the division of labour, the "association of forces" and the formation of capital, by means of exchange and private appropriation in the production of "utilities".

This presentation of the Political Economy, more than an explicit transformation, appears as a modernised version of Bastiat and Molinari's organicism, which tries not to close the door to a new aspect of a more abstract and general Political Economy. The *Apuntes* accommodate one of the first explicit expositions of the view of spontaneous *coordination* in the new Spanish organicist economic literature, while also confirming Jevons's methodological message.

The concept of mutual coordination appears once again to refer to the law of supply and demand which "links and coordinates the production factors, the basis for a productive organism" (*AEP*: 147). Another use of the concept, similar to the management of production, appears associated with the "entrepreneur, that is the manager of the enterprise" (*AEP*: 454), but in this case it does not refer so much to the spontaneous coordination as to the induced one.

We should say that throughout the entire course, utility understood as the quality of satisfying needs, becomes an essential entity which is subject to consumption and trade. He insisted on considering utility as a relationship of individual appreciation, but other social patterns are accepted. And the progressive nature of the needs due to the "laws" of variety and succession are postulated (*AEP*: 31-33). Thus, instead of the old expression of useful goods, the *utility* (*ies*) (*AEP*: 39-40) is/are used more frequently. Without a doubt, the perspective differs from the British tradition, because even though Stuart Mill (Mill, 1965: I, 45-54) also referred to the production of utilities, he reduced the concept of wealth exclusively to the material production. Another unique feature of his exposition was his emphasis on the joint action of the division of labour and the association of efforts corresponding to specialisation and exchange (*AEP*: 45-50). In all of these matters, Rodríguez accepted and developed Molinari (1863: 37-79) and Le Hardy's formulation (1861b: 13-46).

Furthermore, the chosen view explicitly eludes the economy of the isolated individual because he cannot exist as such (*AEP*: 27-28, 34-35), which follows the critical view of Frédéric Bastiat and his followers, in regard to Rousseau's state of nature. However, the hypothetic case of self-sufficient producers will be used frequently as a didactic tool, to recognise the advantages of specialisation and exchange.

THE *Apuntes de economía política* (II): The production

The analysis of the production in the *Apuntes* follows the path of the Belgian economist school, adapting the exposition to Le Hardy and Molinari's plan, together with two important contributions from Cherbuliez. From the latter, he appears to have accepted the concept of wealth with the conditions of utility and limitation (scarcity), to which he adds the permutable nature or power to change (*AEP*: 68-72), mentioned by Garnier (1860: 265-8), among others. It is interesting to note that Rodríguez would refuse to translate *rareté* (because it literally means scarcity or rarity), and he would specify that its meaning was the power of change associated with limitation or scarcity, which involved an effort (*AEP*: 175). Thus, he replied to the old paradox of the value of water and diamonds.

Once the notion of the production of utilities in general and of industry is established, he disdainfully put forth a classification of industries (*AEP*: 76-87), whose meaning he considered practical and statistical, although it had previously revealed Charles Dunoyer's criticism to the British tradition which only considered the production of material goods. Rodríguez had already used this classification to criticize List (1863d), and now he very faithfully adopted Le Hardy's stance (1861b: 28-9).

Of the three production factors, we should point out, as a characteristic feature of the French-speaking economist school, the consideration of intellectual work as productive, the distinction between the gratuitous utility and the onerous utility of the natural resources (fundamental for the rent theory) and the view of capital as the fruit of "abstinence and saving". A greater innovation covers the inclusion of the "space" or "industrial emplacement" as a limited natural resource (*AEP*: 98), a subject to which he would return when he studied the general economic trends.

The metaphor on the "great workshop of Society" (*AEP*: 110) states the problem of the coordination of the factors in the productive process. The solution is the division of labour and the corresponding "association of

efforts" or collaboration of several "centres" in the productive process, because that joint process is advantageous for all the centres (as Molinari and Le Hardy stated, although Cherbuliez specified that it was not an association but bonds of mutual dependency).

Rodríguez used an elementary model to analyse the advantages of the social division of labour and the specialisation through exchange (*AEP*: 115-6): the case of producers who obtain two *utilities* (A, B) by means of labour units (t). The basic supposition is that the consumption of both is identical (1A, 1B) and invariable in the process, and the relationship of exchange between both *utilities* is, in an implicit manner, 1A = 1B.

	Cost of A	Cost of B	Total Cost	Δ
Producer 1 (1A, 1B)	2t	3t	5t	
Producer 2 (1A, 1B)	5t	1t	6t	
Specialised Producers				
Producer 1 (2A)	4t		4t	-1
Producer 2 (2B)		2t	2t	-4

Self-sufficient Producers

The direct advantage of the division is the labour-cost reduction for both producers, who could devote the extra time to the expansion of consumption or to savings and the creation of capital. It is an unusual use in contemporary literature of the model presented by Stuart Mill to explain the advantages of international trade and with which, as we see, Rodríguez was familiar at least fifteen years before (Rodríguez, 1865b). The peculiarity lies both in presenting his exposition within a general context (not an international one) as well as with its very rough analysis, for it does not cover (I think deliberately but not correctly), the determination of the rate of change because the theory of value had not yet been explained⁹⁸. We

 $^{^{\}rm ss}$ We should point out that with this information, as the arbitrarily defined relationship of change (1A = 1B) is found between two extremes (1A = 0.66B) and (1A = 5B), the two producers would benefit from the exchange. The reader should remember that in 1865, Rodríguez put forth Mill's theory of convergence towards an intermediate rate defined by reciprocal demands.

wish to recall that Rodríguez had access to Mill's contribution through Cherbuliez (1862: I, 375-91) or Cournot (1863: 337-40), within a context of very limited receptivity to the model within French language literature (Bloomfield, 1989). Schumpeter stressed that the majority of the economist school was unfamiliar with it or did not understand it correctly, although Cherbuliez was an exception (1954 1970: 674n).

The most customary analysis of the division of labour referred to the process "within each centre", with the inevitable mention of Smith and the pins, the limits on the division, the moral objections to the specialisation and dependency of the workers, and the criticism of the use of the machinery (*AEP*: 120-37). Here, the professor followed Le Hardy's orderly and orthodox narrative (1861b: 26-37, 47-57).

This brief section on production is concluded with Chapter IV which discusses "how the three factors are linked together" in the "organism of production". Within that coordination or assignation, two cases are distinguished: that of the enterprise, in which the criteria of an "intelligent management" predominates; and in society, where "this general workshop is not managed" but is ruled by the "laws of supply and order", "a first cause for movement which awakens wills" (AEP: 137-44)⁹⁹. After considering that the order [*pedido*] is an "aspiring force of factors", and presenting the process of adjustment between factors, production, orders [pedidos] and prices, he concluded that "the production factors are like the atmospheres, they always tend necessarily towards a state of balance", although there can be "disagreements" and errors in the "judgment of the individuals". This reinforces the idea of a natural order on a predominately free market (AEP: 145-51). He ends with criticism of the "socialist" and "protectionist" schools as "artificial" or "anti-scientific" systems of economic organisation, and defines the economic scope of the State as that of guaranteeing property and freedom of action (AEP: 151-7).

⁹⁹ Rodríguez maintained until 1880 the criteria established in 1848 by Eugenio de Ochoa, of using the commercial term "pedido" [order] instead of "demanda" [demand]. See his "Advertencia del traductor" to diffused Garnier's textbook (1846 1870: v-vi).
THE APUNTES DE ECONOMÍA POLÍTICA (III): THE CIRCULATION

The study of the exchange begins with the necessary conditions for its existence: the expected advantage of obtaining something "that would have required a greater effort to produce" (*AEP*: 167), the willingness, the property, the freedom, the security and the properties of wealth: utility and limited quantity (signifying an effort).

The general analysis of the market functioning covers an initial presentation of the law of supply and demand in Part I, and the three first chapters on the change and value of Part II dedicated to circulation. They jointly plan a unique theoretical model, in comparison with other texts of the epoch. In my opinion, it is a synthesis of what is put forth by Antoine Cherbuliez in his *Précis d'économie politique*, according to Schumpeter "one of the culminations of the didactic literature of the period" (1954 1970: 562n).

Cherbuliez distinguished two components both for the demand as well as for the supply: "l'étendue" and the "intensité", which Rodriguez translated as the *quantity* and the *energy* of the demand and of the supply. The intensity of the demand according to Cherbuliez (*energy* in the *Apuntes*) for an individual is a relationship of exchange (between two goods A and B) that the "demander" of B is willing to contract for the quantity requested, because that relative price expresses "the desire and the means to acquire what it represents", that is, his appreciation and the capacity of B to buy units of A. The inverse corresponds to the supply.

While Cherbuliez's explanation is very detailed, the *Apuntes* reflects a very brief synthesis, surely cryptic to today's reader. However, Rodríguez illuminated his audience of engineers, by adding the physical metaphor of a force of two components as equivalent to the expression of the *intensity* of the supply and the demand, understood as the product of the *quantity* multiplied by the *energy* (price). He established the process of aggregation on the market:

From where it results that the true intensity, or force of the demand and of the supply is not measured only by the quantity of the utility [commodity or service], but by the quantity and energy with which it is requested or offered, as the physical force is measured by the mass of the body and the velocity applied to it. And so, as the force is proportional to the product of the mass multiplied by the velocity, thus, the force of the demand or of the supply will be for each individual, the product of the quantity which is requested or offered by the energy of the demand or offer. The partial totals of these products [individual ones] constitute the total force of the supply and the total force of the demand and receive the name of *effective supply and demand* (AEP: 180-1).

Professor Rodríguez did not mention to be brief that the aggregation of those forces for each price level would lead to reciprocal Income-Expense charts, which would implicitly represent price and quantity relationships (whose importance is revealed in the fourth part of the course, dedicated to consumption). He introduced the money as a socially accepted unit of account and it can go from the exchange relationships to monetary prices. That step didactically facilitates the analysis of the equilibrium of the market, defined as the equality between the effective supply and the demand, which implies an equality between the two pairs of components, the total amount and the equilibrium price. The Apuntes states a process of adjustment which is a case of partial analysis (the amount initially offered is assumed fixed) with negotiations without transactions. If the amount requested is higher than what is offered, the competition "between buyers" will increase the price of the demand, so it will reduce the amount requested and increase the initially offered amount, and "the effective supply and the effective demand would approach a level of equality". In the contrary case, the competition "between sellers" produces the inverse process. Even though the solutions for equilibrium are finally obtained in the moment of the exchange, in reality they are "essentially variable" in time, due to "a thousand different reasons", which modify the initial conditions (AEP: 185-91).

Cherbuliez-Rodríguez's conceptual structure on this point could be classified as neo-Smithian due to the use of the effective magnitudes, made up of quantity and price, but without considering a "natural" pre-established price¹⁰⁰. The view of partial equilibrium and negotiation in the prices

¹⁰⁰ Adam Smith's concept of effective demand (and Malthus's view) was not successful in historiography and was usually deformed by a retrospective Marshallian perspective, which considered it

without an effective exchange leads to a solution where "the extension [quantity] of the supply available and the intensity of the demand, are the only determinant causes for the value" (Cherbuliez, 1862: I, 214). The process of equilibrium resembles Walras's initial study in the *Éléments* (1987) more than Marshall's one (see a standard comparative study on both processes of equilibrium in Ekelund et al., 2014: 439-44).

Professor Rodríguez's intermediate reflection is conclusive on the suitability of the use of mathematics in the study of market equilibrium:

The previous ideas will make it possible to understand how Stanley [Jevons] and Walras have been able to apply mathematics to the study of matters regarding change. The result of their study has been to show in a flawless way that the price or the relationship of change is set in a fatal and necessary way by the afore-cited law of equality between the effective supply and demand, and that the maximum satisfaction of human needs corresponds to the maximum freedom of the market which permits the free game of the supply and the demand (*AEP*: 191).

The reference to the maximisation of the satisfaction makes it possible to imagine that his knowledge of the ideas of both authors was not entirely superficial. And the link between the equilibrium and the free market facilitates rejecting once again the socialist theories which promote interventions to correct several hypothetical social injustices deduced from erroneous theories (*AEP* 198-9).

The closing of the model is presented by introducing the cost of production in a rather abrupt manner. The process of convergence between the market price and the cost is here quite conventional in contemporary classic literature: the profits or losses of several producers are those which would modify the use of factors and the quantity offered. According to Cherbuliez, the cost represents "a minimum of effort" which must be covered, and Rodríguez calls it a "price limit" below which the supply is reduced¹⁰¹, but it has little to do with the proposals from the Swiss professor on

a simple magnitude, for example, in O'Brien (1975 1989: 117-21). An interpretation which considers effective demand as a magnitude composite, in Benetti (1979: 77-107).

¹⁰¹ We should bear in mind Rodríguez's reiterated argumentation in 1869 and 1879 on the cotton and wool sectors: the problem presented by the reduction of the expected customs duty which was not the entire industry, but the small companies with manual traction and high costs.

the natural price or the "general equilibrium", and he develops an interesting argument which would expand the temporary horizon of analysis.

He highlighted that the temporary profits constitute a fundamental incentive so that several entrepreneurs tend to reduce the costs by means of productive "perfecting". He analysed how the subsequent process of imitation of the new processes "during a more or less long period of time" would lead to a drop in the production costs towards a new equilibrium in which "the profits from the progress would consequently become general" to the rest of the producers and, finally, to the consumers (*AEP*: 200-204). Perhaps it was a reflexion suggested from his previous meditations about the imitation of the "inventions" in the sixties (Rodríguez, 1861b). The comparison between both convergence processes put forth by Rodríguez suggests a proximity (although relative and anachronic) between his "short term" perspective with the "Walrasian" one, while the "long-term" convergence resembles more a hybrid between the "Marshallian" and the "Schumpeterian" ideas.

The rest of the second part covers a set of chapters on currency, loans, banks and free trade, also following closely the literature of the French-speaking economist school, both in the analysis as well as in the recommendations. Rodríguez's exposition reveals, however, certain specific characteristics. The first one is a categorical distinction between the *money*, as a scarce and exchangeable commodity [*utility*], furnished with other special characters (see Le Hardy 1861b: 127-8), and the rest of the means for payment considered as monetary *signs* based on confidence.

The application of the supply and the demand principle to the money preludes the quantitative theory. The supply of money "depends on the total number of transactions to be made and on the velocity with which the money circulates", and the inflow and outflow of the money from abroad adapts to the internal needs (*AEP*: 221-2)¹⁰². In an isolated economy, if the supply and demand of goods and services "in general" remains "stationary", an increase of the supply would lead to a "proportional" growth of all the absolute domestic prices, leaving the relative ones intact, but the

¹⁰² The protectionist objection which affirmed the possibility of a persistent exportation of currency, in order to compensate for a chronic commercial deficit, settled on an erroneous interpretation of the Customs statistics (*AEP*: 223-7). This argument, which Rodríguez used to criticize Minister García Barzanallana (Rodríguez, 1865b), was inspired by Le Hardy (1861b: 145-9).

subsequent "de-monetisation" would revert the equilibrium (*AEP*: 229-30). In an open economy, the quotations of the promissory notes determine the change. Rodríguez states a preference for the gold specie standard, assisted by metallic silver and copper pieces as *signs (AEP*: 243-4).

In the exposition on the credit, in addition to the fundamental concepts and financial institutions, the equilibrium between the supply and the demand of the means for payment is analysed in detail in a monetary system based on free emission, made up of coins and bank notes convertible on sight, issued by the banks on discounted promissory notes. The equilibrium is double, in terms of the total amount and its composition between coins and notes, through the flow and reflow of currency abroad and to the banks, as well as their self-control on a wise proportion between emissions and cash reserves, by means of the discount rate. Rodríguez's criteria is that an excessive emission cannot exist if three necessary conditions are met: the short term of the promissory notes (two or three months) with real backing, banking competition and convertibility. It was not necessary to regulate the cash coefficient. The professor resumes here (AEP: 289-302) his defence of the postulates of free banking, the implacable criticism of the monopoly of the Bank of Spain, due to its role as the government's long-term financial entity and, of course, the obligatory course of the bank notes (conclusions which Rodríguez had anticipated, 1866b). The "dangers of credit" are similar to the commercial risks in general; precautionary measures should not be adopted. In fact, the Apuntes do not contain an explanation of the economic crises.

The long chapter on free trade (*AEP*: 314-48) is initiated with the surprising statement that the scientific grounds of the matter are resolved and refer to the general advantages of the division of labour, already explained. He felt that the main arguments of the protectionists or of the *socialists of the chair* are of a political nature, but his response is heterogeneous: public financing, the exit of money, an unequal level of economic development, the national economic, political and military independence and the contraband. Many of the arguments raised seem to come from Garnier's extensive examination (1860: 397-448) illustrated with Spanish examples, although the rhetorical presentation is similar to what was put forth the year before in the informative commission on wool (Rodríguez, 1879a). All of this is in contrast with his interest in the theoretical debate (List's criticism) during the first 1860s. However, the terms of the discussion had changed and not only in Spain.

THE *APUNTES DE ECONOMÍA POLÍTICA* (IV): THE DISTRIBUTION

This part begins with two chapters on the right of property. The Apuntes's uniqueness in regard to other texts of later classical Political Economy, resides in sustaining the conceptual framework of the philosophy of Frédéric Bastiat's natural law, whose roots date back to Charles Dunover and Charles Comte. However, he included one correction. The professor explained that if work is the necessary condition for appropriation, understood as the "assimilation" to the personality, it is also necessary for the object to be external to said personality in order to guarantee the individual's "exclusive assimilation" and its possible change. This double condition is relevant in the case of the right of property on the "inventions" whereby Rodríguez (AEP: 386-97) put forth and expanded that restrictive interpretation. The inventions do not comply with the criteria of exclusivity and cannot claim the natural right to property and, no matter even if one argues (in a utilitarian manner) the loss of incentives for scientific and technological progress, the patents and temporary privileges are illegitimate and incoherent; if they are accepted illegitimately, they should be permanent. It is a heterodox position, declared two decades before in La Razón (1861b), which might have been inspired by Mathieu Wolkoff.

The rest of the theory of the property right is quite orthodox in regard to a new liberal *iusnaturalist* orientation. In particular, the theory on the legitimacy of the appropriation due to the occupation of (free) natural resources, when the reservations enunciated by Locke on the exclusion are ignored, leads directly to the concept of the real estate as "a product created by man" (p. 368).

The theory of distribution states, once again, that the process of social coordination through free exchange makes it possible to explain the correspondence between the contribution and the remuneration of the three factors of production (justice), and that the distribution thus established is convenient for free cooperation and general economic development (*AEP*: 403-19).

One of the most noteworthy differences of the economist school in regard to British tradition was the consideration of the land as capital, as the product of prior human work in the appropriation and improvements of natural resources. The rent then is the remuneration of that capital "and not a retribution to nature" as Adam Smith and David Ricardo had postulated. This last one had wrong as well when he explained the order of the cultivation process towards less and less fertile lands (*AEP*: 420-26). There was an echo of Henry Carey and Bastiat's criticism of Ricardo, without mentioning now the previously established distinction between the free and onerous utility of the natural resources.

In addition, rent is a phenomenon which exists in other activities due to natural differences, for example, between the voices of singers, or between merchants due to their different proximity to the consumers, because of *location* [emplazamiento] (*AEP*: 427-8). The professor had warned his students about the relevance of this last limited factor (*AEP*: 98, 369-70), but it is now when its influence is dealt with both in the determination of the rent and wage as well as in the analysis of long-term growth and the explanation of "social question". Undoubtedly, it is a rather unique feature of the *Apuntes* which should be examined further.

The different costs associated with the location, and not the energy or the natural properties, explains the different retribution of the same factor in the production of a homogeneous good and a single price on the free market. Rent is not due to nature but to the unequal conditions of location which have been established by the "social organism" and which affect all the industries. The professor stated that the rent is a just retribution, as it is the result of the competition and of the concentration of population, and it is also convenient to stimulate the improvement of the productive processes. Even so it was finally recognised that "the matter of the locations can have very serious consequences against the humankind", due to the process of the "inevitable" exhaustion of the locations, when the volume of the world population increases (*AEP*: 428-36).

We can say that this theory of distribution and growth had been formulated by military engineer and Russian diplomat, retired in Paris, Mathieu Wolkoff (Matviei Stepanovich Volkov) in his previously mentioned *Lectures d'économie politique rationnelle* (1861). During the fifties, he had translated a part of the second volume of *Der Isolierte Staat* by Johan H. von Thünen (1850–1857), assuming the role of defender and diffuser of his work, adapting it in the *Lectures* by means of arithmetic examples. In a later version, entitled *Précis d'économie politique rationnelle* (1868), Wol-koff introduced in appendices the fundamental algebraic demonstrations of the German economist. I think that Rodríguez read both versions, though he was definitely familiar with the second one.

The analysis of the retribution to the capital momentarily interrupts the link with Wolkoff-Thünen. Here the *Apuntes* confront different concepts of profits but the variable studied is the interest rate as a remuneration of the capital borrowed, or the price of the loan, because it is considered the most general case. The interest rate depends on the risk (not on the productive activity but on the loan: personal nature, guarantees, legislation and general situation) and on its influence on the effective supply and demand of the available capital. Abstinence appears only for an instant (*AEP*: 437-51). The extensive critical exposition on the doctrines contrary to the loans also suggest the similarity with Garnier's view (1860: 480-500).

In the study on wages, the income of the entrepreneur or coordinator of the factors is considered as a retribution for his qualified labour of management. The most important case is the wage of the unqualified work, as the result of a mutual competition between workers on the side of the supply for each level of the demand. When the market wage is lesser than what is necessary or of subsistence, the "social question" arises, a subject to which he devotes the three remaining chapters either directly or indirectly.

Chapter VII deals with the relationship between wages and profits and a criticism of the theories which present them as antagonistic. One of the theories sustained by Bastiat on the harmony of the social interests stated that the variations of profits and wages were not inverse. Rodríguez presented a systematisation of the relations between wages and profits in four "laws, all of them deduced from the law of the value" (*AEP*: 473-80): 1) As the interest "is regulated by the last capital which concurs in the production (...), the creation of a new capital tends to reduce the retribution of the capital in general"; 2) "An increase in the capital (...) also increases the retribution of the labour in a greater proportion than that of the capitalist"; 3) "Society in general is interested in the worker having an increasingly greater surplus of wage over his needs", and 4) "The worker is interested in economising [part of] his wage" and increasing his capital. In order to understand these "laws" correctly, it is necessary to state that they are a reformulation of the ideas maintained by Wolkoff (1868: 297-329) on the harmony of interests in an economy with similar assumptions to those contemplated by Thünen in the first section of Part II of *Isolierte Staat*. A model with producers who receive a higher wage than what is necessary or for subsistence are found in the least favourable situation (without rent), and intensive decreasing returns and availability of locations exist¹⁰³. Thünen and Wolkoff's argument was that the real freedom of labour should include the possibility that the workers can choose between continuing as salaried workers or establishing themselves as autonomous producers (associated or not) with capital saved or loaned. The mathematical demonstration that the natural or equilibrium wage rate \sqrt{ap} was a geometric average between the needs of subsistence (*a*) and the productivity (*p*), re-established the notion of justice and furnished the model and the social reform with consistency and feasibility.

Rodríguez's brief exposition does not cover the suppositions nor the general theoretical framework; nor was that his intention. He ignored the fact that the retribution of the factors is not determined now by the supply and the demand (even though he referred to the "law of value"), but to its marginal productivity. Even so, the heroic synthesis of the harmony of interests by Wolkoff's helped Rodríguez to express his central idea that social conflicts come from two causes *external* to the distribution established by the competition. It is a matter of two fundamental and convergent processes: 1) the increase in the population above the accumulation will lead to a drop in the wage rate, 2) the exhaustion of the locations will raise its price, reducing the workers' standard of living (*AEP*: 482-5). According to "a German economist" (obviously, von Thünen, whose formula of the natural wage translates as $\sqrt{n.p}$), the margin between the natural wage and the necessary wage (*n*) or the one for subsistence will tend to be reduced, or even cancelled, as the available locations disappear.

Rodríguez supports the standard version of Malthus's theory but corrected it with the theory of the improvement of the standard of living of the working class over the last sixty years, although he attributed a rele-

¹⁰³ A systematised presentation of Thünen's model in Leigh (1946 1971) and in Theocharis (1993: 178-97). A general panorama on his work in Frambach (2012), which includes mention of Thünen's social concerns, which are usually forgotten.

vant role to the demographic drop to the very high infant mortality rate. In the end, he repeated the more classic remedies: moral restrictions (in a broader sense of caution and moral responsibility, without Malthus's theological ligatures) and the freedom of emigration.

The following two chapters on the "social question" and their remedies (AEP: 496-538) cover first a characterisation of the socialist solutions, of the *Internacional*, their evolution and their influence on the "large" working class, even though he also mentioned, with hope, the pragmatic evolution of the unions in England. The "economists's" remedies are those already mentioned, a moral restriction and freedom of emigration, to which a discussion is added on public actions: he accepted the coordination of services for crop forecasting (following the periodicity of the sunspots indicated by Jevons), because they could avoid the crisis of subsistence; he took a stand for free teaching and education; and, finally, brought up the principle of the "free and spontaneous association" of the workers.

In his opinion, regarding the associations "for striking", he highlighted their extreme and on occasions ineffective nature, while the new mixed juries proved to be an effective means in England for social conciliation. He objected to the associations of production but praised the results in relation with the credit, the mutual aid societies and the distribution of consumer goods because they facilitated the prevision¹⁰⁴. In contrast with other Spanish authors, Rodríguez recognised the workers' rights to non-coactive syndication (we should recall his interventions between 1869 and 1872), and his opinions appear less confident in the associations and cooperatives than these of John Stuart Mill, although he perhaps took advantage of the abundant documentation of the *Principles* (1965: II: 759-96), even though it had become quite antiquated by 1880¹⁰⁵.

¹⁰⁴ The *Journal des Économistes* devoted a great deal of attention to the new socialist trends. Months before beginning the 1880-81 academic year, Rodríguez gave a talk in the *Sociedad de Fomento de las Artes* on "Schulze-Delitzsch and the popular banks in Germany". A brief report in the *Corres pondencia de España* 1880/01/25, and in *El Figaro, El Globo* and *El Liberal* appeared the following day. *El Liberal* 1880/01/25 stated that the speaker had praised Schulze ("to whom economic individualism owes so much") and he highlighted "the advantages of the popular banks to fight Socialism".

¹⁰⁵ As regards Mill's positions on Socialism, see Pedro Schwartz's classical study (1968). The inexact mention to Mark's death before 1883 in the lessons (AEP: 511) is a mistake if we bear in mind that in 1878 Rodríguez gave a talk in the *Institución Libre de Enseñaza* on "Karl Marx and Lassalle" as representatives of the international and national (German) socialism, respectively, and the difficulties of the unification of the "resolutions of the Gotha Congress". He alerted about Bismarck's dangerous repressive policy, according to *El Imparcial*, 13 and 14 December 1878.

THE APUNTES DE ECONOMÍA POLÍTICA (V): THE CONSUMPTION

Gabriel Franco felt that the two chapters in which "the optimum consumption" is determined mathematically (1927 1972: 11) represented "the most interesting part" of the *Apuntes*. Rodríguez's argumentation is developed in five blocks: the first deals with a statistical law of the demand, the second is on the enunciation and characteristics of the demand function and its use to obtain maximum receipts or profits, the third covers the ideal Customs tariffs, the fourth analyses a strategy of differentiation of the product, and the fifth outlines a commentary on the different kinds of consumption.

Professor Rodríguez presented consumption as the destruction of utilities which completes the final phase of the economic process ("economic evolution"). He distinguished, as was already customary since Dunoyer remodelled Say's classification, between the reproductive consumption (which forms a part of the production theory) and the unproductive one. The study of consumption confirms, once again, how the needs are the force which stimulates the use of the production factors through the supply and the demand. The first problem is to determine the proportion of the personal income between both types of consumption, and the only criteria which is suggested is "to repair the losses which had been suffered by the person or his assets (...in order) not to reduce his force as an economic centre" (*AEP*: 549), but the division of the individual net income between consumption and savings was not considered as an economic problem.

The relationship between the production and the satisfaction of the needs adopted "the form of a numerical relationship between the consumption and the prices" established by Say, which Rodríguez qualified as the "*statistical law of consumption*" (AEP: 553). We should remember that Jean-Baptiste Say had introduced in the *Cours complet d'économie politique* (1840: I, 360-1) a relationship between the "fortunes" (he does not use "revenues") of the consumers, the cost and the number of consumers of a product by means of a triangular graph ("pyramid"), and from this dependent.

dency, he finally obtained an inverse relationship between the price and the consumption¹⁰⁶. These ideas were spread by his disciple, Joseph Garnier, in two well-known texts (1856; 1860), including Say's graph, which was slightly modified and marked as "the statistical law of consumption" (see Figure 1). The triangle is the packaging for the distribution of the individual "fortunes", represented by the height of the segments perpendicular to the base and inside the triangle. The scale located to the right represents the price of the product. When the price is zero, the consumption is the maximum and is represented by the length of the triangle's base. Higher prices (25, 75) could only be paid by more and more wealthy consumers and the consumption would drop (AB, CD), etc.

We do not know if the professor drew Garnier's graph on the blackboard. There is no record in the *Apuntes*, but it is almost necessary to see it in order to follow his argumentation. What is important is that Rodríguez furnished a somewhat different explanation of the law of consumption, for now the heights of the "pyramid" "represent the prices" and then the inverse relationship between price and consumption appears directly, without the intervention of the "fortunes" (*AEP*: 553-5). Even though Say and Garnier really referred to a triangle, Rodríguez considered a tri-dimensional body, without detailing the third dimension (perhaps the number of units



Figure 1. Statistical law of consumption (Garnier, 1856: 447)

 $^{^{106}}$ The idea was older than that and came from a similar graph presented by Germain Garnier (Adam Smith's translator) in 1796. See Diemer (2000b).

consumed per individual). In any event, the limited scope of the model does not seem to matter to him very much due to the implicit supposition that each consumer is always limited to acquiring one unit of the product, even when the price is zero. In fact, Say spoke of a "number of consumers", not of consumption.

Just like Say and Garnier, Rodríguez highlighted the specificity of the law of consumption "for each locality, each epoch and each particular utility", but his point of view is that "Say's pyramid was nothing more than a *symbolic* representation of the law of consumption" (*AEP*: 555). In fact, the immediate proposal is to consider the relationship between consumption and price as a continuous function, delimited by the zero values of the price and the quantity, and generally convex towards the origin, in order to "be able to infer general rules from it".

The justification of the methodological jump from the data to the function occupies the first pages of Chapter IV "*De la loi du débit*", the pioneer book by Antoine-Augustin Cournot (1838: 46-52), in which he proposed procedures for interpolation and the use of annual averages, under a concept of confluence between the Statistics and the Calculus which had been called "natural Econometrics" by Le Gall (2007). Perhaps obliged by the limitation of time, Rodríguez cited directly the formal nucleus and the graph of Cournot's function of the demand in order to reflect the behaviour of the entrepreneurs' receipts ("the total returns"). The comparison between the French economist's original graph (Figure 2) and the presentation in the *Apuntes* (558-60) does not feature any more differences than the intersection of the curve with the axis of the abscissa (price) and a change in the notation: *x* is the price and *f(x)* the consumption; *p* and D = F(p)in Cournot.

The demonstration and graphic visualisation of the maximum point of the receipts $x_i f(x)$ follows Cournot's text faithfully: it corresponds to the point at which the first one derived from said expression is equal to zero. Graphically speaking, where Oq = qt (in the *Apuntes Ox* = xt, 560-1). The analysis of the second condition of the maximum is omitted.

The *Apuntes* continued with three additional observations. The first, on the distinction between the receipts and the profits (as a difference between receipts and production expenses); and the general non-coinciden-



Figure 2. Cournot's demand curve (1838: page of graphs Fig. 1)

ce between the point of maximum receipts and the point of maximum profits. However this analysis corresponds exclusively to the case of the monopoly, studied by Cournot in Chapter V, of which Rodríguez extracted a second observation referring to the "producer", in singular, which is the only warning in order to implicitly indicate the monopolist. In the event that the "cost per unit (...) produced" is constant, the point of maximum receipts would coincide with that of the maximum profits (AEP: 562), an erroneous conclusion, because as Cournot said, that coincidence in the maximums only occurs when the total costs do not vary with the production, that is, when the marginal costs (their function $\phi'(D)$, absent in the Apuntes) are zero (1838: 46-52). In the other cases, the professor insisted correctly, the monopolist "is not interested in increasing the price beyond a certain limit" (AEP: 563). The third observation presented the practical importance of the different forms of the demand curves, such as those of the "first need" and "luxury" goods, implicitly using, as Cournot, the concept of the elasticity of demand (AEP: 563-4).

The third block of arguments on consumption is a practical application of the demand theory on the "Customs receipts". Rodríguez diverged here from Cournot's complex deductions on the taxes and applied Jules Dupuit's reflections on the tolls in public works in order to infer, by means of a numerical table, the tariff rate which reported the maximum receipt. A clear similarity existed between the chart of tariffs, consumption and receipts from the *Apuntes* (565) with the toll table, frequency and yields from Dupuit's "Péages" (1853–1855: 35), which Rodríguez translated for the *Revista de Obras Públicas* in 1855. He added that the same idea could be applied to the yields from the post and telegraph office¹⁰⁷.

The fourth block of this rather dense part on consumption deals with a strategy to increase the profits "by only slightly improving the quality of the product which is ordinarily sold". Now, we can see Dupuit's fundamental theory on the differentiation of the product, when a monopolist established for a basic service, with a price determined by the conditions of the maximum yield, a series of superior categories with price supplements which are much higher than the additional cost of differentiation (Diemer, 2000a). The reasoning was included in the afore-cited article (Dupuit, 1853 1855: 43-44), including the same examples of the luxury editions and the different classes of seats on the trains. Rodríguez added in his explanations a graphic representation of the differentiation by means of a demand curve (AEP: 567-8), but he was not fortunate in his argumentation (or the copyists in the transcription):

In this way, the product obtains the *oxmy* yield corresponding to the price *x*, and in addition, the *yam* yield which is the sum of the small rectangles which are being added as they are being obtained, with a small increase in the expense in order to sell them to those who are willing to pay more.



¹⁰⁷ This was an argument systematically used on behalf of the fiscal Customs tariffs and was of common use for the economist group. In 1863, Rodríguez used it in his criticism of Salaverría's customs duty. Echegaray explained it didactically before the Congress during the debate on the customs reforms, *DS-CC* 1869/06/28: t. V, p. 3252.

The explanation and the figure are contradictory with the idea of representing of the price in the abscissa: "to pay more" would imply higher prices than the *ox*, not lower¹⁰⁸. Dupuit's representation in a previous article (1844: 373-75 and figures sheet 75)¹⁰⁹, established (see Figure 3) the initial service with a price *Op* corresponding to the maximum receipts, but it sought a part of the consumers n'q' who would buy a more comfortable or distinguished service at a price *Op*', and successively another part n"p" at a price Op". Instead of the initial receipts *Ornp*, now the surface area Ornqn'q'n"p" would be obtained.



Dupuit's demand curve with product differentiation (1844: pl. 75).

In addition, Dupuit explained in length in this article his theory of the decreasing marginal utility and the surplus of consumers to explain a demand curve of public works, which the *Apuntes* did not mention. An explanation of this omission is always dangerous with the information available. It could be due to the fact that he was not familiar with it (although I think it unlikely because he tried to imitate it in his graph), to improvi-

¹⁰⁸ The correspondence between the text and the graph (pencilled in after its printing) from the *Apuntes* does not exclude an error on the part of the copiers or note takers, but it is less likely.

¹⁰⁹ A minor detail. Dupuit developed the formal arguments in the 'Notes' (373-5) which refer to four figures included on a separate page as the 'Planche 75'. Even though the author uses his Figure 4 to explain his ideas on differentiation, I am using his Figure 1 here due to its plastic proximity with Figure 2 of the *Apuntes*.

sation, to the limitations of the course or to the fact that he did not share the quantitative view of the subjective utility (despite the praise-filled references to Jevons and Walras), probably because he rejected in general the utilitarian's perspectives, associating them to the erroneous orientation of the "sensualism". For example, Dupuit's utilitarianism was linked to his rejection of the natural right of property (1861). The final result is that the demand curve with product differentiation in the *Apuntes*, if we momentarily forget the error, is a return to Cournot's demand curve, without statistical nuances nor the theory of subjective utility.

The last conceptual set is dedicated to reviewing the different kinds of consumption and their economic effects, such as absenteeism, poor's consumption, parasite consumption, savings, greed, prodigality (governmental), insurance and charity. In these matters, he followed Garnier's orthodox exposition (1860: 553-69) very closely.

THE APUNTES DE ECONOMÍA POLÍTICA (VI): THE STATE AND THE ECONOMY

The "Course's Conclusion" is devoted to studying the role of the State in the economy, for the preferential goal of the previous lessons had been to show the functioning of the "economic organism" in accordance with the conditions of a natural economic order. In said order, the State is a "natural and necessary institution, whose function is to maintain the integrity and freedom of all the centres", the same formula contained in *El Economista's* first editorial in 1856.

The exposition lists the functions of the State and the most adequate means to carry them out. There are no references to a customary discussion on the productivity of the public expenditure present to a great extent in contemporary economic literature, generally oriented with utilitarian criteria. On the other hand, the basic criterion which we find again in the *Apuntes* is that of natural *legitimacy*, a postulate of the social iusnaturalist philosophy by which the use of force by the government can only be justified by the impartial need for justice. The coincidence with Bastiat's arguments (1850 1864: 552-5) on the legitimate functions of the government is very clear, as well as with other coetaneous *laissez-faire* currents in Robbins's classical definition (1952).

In fact, the State's economic agenda in the *Apuntes* is circumscribed to four necessary or essential functions: the juridical framework for guaranteeing of freedom and property, justice in the resolution of conflicts between individuals, the defence, security and protection of the individuals and collective assets of the territory, and the international representation (*AEP*: 579-85). Some of the innumerable and illegitimate intromissions have been indicated which the State still undertakes:

The instruction and the carrying out of religious goals; it still exercises the monopoly over certain industries, by becoming a producer; it still intervenes in the formation and constitution of the economic centres (...); it still tries to foment wealth by intervening in trade (...). There has been a real

plague of monopolies in Spain, of the State and of the companies (...) (AEP: 585)

As we said, Rodríguez presented the elimination of the draftees and opted for an army made up of salaried volunteers, without going so far as to follow Molinari's steps as a defender of private security. In addition, the reference to collective assets not "susceptible to individual appropriation", (p. 582) indicates a provision of public assets as necessary, which makes a clear distinction from the trends identified with a minimal State.

The analysis on the taxes as ordinary means for sustaining public expenditure is based in the *Apuntes* on the principle of justice or correspondence between the public services received and the taxes paid by citizens and enterprises. This criterion should mark the amount of the total fiscal burden (sufficiency), but it should also determine its individual distribution. The principle of profit presented by Rodríguez was widespread among the classical economists since Adam Smith, and it was frequently interpreted by the economist school according to the rule of the tax proportionality with regards to the public services received, in accordance with the "economic importance" of the economic agent.

Following the proportionality logic, Rodríguez stated the advantage of the direct taxes over the indirect ones in regard to justice, but also in respect to the financial efficiency, given the costly tax administration of the latter ones. Other Spanish economists differed with this and followed a pragmatic orientation of mixed taxation. His discussion on the tax bases is interesting, for he identified capital as an indicator of property, while the yields could be considered as a result of the "freedom of action". He felt that a mixed system which taxed both bases would respond better to the payment of the services of protection of property and of freedom, respectively (*AEP*: 609-11).

The *Apuntes* revealed not only the professor's well-reasoned preference for direct taxation, but an unequivocal rejection of the indirect taxes. The praising of "income tax" reinforced the unifying argument that all taxes "should always be direct" (*AEP*: 613) and proportional. However, Rodríguez established an exception to the proportionality rule when he stated that the progressive taxes, which he considered unjust, could be "admitted in several cases (...) as compensation for the injustice of others which

mainly taxed the poor" (*AEP*: 620-1). It is a correction which attempted to bring a globally regressive tax system closer to the proportionality.

When referring to the monopolies existing in Spanish economy, he also introduced a nuance with regard to the State's role in education. He admitted public teaching subject to two conditions: that it be a public service (not a source of revenues) but with a subsidiary nature before the non-existence of private initiative (*AEP*: 617).

GABRIEL RODRÍGUEZ'S POLITICAL ECONOMIC THOUGHT. A BALANCE OF 1881

The review of Gabriel Rodríguez's intellectual biography has allowed us to discover different intensities and meanings in the author's actions over a period of thirty years of his adult life, and leads to a sequence in which traditionally separated aspects appear to be linked together, especially his economic ideas and his political and professional activities. The documented sequence starts with his formation as an engineer, his appointment as a professor and his interest in the political economy of public works based on a knowledge and familiarity with the fundamental texts of the French-speaking Economist School (Dunoyer, Chevalier, Molinari, Dupuit, the *Journal des Économistes* and the *Dictionnaire* of Coquelin and Guillaumin).

The publication of *El Economista* (1856-57), when the revolution of 1854 showed evident signs of exhaustion, reflected at the same time an attempt for personal projection in the public sphere, and a preferential attention for the diffusion of the principles of political economic freedom, and for the formation of a qualified public opinion that would contribute to reorienting the process of collective action in Spain. The adoption of Frédéric Bastiat's cosmovision, widely extended among contemporary liberal economists (Sigot, 2010), complemented cautiously with Krausism, revealed the aspiration to constitute a new liberal and democratic alternative (philosophical, scientific and political) before the eclectic, utilitarian or socialist views, after the great European confrontation of 1848. The modernisation of classical liberalism with universal suffrage could only acquire consistency with an immovable and illegislable concept of individual's rights. Free trade was, in that intellectual and political ambience, a socially transversal aspiration, the backbone of the economic and political renovation of the country, and the horizon for international pacification.

Rodríguez's publications in *La Razón* contained a comparative analysis between the proposals and contemporary economic practises regarding to a type of social *ordering* defined by freedom and property. The main problem was not so much the discussion of the *consequences* of some or other measures or institutions, as analysing their *legitimacy* in the light of certain basic postulates. Even his interesting contribution to the process of innovations and patents does not escape from that circle. That priority in the general defence of a liberal *iusnaturalist* order helps us to understand the frequent argumentative reiteration present in the writings of the Economist group of that epoch.

Rodríguez gradually opened up this self-limitation of the economic discourse, not because he would renounce the abstract procedural criteria but because, after having failed the option of the so-called rationalist or economist party which advocated "a true, radical democracy, free of socialist elements", he chose to deal more closely with the specific problems of the Spanish economy, whose public debate required answers with greater technical and institutional details. That evolution is evident in some of his writings, which were not well-known, between 1863 and the revolution of September 1868. Some new analytic supports also appeared in them and also intellectual references, between the lines, to Le Hardy, Cherbuliez, Wolkoff and Pastor, among others. His active political participation in the Administration, the Parliament and the press during the six-year Revolution confirms that evolution with regard to the Customs reforms, public deficit, social matters, the organisation and supervision of the companies, and the analysis of the very process of elaboration and handling of the Spanish economic policy.

The dispute over the Political Economy method raised by Gumersindo de Azcárate stimulated or crystallized a revision of the possibilities for strengthening the development of the "Economic Science" by accentuating its deductive potential, reaffirming its disciplinary autonomy within the more general scope of the social sciences, and preserving the liberal economic tradition before the attacks from Historicism, neo-Krausism and Socialism. He took advantage of Dameth, Jevons and Spencer's contributions to link that tradition to several principles of the new economic theory.

We do not know the contents of his teachings at the *Escuela de Ingenieros* de Caminos from 1873 to 1879. The classes found in the recovered *Apuntes de Economía política* of 1880-81 reveal a generalised presence of certain analytical and doctrinal perspectives from the French-speaking economist school, between 1850-1880, which were masked slightly by the renewed but omnipresent organicist vocabulary. However, together with that legacy, other less frequent contributions appeared and the professor adopted a methodological orientation favouring logical-deductive processes for outlining universal laws, comparable to those of Rational Mechanics, due to the abstract, functional or mathematical treatment of the economic magnitudes, an orientation which was generally rejected by those economists. At the same time, the "Old School" postulates were reaffirmed and new paths were opened for later development, which would suggest that during the 1880-81 course, Gabriel Rodríguez presented a balance in his lessons in the *Escuela*, a synthesis which he had not been able to develop at the beginning of 1880 in his monographic course at the *Institución Libre de Enseñanza*.

The *Apuntes* present important differences in regard to the contemporary text-books on Political Economy which were being used in the Faculties of Law and in the Commerce Schools. This was due not only to professor Rodríguez's scientific training, but to the material brevity of the text together with its density, which can only be understood because the classes were intended for a special audience, the fourth-year students of the *Escuela de Caminos*, academically pre-selected and with a high level of scientific and mathematical preparation.

Certain important differences are also noted in the contents, in addition to the already mentioned deductive methodological perspective. The first is the synthetic explanation of the development of an economic organisation in which individual specialisation according to a social division of labour is coordinated by means of voluntary exchanges, because it would benefit each one of the participants in the economic process. Obviously the idea was not a new one; what attracted our attention was his explanation in the lessons. It is a particular fusion of Smith's ideas reformulated by Spencer with the help of Cherbuliez (Stuart Mill).

The second is a theory of the value (utility and power of exchange) and of the formation of the prices as an incessant process of equilibrium between the effective supply and demand, understood as forces made up of the amount and energy of the propensity to change. The partial analysis at any given moment is completed when he include the minimum cost that conditions the supply, the temporary profits and the diffusion of the productive improvements over a broader period of time. Rodríguez synthesised and completed Cherbuliez's model, and suggested that the equilibrium of the market could be analysed mathematically as Jevons and Walras had recently shown.

The third particular contribution is a theory of distribution and growth, which tries to combine a theory of distribution based on the supply and the demand of the factors, with another theory of the decreasing marginal productivity of the capital, this latter concept, owed to von Thünen and supported by Wolkoff. The result of this less rigorous combination is a view of the contemporary social problem (insufficient wages) as the result of the natural causes *external* to the market (the growth of the population and the limited locations). The remedies should not affect the general organisation based on freedom and property, and the exposition stands out due to its repeated defence of the free association of the workers and some of the mutual aid and cooperative initiatives.

The fourth special contribution is the formulation of a theory on consumption which attempts to link together an empirical approximation to the law of demand (Say-Garnier), Cournot's demand function, an explanation of the monopoly equilibrium (not entirely successful), and Dupuit's application of the theory of tariffs to the fiscal duties and product differentiation. Despite some stumble, the combination is entirely innovating on the Spanish scientific scene of the epoch, as Gabriel Franco correctly pointed out. We should add, not only due to its contents, but also to the new theoretical vision it represents.

The *Apuntes*, considered on the whole, are a unique example of the *rational* political economy, a term used by Rodríguez in 1879, and which the engineering economists used in the 19th and 20th centuries from Jules Dupuit to Francis Divisia, including Wolkoff, although with different meanings. Rodríguez tried to unite certain contributions from the liberal economist school (the Chez Guillaumin plural group) with the initiatives of deductive and mathematical development of several engineer-economists, such as Jules Dupuit, and also Cournot, von Thünen and Wolkoff. A specific characteristic of the lessons given during the 1880-81 course is that his modernising efforts did not immediately lead to an active reception of the new marginalist trends, despite Rodríguez's favourable opinion of Jevons and Walras, and the incidental assimilation of the decreasing marginal pro-

ductivity of the capital or the locations. We should ask if, in Rodríguez's case, his profound aversion to utilitarianism represented an insuperable obstacle.

Where the *Apuntes* does resemble other contemporary books is in regard to its liberal economist orientation, although its predominance began to decline slowly with the new texts by Santiago Diego Madrazo and Melchor Salvá, and with the criticism of José María Piernas Hurtado and Adolfo Álvarez Buylla (Almenar, 2012). However, each of them manifested a strong resistance to the use of mathematics and to the new economics, tempered somewhat in relation with the Austrian economists, as was the case in France (Breton, 1998).

The mathematical political economy did not lead directly to the acceptance of the marginalist economic theory, as is often assumed, but Rodríguez's innovating efforts were not immediately forgotten. Thanks to Manuel Martín's study (2006b), we can now suggest that the repercussion of the Apuntes, after the professor's retirement in 1884, was limited to the academic scope of the Escuela de Ingenieros de Caminos, but it was prolonged over time. There was a continuity in the orientation of the teaching of Political Economy and a broadened acceptance of Dupuit's scientific program on the utility of public works and the study of the tariff systems. The comparison between the index of the Apuntes, of 1880-81, with the programme of subjects followed in 1885-86 by professor Vicente Garcini (reproduced in Martín Rodríguez, 2006a: 115-27), reveals a detailed identity of the syllabus and the different sections of the part devoted to general approach on political economy, except for some other added sections (on monopoly, for example). Garcini's perseverance regarding Rodríguez also helps us to interpret more wisely the similarity of the afore-cited Apuntes with the summary furnished by Franco on other edition of the 1887-88 course, and Garcini's indirect influence, on the Apuntes para la clase de Legislación, Administración y Contabilidad de las Obras Públicas. Curso de 1889-90, rescued from oblivion but precipitately attributed to Rodríguez by professor Rocío Román (2008).

In a way, the meticulous attention paid currently to these teaching materials seems to be a historiographic paradox, in comparison to the secondary importance attributed to it by his contemporaries (economists included), who were more interested in the social and political projection of their economic doctrines. However, as we have tried to show throughout this study, the construction of general views and the acceptance of their analyses, their application to the problems of Spanish society, their teachings, their social diffusion and their political projection, with different styles and audiences, were intimately related to one another, but also to the vicissitudes of the political and social developments.

Gabriel Rodríguez continued in the eighties and the beginning of the nineties, dedicating his main efforts to the defence of free trade in an increasingly more adverse intellectual, economic and political atmosphere. He did not give up. However, that is another itinerary whose examination goes considerably beyond the purpose of the present study.