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THE NATIONAL FACTOR IN THE DEVELOPMENT OF SCIENCE

(Guest Editor Antonio Lafuente)

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Abstract

The Lima Geographic Society, founded in 1888, was closely tied to the central government, and became the largest and most prestigious of all Peruvian scientific and technological societies related with the economic modernization of the country. The reasons for its prominence, particularly its role as a catalyst of geographical studies based on nationalistic motives, are analyzed, together with the

reasons for its decline, caused by the scientific devaluation of surveying work (performed routinely by the Army) and the reorientation of the field that resulted from the evolution of specialized branches.

National Sentiment in Medical and Naturalistic Literature in Colombia at the End of the Nineteenth Century (*Spanish*)

DIANA OBREGÓN

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Abstract

At the end of the nineteenth century there was a burst of interest in natural sciences in Colombia. This was manifested by the founding of several scientific institutions, the publication of science journals, and the contracting of a scientific commission to explore the territory's natural resources. The sudden interest in science was justified on economic and political grounds: the study of nature, it was said, would provide new products for exportation, while science would perform a unifying and «regenerating» role. The force of this latter justification of the need to do science was so strong that it gave rise to a «scientificist movement» during this period, whose aim was to spread its rules and values through other spheres of social, political and religious life. However, the arguments used to support the advance of science failed to convert it into an institution, owing to obstacles of a social nature, which are examined in detail in the text.

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Abstract

One of the most serious problems to be faced by the new Central and South American states as they slowly became consolidated during the nineteenth century was their lack of scientific institutions. From an ideological standpoint, these institutions were sustained by the creation of a new scientific mythology. In Venezuela, the Bolivarian cult was paralleled in the scientific arena by uncontested devotion to the life and works of the German savant Alexander von Humboldt. However, widespread acceptance faded in 1867, when the traveller and politician Francisco Michelena sharply criticized von Humboldt's work because of its «contradictions» with respect to the Venezuelan-Brazilian border. The reply of the positivist Adolfo Ernst initiated a controversy illustrative of the close links between national construction and the search for and creation of political and scientific myths in nineteenth century America.

Science and the History of Science in the Six Years of Democracy. Formation of a Third Alternative in the Controversy over Spanish Science (*Spanish*)
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The significance of a speech. The historiographic program of the Spanish Society of Natural History

Abstract

The text argues that during the six years of democracy from 1868 to 1874, there emerged, within a liberal political context and a cultural atmosphere impregnated with romantic nationalism, a third alternative in the controversy over Spanish science, which differed markedly from the maximalist positions of the opponents in this ideological dispute. The argument is developed in an analysis of the speech given by the zoologist Laureano Pérez Arcas upon his induction into the Royal Academy of Exact, Physical and Natural Sciences in 1868. The article examines the influence of his approach to historiography and view of the history of science in Spain on historical studies carried out by Miguel Colmeiro, José María Solano and Marcos Jiménez de la Espada, who were among the founders of the Spanish Society of Natural History.

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Abstract

From 1899 to 1935, Venezuelan engineers became professionals, a process that coincided with the reorganization of the country and the beginning of the oil industry. Venezuelan engineers took advantage of these circumstances to ensure their professional status, displaying their skills in construction and cartography for both the government and foreign oil companies. They also trained young engineers, thus ensuring the growth of the group, and used the journal of the Venezuelan College of engineers to attempt to persuade the public of the need to develop engineering in Venezuela. Their mathematical training, the links between engineering and progress, their social usefulness and patriotism, as well as legal arguments, were all used to further the professional interests of this group.

Of Things Native and National. Reassessment of the Brazilian Steel Industry Question (*Spanish*)
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Abstract

This article investigates the development of the Brazilian steel industry as an

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Abstract

This article analyzes the ideological reasons leading 1) to the rejection of bathing as a measure of hygiene in Spain during the sixteenth century, a posture that led to closure of the public baths, and 2) to the adoption of river bathing as a new mode during the seventeenth century. The argument that justified the former policy was based on the union of body and soul as a path that directed individual and group action. Those privileged by wealth or hereditary rank should therefore be able to do without bathing, which moreover served as an identifying feature of those with different social, moral and religious characteristics. In the seventeenth century, a new style of bathing appeared as a prototype of leisure time activities in Baroque society. River bathing was an acceptable social practice, and attracted the attention of the medical profession.

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Abstract

Sensualism and the need to resort to the analytical method became constant, fundamental elements of French medicine during the late 18th and early 19th centuries. These approaches were used in the study of the human body in health and sickness. The development of the so-called «anatomoclinical method» was one of the most important consequences of the application of this analytical method to medicine. However, despite the considerable debts of French medicine to these approaches, French doctors continued to invoke fundamentally vitalist doctrines and their attendant concepts of health and sickness in their efforts to formulate a general theory of disease. This article briefly describes the principal theories developed in France during the transition from the 18th to the 19th century to provide a general explanation of disease, and documents the dependence of these theories, to varying degrees, on vitalist viewpoints.

The Royal Protomedicato Tribunal in the Santa Fe Judiciary During the Second Half of the Eighteenth Century. An Approach to the Study of the Transformation of this Spanish Institution (*Spanish*)

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Abstract

An examination of historical sources made possible to trace the evolution of the Protomedicato Tribunal in the cities of Santa Fe and Cartagena in New Granada. The corresponding tribunals in Panama deserve a separate study. The New World Laws (*Leyes de Indias*) created a model Tribunal, based on the Castilian institution, which was subsequently adapted to each Viceroyalty. In the judiciary examined in this study, additional variations were introduced in each of the cities under its jurisdiction, leading to more marked differences with respect to the original model.

Spain's Entry in the European «Information Science Movement» at the Start of the 20th Century: The Contribution of the Madrid Academy of Exact, Physical and Natural Sciences to the International Catalogue of Scientific Literature (1904-1921) and the *Unión Internacional Hispano-Americana de Bibliografía y Tecnología Científicas* (1910) (*Spanish*)

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Abstract

At the invitation of the International Association of Academies and the Royal Society of London, the Madrid Academy of Exact, Physical and Natural Sciences participated in one of the grand bibliographical projects of the beginning of the 20th century: the International Catalogue of Scientific Literature (1904-1921). José Rodríguez Carracido (1856-1928), librarian and member of the academy, was responsible for providing London with bibliographic information on Spanish scientists. The lack of political support made Spain's participation problematic. On the basis of the experience acquired, the Madrid Academy of Sciences, through the efforts of Leonardo Torres Quevedo (1852-1936), attempted to export the British model of organization to the Hispano-american world by creating the International Hispano-American Union of Scientific Bibliography (1910), an institution that also failed because of lack of support from Spanish politicians. The only material product of the Union was the *Vocabulario Tecnológico* (Technological Glossary), the second edition of which was published in 1990.

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Medical Police and Clinical Medicine in Bamberg from the Illustration to the Romantic Period. Testimony of A. F. Markus (*Spanish*)

LUIS MONTIEL

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Abstract

Since its founding in 1790, the Bamberg Hospital, under the direction of Adalbert Friedrich Markus, played an important part in the clinical training of many German physicians. That Schelling himself studied medicine in Bamberg accounts for some of the most noteworthy aspects of his *Naturphilosophie*. This topic, investigated in recent historical studies of German medicine, losses part of its attraction if we disregard the analysis of one aspects of Markus's writings that is rarely considered: the medical police. This article attempts to demonstrate that Markus's illustrated discourse on the medical police had a very specific goal: the delimitation of the field of action of police strategies, in order to free hospitals from the tasks that were entrusted to them within these strategies. This aspect, which is seldom mentioned in the writings analyzed in this study, nevertheless appears to be a conclusion which arises naturally from Markus's published work, as I will attempt to show. Thus this author's illustrated discourse appears to be little more

than a justification of the other viewpoint that arose during this period —especially in France— which was to make the hospital an ideal place to study disease.

Medical Scientific Institutions in 18th Century Murcia. A Fruitless Attempt to Renovate Medical Training. (*Spanish*)

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1.—Introduction. 2.—School of Medicine. 3.—Accademy of Medicine. 4.—Reasons for failure. 5.—Conclusion.

Abstract

Two attempts to modernize and to improve the training of physicians in 18th. century Murcia are studied. Both failed, seemingly due to the lack of agreement between their supporters, although we are prone to think that the failure was due to deeper causes, such as the low level of scientific activity in this city, which made the existence of teaching institutions or others such as the Accademy of Medicine superfluous.

Note on the Number and Distribution of Doctors and Surgeons in Andalusia, Murcia and Albacete around 1835 (*Spanish*)

ESTEBAN RODRÍGUEZ OCAÑA..... 291

Abstract

We present the results of a census of titular civil doctors and surgeons named by the *Real Junta Superior Gubernativa de Medicina y Cirugía* in 1835 in a document conserved at the Royal Granada Academy of Medicine. These data are complemented with similar findings in the same district (currently the eastern provinces of Andalusia, in addition to Albacete and Murcia), and with scarcer data for Seville. We conclude that these incomplete data are insufficient to allow us to calculate rates of physicians in order to determine the availability of health care, although a pyramid of dates on which certification was granted suggests that availability had declined in comparison with previous periods.

El Baldaet: Quack Medicine and Disease Care (*Spanish*)

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Abstract

We used an analysis of the practices of José Cerdá Baeza, known as El Baldaet, a quack who was active in Alicante at the end of the nineteenth century, as an example of the type of information that can be obtained from this type of practice. An understanding of these «care providers», together with knowledge of professional health care and self-care, give a complete picture of the range of alternatives used by a population to prevent and face disease. We present this case within the framework of the increasing attention being paid by medical historiographers to alternative forms of care other than Western scientific medicine.

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Luisa Rosado, a Midwife in Enlightened Spain (*Spanish*)

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Abstract

Luisa Rosado, a midwife who lived in Madrid in 1770 and 1771, applied for permission to advertise her services through posters; part of the Simancas Archive file regarding her application is reproduced and commented on. The file contains testimonies from physicians regarding difficult births in which they were assisted by the applicant, reports from the Protomedicato Tribunal recommending that permission be denied, and two royal resolutions which, with certain conditions, approve the midwife's request. The accompanying commentary centers on the conflict of interest between midwives and surgeons, and in the professional knowledge of both parties, based on documents and birth certificates from the period under study.

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