

Disfiguring disease, degeneration and climate in Colombia, 1880-1920*

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Received for publication in July 2009.

Approved for publication in October 2010.

Translated by Catherine Jagoe.

CARDONA RODAS, Hilderman;
VÁSQUEZ VALENCIA, María Fernanda.
Disfiguring Disease, Degeneration and
Climate in Colombia (1880-1920).
História, Ciências, Saúde – Manguinhos,
Rio de Janeiro, v.18, n.2, abr.-jun.
2011. Available at: <http://scielo.br>.

Abstract

This text aims to unite two neglected areas of study in Colombian medical historiography: disfiguring disease and the concept of climate. It seeks to show how physicians in the late nineteenth and early twentieth centuries in Colombia associate a clinical semiology of disfiguring disease with the influence of certain climatic and hereditary conditions. Characterizing disfiguring disease associated with climate implies revising the way in which, at the close of the nineteenth century, medical discourse constructed etiological explanations using the applied rationalism of the period. Thus, the ideal pathological terrain was both the body of the patient and the territory he or she inhabited.

Keywords: climate; disfiguring disease; degeneration; race; Colombia.

If the infection in your lungs is only a symbol, as you say, a symbol of the infection whose inflammation is called F. and whose depth is its deep justification, if this is so then the medical advice (light, air, sun, rest) is also a symbol.

Lay hold of this symbol.

Franz Kafka, 15 September 1917.

Although disease can be understood and studied from different analytical standpoints, as a social construct, as a doctor-patient relationship, as a set of cultural values or as an event belonging in a specific context, it can also be understood, from a disciplinary viewpoint, as a set of theoretical and conceptual elements, and also as a metaphor, a symbol, from the perspective of language studies.

This article aims to explore how, at a particular moment in the history of medicine in Colombia, doctors approached knowledge of disease from the point of view of clinical semiology, meaning ways of approaching illness from the standpoint of the symbolic, the metaphoric and the sensorial, which are reinforced by elements peculiar to medical theory interested in certain features of climate and their relationship to illness.

In Colombia during the nineteenth century and the first two decades of the twentieth, the etiological explanation for disease in the medical field constructed a knowledge that articulated illness, climate and degeneration. This field of knowledge permitted the medical gaze to focus its discursive horizon on the construction of a knowledge of disease, which projected diagnoses and prognoses based on a semiological reading of the body of the sick person and a nosology based on comprehension of the role of climate in the genesis of diseases. This semiological reading consisted of a series of learned gazes, techniques and languages but it also arose from knowledge based on the doctor's sensory experience of the patient's body, the basis for the medical gaze (Johannisson, 2006, p.16). Thus, some Colombian doctors would construct a way of talking about disfiguring disease, using a series of expressions to describe it that have to do with how it was defined in medical and etiological terms but also employing value categories, which make the medical gaze the field of the perceptual effect of what is seen as abnormal and deformed.

The physician is not beyond the value judgements according to which a society conceives the outsider as deformed and abnormal (Cardona Rodas, 2006). The subject position of the physician when trying to capture disease through scientific categories surpasses all pretensions of objectivity, since what is seen as deformed from the field of semiology makes visible a way of approaching the history of disease from a different perspective. The repulsive cannot be summarized within the dry categories of the scientificity of the phenomenon seen as objective, it approaches the sensory field of what it affects by questioning the anatomic and moral normality of normal bodies. In this context, Hering Torres (2008, p.16) mentions that "the body must be understood not only as a biological reality, but also as a discursive reality and a representation, processes that create a semiotic body; the body, in short, is also a cultural experience of different types of discourse and

practice. If we add historical perspective to this, the body can be understood as a historical variable with multiple meanings interrelated to time and space.”

The difference made visible in medical discourse exhibits not only an objective and scientific vision of illness; it also projects a social sensibility towards the repulsive, an attraction to that which perturbs order, which is at the same time rejected under the logic of exclusion.

Thus, the questions underlying the present text are: how does the link between disease, climate and degeneration come into play? And what makes the articulation of these semantic and epistemological concepts visible in the horizon of the clinical gaze? The study of medical language brings to light a problematic relationship in the formation of scientific knowledge, which, in the case of medicine, makes the diseased body and its environment the surface of inscription of a will for power/knowledge.

Therefore, the objective of this text is to show how these concepts are articulated and how, in the horizon of medical discourse, they construct a truth-telling that moves between the clinical and the climatological. The archival documentation chosen for this article focuses on those documents that stress the relation between climate and disease and the characterization of pathological cases in clinical knowledge, among which are *La nueva geografía de Colombia* (The new geography of Colombia) by Francisco Javier Vergara y Velasco; the reflections on elephantiasis and climate by Andrés Posada Arango; the *Geografía general y compendio histórico del estado de Antioquia en Colombia* (General geography and historical compendium of the state of Antioquia in Colombia) by Manuel Uribe Ángel; Luis Felipe Calderón’s text on polyglandular syndromes; and Juan Bautista Montoya y Flórez’s reflections on leprosy. We also offer some illustrations that show how doctors imagined the link between climate, territory and illness, and the topic of this article, disfiguring disease.

In the first part of this article we deal with the concept of climate in Colombian medicine, analyzing the way in which some physicians constructed medical geotopographies that describe certain illnesses and also the habits and behavior seen in the inhabited areas of Colombia. In the second part we analyze the concept of disfiguring disease associated with climate, degeneration, the distinction between normal and pathological and the differential analyses of disease linked to the country’s geography, in relation to two illnesses: elephantiasis and internal glandular disorders.

Climate and disease: a problematic relationship in Colombian medical practice

In the second half of the nineteenth century, the conditions for the formalization of scientific organization in the country were met, as historian Diana Obregón Torres notes (1992). This framework arose slowly but it signified the beginning of the struggle to confer scientific standing on medical knowledge. It is in this context that the medical preoccupation with relating climate and illness arose, an interest that becomes visible in the construction of studies of medical geography and topography. However, this preoccupation was not limited only to physicians, since some naturalists and engineers started asking questions about the same relationship.¹ The knowledge that doctors had

about geography, especially in relation to the concept of climate, had various conditions of possibility:

- A national interest in defining national and international territorial borders;
- The growth of knowledge in the natural sciences starting in the second half of the nineteenth century;
- The relationship between doctors and naturalists, especially through the Society for Medicine and Natural Sciences in Bogotá, founded in 1873;
- The creation of the Permanent Scientific Commission (1881), whose mission was the construction of a ‘national medicine,’ research devoted to the analysis of the Colombian territory from the geographical, geological, botanical, and pathological points of view, among others;
- The country’s first steps toward entering the world economy. Regional knowledge was of vital importance, principally in export-rich regions (rubber, quinine, tobacco and certain minerals like coal and gold).

The construction of medical geographies or topographies² was, then, the contribution doctors sought to make to the goal of scientific, political and economic development of the country during the second half of the nineteenth century. Thus, geographic knowledge, especially knowledge of physical geography³, was relevant to the development of medical geographies. Doctors studied the problem of the influence of climate on character, illness and health in medico-scientific studies in which they collected meteorological data and related them to medical observations, reporting the physical and human characteristics of a region, the nature of the soil, geology, water quality, manners, types of habitat, clothing, and food, among other aspects.

At the end of the nineteenth century in Colombia, the concept of climate involved a series of physical factors including temperature, altitude, and humidity. By climate, doctors understood the mingling of such factors as determining or influencing the appearance and persistence of certain diseases and also the characterization of the living space and behavior of those who lived there. In this sense, discussing space in the panorama of nineteenth-century medical knowledge involves not only geographical coordinates but the designation of a sociocultural, economic and political place; in other words, the vital spaces of human habitat. These considerations were powerfully present in Colombian medical discourse of the period and they served to establish nosological classifications to designate a series of strategies for controlling diseases and conferring their political and moral meaning.

Historian Claudia Mónica García (2006, p.48) states that there was a medical concept that related “the malignity of intermittent, pernicious fevers as an attribute of hot climate.” According to her, the national elites of the nineteenth century associated a hot climate with an unhealthy, harmful environment. Some of the studies done by Colombian doctors during this period deal with the problem of climatic determination among living beings and its effect on human health. At the same time, there was a negative perception of low-lying areas and hot climates, which associated the presence of certain climatic, geological

and geographic elements with the occurrence of certain illnesses. This climatic and geographic determinism extended to the physical and moral life of individuals and corresponded to the construction of a national type and an obsession with the dangers of tropical climates that obliged doctors to come up with their own vision of climate and its effects.

Physical geography was the conceptual field that allowed the meeting of climate studies and medical knowledge. On some occasions, doctors found climatic elements to be the cause of illnesses, above all those present in the country's hot climates⁴; this is seen in the case of elephantiasis, which led to a sort of climatic determinism. Other times climate was understood as a contributing factor that favored the appearance of certain diseases.

The physician Emilio Robledo (1916, p.83), in his study *Geografía médica y nosológica del Caldas* (Medical and nosological geography of Caldas), defines medical geography as "the part of mesology that deals with diseased man in relationship to the earth. It is devoted to the study of the morbid influence upon mankind of geographic and meteorological agents, in other words, climate." Thus, climate was configured by a medical concern whose *raison d'être* lay in the geo-topographical studies of medical knowledge at that time. Similarly, Manuel Uribe Ángel (1822-1904), a doctor from Antioquia, wrote that the climate of a place is characterized by a series of meteorological and geological factors, which in turn characterize the hygienic conditions that determine the relation between health and illness in a region: "the great complexity of physical make-up noted in the State [Antioquia]⁵, the infinite variety of its component parts, the necessary modifications that all bodies must undergo in this country thanks to their individual or relative situation, must and indeed do produce the notable phenomenon that every locale exerts different hygienic influences upon the man who inhabits it" (Uribe Ángel, 1985, p.46). For Uribe Ángel meteorological knowledge is an indispensable auxiliary tool for medicine, since it allows one to understand the health status of a region. He mentions that:

From the moment that medicine knocks on the doors of meteorology to nourish itself with the natural help that it offers; from the instant when assiduous observations of the barometer, the thermometer, the hygrometer, the pluviometer and other instruments provide their modifying coefficient over the organism; from the moment we have measured electrical and magnetic tension, their fluctuations, their discharges and currents; from the moment, finally, when the study of branches of knowledge is complemented by the beneficent cooperation of experimentation, we can be certain we are on the road to progress. The art of curing cannot, must not and will not dispense with the powerful aid of accessory sciences (Uribe Ángel, 1875, p.187).

This paragraph shows how natural science and geography as 'accessory sciences' help medicine to define, in Uribe Ángel's case, various hygienic conditions that are the product of the influence of 'meteors'; as well as offering valuable insights into men's physical sufferings, they help civilize the country.

Colonel Francisco Vergara y Velasco (1860-1914), an engineer, also associates climate conditions, race and the presence of certain diseases in his work *Nueva geografía de Colombia* (New geography of Colombia). For example:

The black race in the hot region suffers especially from furunculosis, eczema, psoriasis which is their leprosy, chloasma, beriberi, elephantiasis of the lower extremities and the

scrotum, and while it victoriously resists malaria, syphilis devours it with incredible power. Even illnesses seemingly limited to the cold region are present here in the heat, like influenza, bronchitis and tuberculosis ... [in this same zone exclusively we find] spotted sickness, a disease as contagious as it is repugnant that may take various forms and that particularly attacks people who are ill-dressed, ill-fed and subject to hard labor whose skin turns into chameleon scales; it prefers dry, siliceous, feldspar soils, and in the Valley of Upar they attribute it to the bite of a special mosquito. ... Both of warm and cold lands is goiter, above all in temperate regions, a terrible disease that stupefies the human race and is caused by bad water. And lastly, the most frightful of diseases, elephantiasis, extends its dismal mantle over the whole country for lack of care and isolation hospitals: we have observed that it has a marked antagonism to spotted sickness; it develops above all in calcareous soils, especially if they are cretaceous: it is caused by the slightest sudden chill of the body, especially those due to bittersweet, cold drinks and it is not seen in purely volcanic soils (Vergara y Velasco, 1892, p.DLXXXVI).

Despite not being a doctor, Vergara y Velasco resorts to classifying diseases (nosology) based on his knowledge of climate and geography. Similarly, his remarks go beyond a simple classification and become a study that links climate with degeneration, poverty, disfiguring disease and race. Thus, the association between disease and climate demonstrates a means of truth-telling about subjects, their behavior and the place they live.

On this topic, historian Ernesto Noguera (2003) mentions that doctors designed “a set of hygienic and prophylactic measures to block or reorient certain atavistic tendencies identified as prejudicial to the preservation and progress of the human masses living in the country.” According to Noguera, the concept of race permitted the definition of forms of political control “over the acknowledgement of heredity and atavism as central factors in the anatomical, physiological and moral configuration of the Colombian people” (p.111-112). Meanwhile, the concepts of both race and heredity were related to the distribution of heat and humidity across Colombian territory, and to the different forms of social organization.

In the case of the study on leprosy in Colombia (1910), carried out by physician Juan Bautista Montoya y Flórez, we note once again this ‘classificatory reason.’ In this work he performs a geo-climatic mapping of disease, locating elephantiasis, understood as a physiological disorder that led to cases of hypertrophy of the genitals or extremities, in the hot climates and leprosy in the cold climates of the country. Thus, he locates a higher number of cases of elephantiasis on the Atlantic coast in comparison to leprosy; the reverse occurs on the Cundiboyacá Savannah, where this relationship is inverted. To illustrate the distribution of leprosy in Colombia, Montoya y Flórez (1910) drew up a map that shows the cases of elephantiasis (Figure 1).

Analyzing medical discourses that refer to the influence of climate on the ‘constitution’ of places and inhabitants and their association with certain diseases in particular regions is important in order to understand the construction of nosological charts, which offered strategies for controlling, preventing and curing diseases. On this topic, Uribe Ángel (1888) mentions that medical knowledge must aim to understand the diseases that occur in each region, since therapeutic approaches depend on that same issue. According to him, there are weighty ‘scientific’ reasons demonstrating that the ‘human organization’ is not the

same in all regions of the world, which suggests that vital phenomena and the therapeutic action of bodies differ (p.101). The variety of climates in Colombia explains why human populations are subject to various 'environmental pressures,' which justifies undertaking medical studies – medical geographies – in order to understand the different regions' climatic, racial and demographic 'constitutions.'

Physician Juan Bautista Londoño (1910) also finds an association between degeneration and climate, specifically in hot climates:



Figure 1: Map of the distribution of leprosy in Colombia. The gray shading on the map represents the frequency of leprosy in the areas; the darker the shading, the higher the number of cases (Montoya y Flórez, 1910)

Valley climates, properly speaking, are hot (torrid) climates, in other words, ones whose harmful influence on the human organism has given pathologists so much work, because they are the cause of the gravest endemo-epidemics that affect the human species: cholera, bubonic plague, yellow fever, dysentery, etc. Malaria reigns there, an infection that attacks the little organs in the vital liquid that physiologists nowadays call erythrocytes, or blood cells. Knowing the immense role of these little organs in the formation and conservation of man, it can be said that everything that perturbs their life and functioning is the cause of degeneration, if not death, for human beings (p.248).

For Londoño (1910, p.248) hot climates can be considered “uninhabitable by men,” except for individuals of black race or mixed blood. He also believes that they are unhealthy, dangerous climates that can have no curative effect since they are risky to the health.

Finally, it is clear from the documents analyzed in this section that in Colombia in the late nineteenth and early twentieth century, medical knowledge shows a special interest in understanding climate, since it saw physical, climatic and geological factors as the fixed and causal explanation for the presence of certain diseases, specifically those found in hot climates. Besides, altitude is the supreme element of climate, since it allows a more efficient linkage of climate and disease. Based on altitude, doctors established a spatial-climatic classification of the country's regions and consequently a nosology. On the other hand, the climatic determinism shown by some of these physicians was not only related to knowledge of the illnesses, but also to strategies for treating and controlling them. This relevance of geographic knowledge to medicine in Colombia in the last third of the nineteenth century can be seen in the various books, articles and scientific studies generally titled medical geographies or topographies. Physical geography was a field of reference for some doctors who associated certain morbid states with some of the geographical and physical features of the places where they occurred, such as atmospheric conditions (meteorology and climatology) and geological conditions (soil composition). However, the climate factor and the study of climatology were the themes that most broadly and powerfully linked geography and medicine (Vásquez Valencia, 2008). These elements lent enunciative force to the definition of disease, extending a threshold between the normal and the pathological that we will analyze in the next section.

Disease, deformity and medical language

The definition of disease brings up a series of essential questions, which were critically explored by Georges Canguilhem in his book *The normal and the pathological*. These questions are: what is disease and what does it consist of? How is it recognized? Where does it begin? Can the illnesses we suffer be distinguished by their degree of seriousness? Or, to fall back on a game of opposites, what characterizes health?⁶ In Western experience, saying and seeing disease has negative connotations, given the dynamic and symbolic seamlessness of the relation of life with death.

In the nineteenth century there arose an ‘ontological’ concept of disease, linked to the project of botanical taxonomy of the second half of the eighteenth century and to Lavoisier's work in chemistry. These connections led to an approach to disease as a natural entity

involving a 'physiological disorder' in a body's organization. Thus, "the order of disease is simply a 'carbon copy' of the world of life; the same structures govern each, the same forms of division, the same ordering. The rationality of life is identical with the rationality of that which threatens it" (Foucault, 1994, p.7). It is on this context that Canguilhem chose to focus by denouncing a dogma promoted from the end of the eighteenth century up to the present day, that of disease as the antithesis of that which is normal and usual, health.

From the nineteenth century on, notions such as health, disease, norm, cure, anomaly, average or error were situated in terms of deliberations on the normal and the pathological. After that point, medical practice in Europe and also in Colombia configured various analyses of the pathological state in clinical readings of the body, putting into circulation concepts like normal, health, anomaly, deformity or disease according to subjective judgements and a desire to re-establish the 'ideal state' of organic behaviour: health as the silence of the organs. "Colombian medical discourse is immersed in a flux of determinations insofar as that which deviates, the abnormal, acquires medical status thanks to the use of certain uses of language related with positions of similarity (metaphors) and semantic contiguity (metonymy), making visible and articulating disfiguring disease, monstrosity and abnormality" (Cardona Rodas, 2005, p.11-12).

Historian Zandra Pedraza Gómez (2008, p.216), moreover, mentions that during the nineteenth century in Colombia and Latin America, the concepts of normality and abnormality were appropriated. Doctors adapted the discourses and experiences of difference and naturalized them to local conditions, linking certain bodily anomalies to climate and racial factors, seen through the prism of the conservative Catholic moral principles of Latin American intellectual discourse.

Clinical descriptions of disfiguring diseases written by Colombian doctors in the late nineteenth and early twentieth century introduce judgements about the pathological state as a deviation from a specific type, according to the distinction mentioned earlier between the normal and the pathological. The clinical gaze sees a disfiguring disease as a manifestation of the pathological flaws and degenerations that constitute race, linked also to the climate factor. This association, made by physicians in order to lend verisimilitude to the clinical explanation, was accompanied by another factor no less important: the metaphoric character of saying and seeing disease. Diana Obregón Torres (2002, p.21), paraphrasing Susan Sontag, says that "some diseases are used as adjectives to refer to what is understood as morally wrong or dangerous. The more mysterious an illness seems to be, the more metaphorical it becomes." This is the case with leprosy, a metaphorically loaded disease linked to heartrending experiences for patients and an excuse to designate the worst of a situation or a person.

In this sense, it should be pointed out that to undertake a history of disfiguring disease that involves clinical practice, climate, degeneration and the narrative nature of pathological events is to trace the relationships between society, language and medical knowledge. "Diseases are not entities whose biography can be written as if they were institutions or people; rather, they are abstractions, ways of organizing various phenomena in order to understand them by giving them meaning" (Obregón Torres, 2002, p.24).

We shall see how in Colombian medical practice these associations between degeneration, deformity, disease and climate constructed etiological explanations and characterizations of the pathological state that loaded with repulsive elements in the act of naming and the shock of seeing.

The monstrous became visible as abnormal, through discursive expansion and comparison, as being deformed, ugly, bad, horrible or deformed, according to a judgemental logic based on criteria of excess or physical or morphological defect. This vision of deformity is demonstrated by Antioquian physician Andrés Posada Arango (1839-1923) in a study on the pathological manifestations of elephantiasis written in 1892. According to Posada Arango, elephantiasis constituted a 'national scourge' that essentially attacked the poor, deforming their limbs until they were in a monstrous state. The physician states that elephantiasis, which he preferred to call lazariasis, referring to the disease of Lazarus, is a very common illness in Colombia. "As it does not kill or significantly shorten life, but does make people suffer a great deal, leaving them deformed and unable to work, it is a true scourge, one of the five that reign endemic in the country, which I believe to be, by order of severity or frequency, leprosy, goiter, elephantiasis, ankylostomiasis or hookworm and malaria" (Posada Arango, 1892, p.261).

Posada Arango (1892) was a little sceptical of the explanation of elephantiasis as a disease related to climate or elevation above sea level, a view defended by doctors like Samuel Durán of the Faculty of Medicine of the Universidad Nacional and Manuel Uribe Ángel of the Faculty of Medicine of the Universidad de Antioquia; although, as we shall see, Posada Arango did not abandon the relationship between disease and climate but rather redefined it. According to him, it is suspicious that the disease does not exist on the coast, in the 'moderate temperaments' of the mountain foothills or in the 'high peaks' of cities like Rionegro, Guarne and Bogotá. Lazariasis was found, according to Posada Arango, in temperate and cool places, where elephantiasis of the feet was frequent⁷ and elephantiasis of the scrotum was infrequent, whereas the opposite was true in places like Cartagena, characterized by high temperatures, where the scrotal form was frequent and the foot form rare. This typology pointed to a differential analysis of disease according to two varieties of a species, reminiscent of the project of botanic and zoological taxonomy applied to medical nosology.⁸

Making elephantiasis a pathology of poverty can be seen in the explanation of the disease offered by Posada Arango (1892). This disease presents, according to him, in individuals who go barefoot, as well as in older people who through "reversals of fortune pass suddenly from comfort to destitution" (p.265), people who, because they go barefoot, are attacked by the 'parasite of lazariasis' (a worm, according to him) that penetrated the body, transforming it and making it deformed. These elements reveal the etiological concept of the Antioquian doctor, since here the climate factor, associated with the subjects' living conditions, the fact of walking unshod on the moist ground, and poverty associated with poor nutrition and hygiene, favored the invasion of the disease. We should stress that for Posada Arango variable heredity is associated with disease, taking into account the factors described earlier, predisposing people to contract illness. For this physician, heredity is a pathological field that "disposes" the body to certain diseases. Two photographs taken

from the book by Pardo Castello (1941)⁹ on dermatology and syphilography show the effects of disfiguring disease on the human body, visible in the two variants of the disease studied by Posada Arango (Figures 2 and 3).

At the start of the twentieth century in Colombia, the problem of racial degeneration figured as one of the principle topics of reflection among Colombian doctors. In this context we see the rise of what historian Carlos Ernesto Noguera (2003) has called sociological medicine¹⁰, which appropriated the political and socio-anthropological implications of nineteenth century evolutionary theories with the goal of population regulation. Here we see what for Michel Foucault configures a biopolitics of population characterized by disciplinary control and the creation of docile bodies.¹¹

In Colombian medical discourses, determinisms based on theories of heredity reached their highest point in the racist and eugenicist theories of the nineteen twenties. And the determinism that explains the pathological is not content merely to trace the anamnesiac, hereditary map of the sick, deformed or monstrous individual (or, at the maximum limit, his family); it has come to extend its explanation to the social body. For the twentieth century, speaking of the monstrous or the deformed has to do with a particular class, society, 'race' or even species. The concept of an ailing or degenerate race is inscribed in a rhetoric that claims to enunciate a scientific, clinical truth: in Colombian geographies, the species that is degrading is humankind (Cardona Rodas, 2005, p.126).

The problem of racial degeneration, which articulates concepts like climate, disease, deformity, monstrosity and pathological flaw, can be seen in the study of diseases of the thyroid gland, specifically in disorders known as polyglandular syndromes. In the National Congress of Medicine held in 1913 in the city of Tunja, Dr. Luis Felipe Calderón presented a research paper entitled "Polyglandular syndromes of the highlands", in which he argued that the denomination of signs of degeneration should be applied to organic states in the outward appearance of individuals, to geographic and climate conditions, and to hereditary memory. For Calderón (1913), these elements of degeneration were evident in the endocrine disorders amongst inhabitants of the Cundiboyacá highlands, a place where, according to him, there were

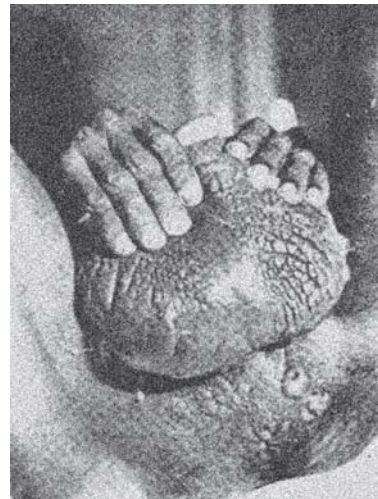


Figure 2: Venereal lymphogranuloma. Recto-genital syndrome with multiple fistulas and elephantiasis of the scrotum (Pardo Castello, 1941, p.350)

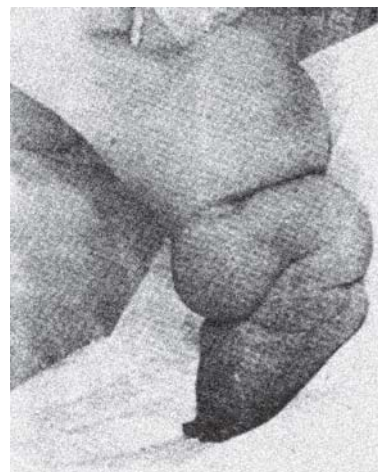


Figure 3: Filariasis elephantiasis (Pardo Castello, 1941, p.333)

cases “untainted by an acquired constitutional flaw” (p.6). The occurrence of these disorders led Calderón to request the urgent compilation of a nationwide set of clinical observations to create a pathological geography of the country, since the information brought from Europe was insufficient to understand the type of endocrine disorders that were occurring in Colombia. For Felipe Calderón, the geographical conditions of the highlands favored the development of the disorders mentioned and to prove it he reports various cases to support his argument about the etiology of polyglandular syndromes. One of these cases is that of a woman named Clotilde, who suffered from ‘infantilism with mental puerilism’. Calderón describes her as follows:

The daughter of healthy folk, whose development seems to have been suspended at the age of 13; she has regular menstruation, the date of onset she cannot recall for certain, but believes it to have been at 14 years old. ... She has suffered from earaches since infancy and speaks of them as the origin and source of her problems. She lives in an anxious state, full of fears, and weeps on relating to us the sensation of terror that accompanies her incessantly. The people who brought her to be examined state that she talks to herself a great deal. When she answered our questions, she gave us the impression of a scolded child. The diction and modulation of the voice are those of a girl of 8 years old, but according to data we have obtained, her real age is 34. It is a case of retrograde infantilism, very probably due to hypophysiary degeneration originating in otitis of encephalic propagation (p.28-29).

The case analyzed by Calderón reveals an association between disease, degeneration and climate since the disorder is linked to geo-topographic conditions in the highlands; in this location the ‘thyroid body’ of some of the inhabitants did not reach the state of hypofunction, causing retardation of both physical and mental development, ‘constitutional vices’ and pathological flaws that reveal the ‘signs of degeneration’ of the race of the Colombian population. Calderón accompanies his argument with a series of photographs to substantiate his opinion about the problem of physical and mental decomposition of the races in Colombia. One of these photographs is in fact of Clotilde (Figure 4).

By studying the body subject to the rigors of disease, deformity and anatomophysiological abnormality, we see how Colombian doctors make the pathological a problematic object, a force field that becomes intelligible by linking nosological concerns, clinical descriptions of disease and etiological explanations based on heredity to the subjects’ living conditions, to the influence of climate or to the problem of degeneration constitutive of race. To this extent, disease involves the absence of norm, an inability to be normative. The reflections of Andrés Posada Arango on elephantiasis and Luis Felipe Calderón make this visible. For them, the diseased body is the corruption of health. The morbid event offers a visual and auditory space for the practice of medicine by making the object of discourse the manifestations of pain, the other, the body marked by the disfiguring effects of an illness or by anatomical realities that an anomalous formation implies. Goldstein, cited by Canguilhem (1991, p.185), says that: “Pathological phenomena are the expression of the fact that normal relationships between organism and environment have been transformed through a change of the organism, and that thereby many things which

had been adequate for the normal organism are no longer adequate for the modified organism. Disease is a shock and danger for existence.”

Conclusions

The link between disease, climate and degeneration becomes visible in Colombian medicine in the studies of ‘medical geographies’ by constructing differential analyses of diseases and proposing therapeutics. Thus, when Dr. Manuel Uribe Ángel constructs his geographical compendium of the State of Antioquia he inscribes his argument on this discursive horizon. This is equally visible in Andrés Posada Arango, although for him climate is not a determining but an accompanying factor in the appearance of disease. However, his approach does not escape a kind of climatic determinism.

The problem of the classification of disease (nosology) makes the relation between disease and climate equally visible. In the case of a disfiguring disease like elephantiasis, it is noticeable how, at the end of the nineteenth century, the climate factor leads to the disease being characterized as occurring in hot lands, differentiating it from leprosy, which was associated with the cool and temperate zones of the country. Climate and location are associated to make differential analyses of the diseases possible.

On the other hand, we see that the association between climate and disease was not only an interest of doctors, since apparently both engineers and naturalists were interested in the topic. The military engineer Francisco Javier Vergara y Velasco is one of them.

Similarly, it is possible to state that clinicians introduced an etiological explanation that relates climate, hygiene, degeneration-heredity (pathological flaw) and poverty, as seen in the study of polyglandular syndromes carried out by Luis Felipe Calderón around 1913. The presence of the illness is found both in subjects and in the space they inhabit,

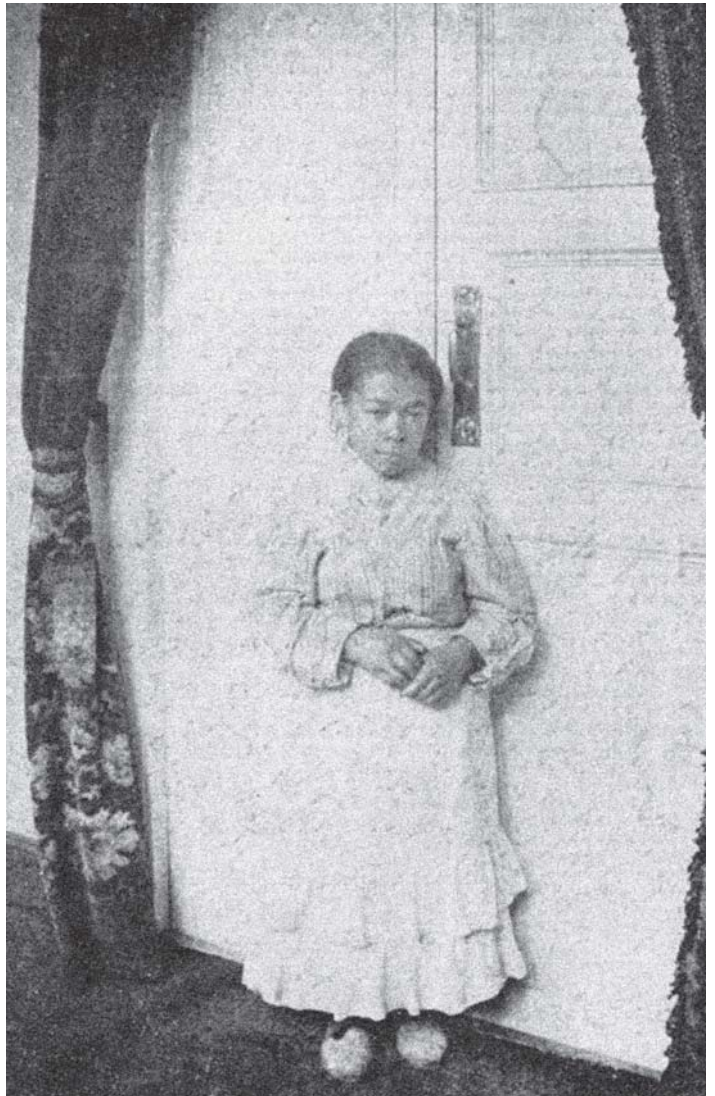


Figure 4: Clotilde N., case of infantilism with mental puerilism, described by Luis Felipe Calderón (1913)

thus configuring their political and moral status as linked to the national program of civilizing and progress that was the order of the day from the second half of the nineteenth century on in Colombia.

Speaking and saying disfiguring disease reveals, therefore, social narratives of the repulsive. Diseases like leprosy, elephantiasis or polyglandular syndromes cannot be seen only as pathological entities limited to the taxonomic categories of medicine; disease exhibits the prohibited and the proscribed, in both the anatomical and the social order. The act of naming and the shock of seeing operate as living metaphors in the staging of a clinical gaze.

NOTES

* This text articulates some elements from the research in *Lo visible del cuerpo en la experiencia clínica: deformidad y monstruosidad en la práctica médica colombiana de finales del siglo XIX y comienzos del siglo XX* (The visible of the body in clinical experience: deformity and monstrosity in Colombian medical practice at the end of the nineteenth century) and *Clima, espacio y enfermedad en la medicina colombiana a finales del siglo XIX y principios del siglo XX* (Climate, space and disease in Colombian medicine at the end of the nineteenth century and beginning of the twentieth century), both MA theses in history presented at the Universidad Nacional, Medellín campus, in 2005 and 2008, respectively.

¹ This relationship is evident in the works of Domingo Esguerra (1872); Manuel Uribe Ángel (1985); Josué Gómez (1886); Francisco Javier Vergara y Velasco (1892); Luis Cuervo Márquez (1891); David Pérez (1901); Juan Bautista Montoya y Flórez (1910); Emilio Robledo (1916).

² This is understood as the set of discourses and medico-scientific practices developed in the framework of hygienist medicine concerned with the influence of climate and geographical space on the life, character and pathologies of certain populations.

³ During the nineteenth century, geography was divided into three main branches: astronomical geography (also known as mathematical geography), devoted to the description of the earth in relation to heavenly bodies, in other words to the earth's relationship with the rest of the universe; physical geography, which dealt with the geographical, geological and meteorological situation, in other words the configuration of the terrestrial globe in terms of earth, water and atmosphere, and descriptive geography (sometimes known as historical geography), devoted to the modes of organization of human groups and their anthropological characteristics. This classification gave rise to two concepts of climate, one defined by astronomical geography and the other by physical geography. The astronomical climate is understood as the space between two circles parallel to the Equator; the physical climate consists of the differences in atmospheric temperature and can also be understood as the combined action of temperature, winds, and rains on a country or particular region. The astronomical climate is based on latitude and the physical climate on altitude.

⁴ Although Colombia is considered, from the latitudinal point of view, to be a country with a completely tropical or hot climate, doctors use altitude to classify the climate of the country as hot, temperate and cool.

⁵ The nineteenth century in Colombia runs from 1830 to 1910. During this period the current territory of Colombia bore various names. Between 1831 y 1858, it was called the Republic of Nueva Granada, which was characterized by a move towards centralization and the creation of political parties. Subsequently, from 1858 to 1863, Colombia was named the Confederación Granadina, an era of transition to the federal model and abolition of the colonial system. From 1863 to 1886, it was given the name of the United States of Colombia, under a federalist system that saw the predominance of the regional over the national. Finally, 1886 on, it was named the Republic of Colombia under the government of Rafael Núñez. As far as territorial organization is concerned, from 1832 to 1853, the territory was divided into a total of 19 provinces under a provincial administration regime. From 1853 to 1886 a federal organization of the territory was instituted, reordering the provinces into virtually independent states. And during 1886 and the first constitutional reform of 1910 the states were converted into departments and some of the former provinces into capital cities of the departments. By the time Manuel Uribe Ángel wrote his text *Los Estados Unidos de Colombia* there were nine states: Antioquia, Bolívar, Boyacá, Santander, Cauca, Cundinamarca, Panamá, Magdalena y Tolima (Jaramillo, Uribe, 1982).

⁶ This series of questions is explored in great detail by François Dagognet in his text *Georges Canguilhem, philosophe de la vie*, in the chapter "Maladie et santé" (Disease and health; Dagognet, 1997).

⁷ Posada Arango (1892, p.261) attempted to give a discursive space to the popular expression patihinchados [swollen feet], leading to a differential analysis of leprosy and elephantiasis. "This means that for me there is no more elephantiasis (or elephantancy) than that of the Arabs, nor any more elephantine people than the individuals vulgarly known here as bigfeet; lazarinés are leprosy sufferers and their hospitals, asylums or sanitariums, leper hospitals".

⁸ The project of medical nosology in the nineteenth century is linked to the botanical and zoological taxonomy of the eighteenth century, since if it was possible to speak of a logical catalogue of the diversity of life in orders, families, species or subspecies of animals and plants, one could also create nosological classifications of the various diseases according to their manifestations, their causes, their relationship to the climate, the places where they were likely to appear, their treatments and their characteristic pathological development. According to François Dagognet (2001), classificatory rationalism makes technique into an ordering and the catalogue becomes a way to capture the diversity both of plants and animals and also of diseases. "The health of mankind, the improvement of its conditions are in the end involved in academic discussions on the most far-flung flowers or their few seeds, and also in the numerous monographs (by curious writers) on cuttlefish, crabs, silkworms, bats, whales, snails, etc. Why? Because the triumph of the naturalists and their repertoires would extend to the theory of diseases, encouraging it and applying a method, suggesting rules and categories" (p.5). This method refers to the semiological reading of disease that underpins the nineteenth century clinical gaze.

⁹ Pardo Castello's book was required reading for students of external pathologies in the Faculty of Medicine of the Universidad de Antioquia.

¹⁰ "The concept of the people as a race meant that intellectual thought and politics were obliged, firstly, to link, within their analyses, the variable of time; in biological terms, atavism and heredity, elements present in every racial conglomerate. Secondly, it necessitated the introduction of the variable of space, or, in geographic terms, of territory, the place of settlement or of interchange of the 'social organism'. More than at any other time, in the late nineteenth and early twentieth centuries, the analysis of social and political problems by the intellectual elites required historical and geographic reflection" (Noguera, 2003, p.110).

¹¹ On this problem see Michel Foucault, 1982 y 1990.

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