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TERATOLOGY IN MEXICO. 19TH CENTURY

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SUMMARY

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It was not until the last third of the 19th century, the period in which, according to historiography, the country definitely inserted itself into modernity, that anomalies and monstrosities had a presence in Mexico. Therefore, what I present here are four moments of teratology in Mexico, four dates in which I try to recount how teratology, which still occupied a marginal place within the main themes of national science, not only reached to cover the realm of medical discussions at the time, but also laid the foundations for new disciplines like biology and anthropology.

Introduction

It happened to me once that, while consulting the library of the National Museum of Anthropology (Museo Nacional de Antropología), the Catalogue of anomalies collected by the National Museum of Mexico appeared¹. It was a small book published in 1896, printed in low quality paper and dedicated to explain the contents of a teratology hall. As I surfed through the pages, I could not keep myself from imagining a visitor touring the exhibition room with the Catalogue in hand and surprised by the display of cyclops, hermaphrodites, siamese and other monsters of nature.

Key words: Monsters – Teratology – Museum – Nation

That was how, starting from a catalogue of monsters, I had to ask myself: what is teratology? What were the states and circumstances in which it had reached Mexico? Why were doctors interested in it? But above all I wanted to know what was a collection of monsters doing in a museum dedicated to the exhibition of plants, minerals and animals, as well as archeological and historical pieces².

Too many questions, perhaps, for a documental corpus made up of, other than the Catalogue, a few studies of published cases from scientific journals of the time. For, as I read through the documents, I started to think that the teratological discourse in Mexico was systematically shallow, fragmentary, and I would even dare to call it almost marginal, especially when compared to the size of European treaties on the subject. At the same time, from the beginning, it seemed to me that teratology in Mexico, notwithstanding the archive's size, did not only belong to the doctors' effort to bring modern European science into the country, but that such an effort occupied a central lieu. Furthermore, I would venture to say that teratology in Mexico not only influenced medical discussions of the time, but also laid the foundations for new disciplines such as biology and anthropology.

In that sense, what I present here are four different moments of teratology in Mexico. Four dates spread across the last third of the 19th century, during the *Porfiriato*, the period of Porfirio Díaz's rule, which has been labeled by Mexican historiography as the one that ended a long cycle of anarchy and despotism which the War of Independence had unleashed in 1810³. It was during these decades of political stability and professionalization of medicine that teratology had a presence in Mexico.

Thus, I present four separate stories, which, however, form a part of the same project; four displacements, partial and fragmentary, in the ways in which a monster is imagined. The first one took place in 1969, when Juan María Rodríguez, an important obstetrician, wrote the first of many papers on teratology. The second one is from 1899,

when the *Medical Journal of Mexico (Gaceta Médica de México)*, the official medium of the National Academy of Medicine⁴, published the case of “José” and with it a concern for the problem of the species appeared in the clinical domain. The third case goes back to 1895, the date when the exhibition hall on teratology was inaugurated in the National Museum of Mexico, and an exhibition of 75 monstrous specimens were shown to the public. Lastly, we have the one from 1909, the year in which the teratological collection of the National Museum was split in two, and Nature was disjoined from Culture.

1869. Description of a Monster

In 1869 Juan María Rodríguez published his first paper on teratology in the *Medical Journal of Mexico*⁵. By the time it was published, the European teratological splendor had already waned. Decades had gone by since E. Geoffroy Saint-Hilaire tried, for the first time, to scientifically explain the monster, and decades had gone by since his son Isidore made a new classification known, one that was quite different from Aristotle’s definition of monsters by parameters of excess and defect⁶. Furthermore, pressing on the temporary offset, I would say that teratology appeared in Mexico a few years after Darwin published his work *On The Origin of Species*, in which anomalies and monstrosities no longer constituted the central explanation of the problem of the origin⁷.

This was Rodríguez’s first paper on teratology, although by then he had published several scientific oeuvres which projected him as the most important obstetrician of his generation, and I cite a fellow gynecologist who today sees in Rodríguez the “man whose doings are the most valuable in the field in all of Mexico’s history”⁸. Rodríguez would not only boost the development of scientific obstetrics in Mexico and become the author of the *Clinical guide to the art of childbirth (Guía clínica del arte de los partos)*, a work that, after its publication in 1885, would become the main textbook for students

at the National School of Medicine for several generations to come, but he would also establish the bases of Mexican teratology. As his necrology recalls, that doctor stood out through his “dedication on the study of Obstetrics and Teratology, genres in which he leaves writings of positive merit”⁹.

In fact, most of the teratological studies published by the *Medical Journal* came from Rodríguez; and the others, in other words, those which were not written by him, would anyway spin around his ideas¹⁰. Furthermore, I would dare to assure that the relationship between this doctor and teratology was so close that the beginning and the end of the discipline could be stamped with the dates of his life and death: for as he wrote the first clinical study on the field and devoted an important part of his life to spreading the postulates of teratology among his colleges, convincing them that anomalies and monstrosities had great use in explaining illnesses and life, at the time of his death the *Medical Journal* practically stopped publishing papers on the subject.

Because of this, it can be said that a distinguishing characteristic of Mexican teratology was precisely the clinical mark imprinted by Rodríguez. In France, teratology was born from the fields of embryology and biology as an answer to issues relative to the generation and transformation of species, while its field of action in Mexico was that of obstetrics. Rodríguez and other doctors who wrote on the subject appealed to works by Étienne and Isidore Geoffroy Saint-Hilaire together with other European teratologists, with the goal of extracting fragments from them which they could turn into useful tools to act in cases of “difficult childbirth”¹¹. I would say that teratological studies can often appear to be guides on how to proceed in case the doctor suddenly found himself with a monster.

In fact, it was in that manner in which Rodríguez read European teratologists – by heaps, drawing upon certain passages each time a monster appeared, translating only some of them into clinical language, reading the theoreticians without being so preoccupied by

the transformation of species as he was interested in explaining the deformed body of a monster. Because beyond the evolutionist speculations of E. Geoffroy Saint-Hilaire, Rodríguez was interested in the causes of a monstrous birth; or, in other words, he was less interested in the philosophy than in the particular phenomenon.

Furthermore, I would say that if Rodríguez reached teratology, it was through the channeling of pathological anatomy, a view on the matter that Mexican doctors had just started to discover but which they knew constituted the foundations of modern medicine. This obstetric doctor openly ascribed to novel medicine¹², and although he acknowledged that the same general rules applied to both the normal and the pathological, as well as the idea that in medicine there was only one science which “is (was) physiology...”¹³, he also thought that physiology had lagged behind in the study of an ordinary, abstract, and therefore inexistent man. In this he coincided with E. Geoffroy Saint-Hilaire, considering pathological anatomy as the only way of taking medicine beyond descriptive anatomy and “hypothetical” physiology which “has only imposed limits upon thought”, thus opening the observational field to the study of irregular acts¹⁴. It was not in vain, he explained, that both teratology and pathological anatomy had appeared at the same time:

At the end of the 18th century, descriptive Anatomy was the source of big discoveries that could be encompassed in the narrow compound where the observers were enclosed. The observational field was slightly broadened with the study of comparative anatomy: the anatomy of animals increased and made that study, which had so far been so limited, bountiful ... At that time, pathological anatomy and the anatomy of monstrous beings, were almost simultaneously created¹⁵.

That first paper, written by Rodríguez in 1869, is entitled *Description of a diplogenic, monocephalic, autosite, omphalosite non-viable human being*, and it seems to me that the title itself describes the

entire teratological project. On the one hand, the name bears with it the force of present times by separating modern science from those “barbaric and superstitious” times where imaginary figures were mistaken with prodigies, and prodigies were taken as real beings, that is, times when the power of imagination could create new beings that combined, in a single body, elements from different species, “horrible, real or imaginary beings, which terrified with their extreme ugliness”¹⁶. The name itself, said Rodríguez, is enough to clear “the extremely dense fogs of medieval obscurantism”¹⁷, and at the same time he affirmed that the monster was the product of an embryonic determinism. On the other hand, the name points to a new manner of observation and to a new vocabulary associated with the idea of measuring. And that is how instead of Ambrosio Paré’s “amazing monster”, with its fishlike tails, doglike heads and “tongues similar to those of a Parrot”, “truncated pyramids” and “polyhedric forms”¹⁸ appeared; and instead of the effigy of two merged bodies we had a single “diplogenetic, monocephalic, autosite, omphalosite non-viable Monster”.

Additionally, the name also set the location for the specimen in a classification which was not Aristotle’s, but a different one, which is organized on the basis of two principles: one of similarity and one of causality. In this case, the name not only imposes resemblance over the monster’s singularity, it also builds upon a sequence of regular causes ranging from the lightest to the gravest anomaly, according to the time at which the embryonic alteration was likely to have happened. For Rodríguez the name depends on the classification, and classification is the best proof of regularity, for through order he showed how the same causes are repeated: “The invariability of effects demonstrates the invariability of causes; and due to the fact that clearly different genres, families and orders have been established, we must also admit that the same causes exist and that these are well tied to invariable and eternal laws”¹⁹.

Nevertheless, beyond classifying and demonstrating the regularity of the monster and its pertinence to the understanding of general laws, what Rodríguez was most interested in was determining, from the study of the monstrous, the difference between the normal and the pathological. And that, it seems to me, is the signature of teratology in Mexico. For even after teratology moved from clinics into the realm of biology and anthropology, that initial clinical interest would end up shaping the discussion on the origins of the Mexican race, a subject which from the beginning was posed as a physiological, biological, anthropological and teratological problem.

1899. José, neither Animal nor Human

In the year 1872 “an individual named José”, native of Ixtlahuaca, son of Petra Nieto and an unknown father, was signed into the San Hipólito’s hospital for the insane. On the same year, the doctor who signed his entry, José Peón Contreras, who was the director of the hospital at the time, wrote a study from his “own observations” together with the comments made by “his esteemed companion and friend” Juan María Rodríguez. He entitled it *Teratology. Microcephalic Idiocy (Teratología. Idiología microcefálica)*²⁰ (Fig. 1).

José Peón Contreras starts his study by remembering the first en-

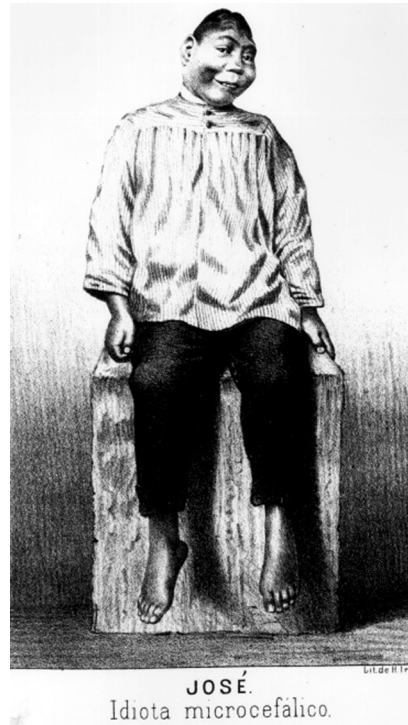


Fig. 1 - An individual called José, Medical Journal or *Gaceta Médica* (1872).

counter with the subject: at the hospital he saw an individual who came in and “vividly caught” his attention; just by looking at him he knew the individual lacked the “faculties with which nature endowed the privileged beings of creation”, and that he could “very well constitute an intermediate entity between humanity and irrational animals...”²¹. He would later find out that his name was José, but that initial encounter determined the sense of the whole research; I could also add that the description of the symptoms adheres entirely to the tone of that first encounter: José suffers from “notable insensibility”, “nothing that happens around him moves him”, and “one day, neglected by those who watched over him, he got hold of and devoured a regular portion of raw meat.”

Peón Contreras thought that José acted like an animal, but Juan María Rodríguez, who is extensively cited in the study, reckoned that José had the traits of a monkey: “If I hold his arms he swings and gives signs of joy. The movements of his head and most of his members have a *je ne sais quoi* from monkeys”. José reminded him of a monkey, and, at the same time, he was reminded of that “idiot which was exhibited years ago in Amsterdam, touted as a savage from Africa...”.

According to those two doctors, this individual looked like an animal, a child, a crazy person, and a savage that is, four different figures from whose entrails one can extract the same primary animalistic feature: it was a being that devoured human meat and ate “plum pits, pieces of linen, tree leaves”, like an animal; running from one side to the other, and embracing with “vivacious and infantile movements the knees of the other patients, leading them to hold him by the hands, so he could swing”, just like a child; besides, he was “light brown colored, with strong and abundant hair”, he used sign language and was “extremely fond of music” and finally what constituted a fundamental detail- from time to time he produced “a certain guttural savage sound”²². These four intertwined figures inevitably remind us of the parallelism which,

years later, Freud, in an attempt to explain the origins of culture, would build between children, neurotics and savage peoples²³.

But, in teratological terms, José was neither a savage, nor an animal, nor a crazy person, nor a child, but a monster, a deformed sum of all those figures, a manifestation of how the normal and the pathological, nature and culture, could get confusingly mixed. Strictly speaking, he was neither an animal nor a human being, but something placed halfway, “an intermediate entity between humanity and irrational animals, for he is invested with the human form, but he lacks the qualities which elevate it to a higher rank”. He was a being placed between two kinds without belonging to one nor to the other. This is why doctors were not able to convene as to where to place him: either in the lowest place in the human scale, in “the last definition of human degradation; in a single word: an idiot”, Rodríguez said, or in the highest place in the animal scale, for as Peón Contreras assured, José’s eyes do not reveal “stupidity or degradation” but have “something that attracts” that “sparkle which allows a glimpse of intelligence or at least the instinct of irrational animals set on a higher sphere, to put it in a certain way”²⁴. In the end, the question was the following: is José an animal-human or a human-animal?

More than twenty years later, Jesús Sánchez, a naturalist doctor whose life was tightly linked to the National Museum, mentioned the case of José in an article entitled *Relations of Anthropology and Medicine (Relaciones de la antropología y medicina)*²⁵. He was mentioning him at a time when questions had changed and the search was not aimed at the place of the monster in the line that had to unify normal and pathological states, but the function it fulfilled in the transformation and evolution of species. Then, biology existed above clinical medicine.

Under the new context, the case of José retook the discussion which had begun decades before in the *Sociedad Metodófila* when Gabino Barreda – know by all, his contemporaries, his disciples and by present-day historians, as the person who introduced the positivist doc-

trine in Mexico – presided it. In those discussions everyone wondered about the origins of race, some contended that native Americans were the product of a common root whose origin lied in Europe, while others upheld that those men constituted autochthonous American races. Or to put it in Barreda’s terms: “Either the multitude of species that today exists has formed separately or they have resulted from one another through gradual transitions”²⁶. The dilemma was the following: either the species was one or it was made up of several races with different origins.

But I believe that the underlying discussion in those meetings was the relation between the Mexican race and pathology, or more precisely, with teratology. And that is how, on the one side, those who defended the idea that there were different origins had to separate the Mexican race from any link with Europe and then admit a probable teratological origin. And on the other side, those who contended for a single origin, like Sánchez or Barreda, necessarily had to consider the possibility that American races had a teratological origin. For if the origin was one and evolution constituted a continual and gradual process, then the American races could constitute intermediate links whose origin could be teratological. Therefore, the stance of the common root opened the possibility of races originating in nature in the same fashion as monsters, for according to the transformist theory of Geoffroy Saint-Hilaire, a monster was born because the embryo stopped in one of the phases through which its development passed, and those phases were nothing but an imitation, at an individual level, of the phases of the evolutive line that went from inferior to superior animals. Thus, if this was so, then ontogeny reflected phylogeny, and the origin of the Mexican race could be explained through embryonic detainment, that is, by fixing time at an inferior state from which new species and races could originate²⁷. That was the question which apparently everyone needed to answer: could monstrous features be inherited up to the point of shaping new races?

In an older paper, Jesús Sánchez considered that “the deviations of the physiological state produced functional alterations the study of which was very important in comparing the mental state of man and animals, and maybe in the problem of the origins of man”²⁸. This means that also he could not stop asking if the Mexican race was normal, like the European, or if it constituted a pathological variation of that species. Although he did not finish formulating it in all its words, Sánchez, together with the other doctors, wondered: are Indians monstrous?

1895. The Teratology hall at the National Museum

In 1895, more than twenty years after Juan María Rodríguez published his first study in the *Medical Journal*, Jesús Sánchez inaugurated the hall of teratology at the National Museum of Mexico. The exhibition had 75 monstrous specimens: two-headed goats, six-legged pigs, siamese, hermaphrodites, and a giant, some “are preserved in alcohol, others are stuffed, and others are represented through photographs”²⁹. The fact that Sánchez opened the teratology hall to the public exactly a year after Rodríguez’s death, turns the hall into a kind of posthumous homage to that “illustrated colleague and dear friend”, a precursor of teratological studies, a man who gave “a prominent place to national teratology, and, through numerous writings on the matter, gave us the basis for its foundation”³⁰. By inaugurating the hall, Sánchez continued the task Rodríguez had started years ago, but he took teratology beyond specialized medical journals and presented it to the greater public in a museum dedicated to science and the education of the people. The goal of the National Museum was, in his own words, to make it “a popular school of objective teaching, made ever more useful by the fact that it will instruct a multitude of people who didn’t get the benefits of learning at schools”³¹. Just as Rodríguez would have wanted, by showing a collection of monsters in a space dedicated to the education of the people,

Sanchez also strived to end with the old custom of exhibiting monsters in fairs, circuses, taverns or cafés³². This is how I envision him, inaugurating the new teratology hall while thinking of Máximo and Bartola, the famous “Aztec children”, two microcephalic dwarfs, allegedly descendants from the Aztec nobility, who, by that year, had been exhibited for over 40 years on several public squares from some of the most important North-American and European cities, as well as on laboratories from the most renowned scientific institutions in Europe³³. Thus, the inauguration of the teratology hall was the way of substituting spectacle with exhibition, and monsters by showcases that enclosed objects of knowledge.

Sánchez wanted to show to that great audience that monsters were neither imaginary nor prodigious figures, but real beings. Just as Rodríguez had done it, and willing to “dissuade the multitude of certain erroneous ideas...”³⁴, Sánchez showed that those beings were governed by the same laws that ruled over all natural phenomena. That is precisely the reason why the exhibition existed- to deny old beliefs and to show the visitor that the monsters were, in fact, from this world. The idea was to show the regularity of the monstrous, but in the National Museum it would not be done from a clinical perspective but within the frame of biology, for although Rodríguez had warned about this twenty years before by insisting on the necessity of incorporating teratology into biological studies, he knew that it was a task that “belonged to the future of science rather than to its present”³⁵. Thus, Sánchez fulfilled the project by “putting into manifest the general laws of organization” in the teratology hall³⁶.

Unlike the obstetrician, the naturalist physician was less concerned with the place of the specimen in a classification than he was with classification itself. He aimed to go beyond the physiology of the individual body and use space to display repetition, that which spoke of the common belonging of all those singularities to an ensemble formed and delimited exclusively by biological monsters,

separated from everything else and yet identical to each other. Sánchez aimed, above all, to show the teratological classification of I. Geoffroy Saint-Hillaire, which meant, at least, two things: on one side, to cast light upon a new conception of reality, which was understood as the presence of the thing itself, in other words, the visual possession of the object; on the other side, to show how each specimen extracted its value not from its singular morphology, but from the place it held in an organized classification based on a temporal sequence of successive embryonic alterations which went from the slightest to the most severe, depending on the time embryonic stagnation had taken place.

Thus, under that new concept of what was real, the exhibition started with the life-sized portrait of the giant Marín Salmeron, an 18th century painting, continued with the drawing of the “Man with a horn”, a case studied by Dr. Luis Montaña in the first half of the 19th century³⁷, and ended with a series of photographs and monstrous fetuses stored in vases with alcohol, the maximum emblem of objective representation. At the same time, it followed a causal classification order that started with an oil painting of the giant Salmerón, a “simple anomaly”, and concluded with a photograph of the Portuguese Lancereaux, who had a leg that grew out of his genitals and thus constituted a “properly monstrous” specimen³⁸.

On the one hand, the teratological collection subjected the singularity of the specimen to the taxonomical order, thus obtaining its meaning through the discourse of natural history, and on the other, the collection was arranged according to the temporal sequence of its embryological alterations and therefore it became distant from the naturalism of the 18th century and its interest in describing the shape of species to impose upon the fixed taxonomy of natural history a notion of change coming from new biological studies. In that hinge-like condition, the regularity of the monster mattered, but also did its place in an evolutionary process. This stands out when the tera-

tological hall is seen as an integral part of a museum complex, for when one is faced with the big halls of natural history, archeological pieces, and national history, the small collection of monsters seems to be held responsible for establishing the mechanisms by which evolutionary change operated. Let us say that its function consisted of formulating the question that Gabino Barreda and the doctors of the *Sociedad Metodófila* had made without actually making it: its sole presence in the space of the museum imposed the necessity of knowing if the Mexican race was as normal as the European or if it constituted a pathological variation of that species.

This new role freed monsters from their appendix condition in the halls of natural history and placed them in a central place to understand, not only the evolution of species, but also the particularity of national history, opening, in a sense, the possibility that the origin of the nation was teratological. Although neither Sánchez nor Rodríguez was explicitly suggesting it, teratology was opening a scientific and political space to consider monsters from their empirical existence, thus giving “Indians” an anomalous statute and defining the singularity of the nation from a pathological scope³⁹.

I believe this was what the Mexican teratological project consisted of, a project that had already been outlined in the work of Juan María Rodríguez through a policy whose interrogation referred less to the individual body, the species or humanity than to race and national identity. For, if teratology was not brought to Mexico to influence the debate on the origins of race, thus branding it with its seal, then what was it for? Maybe this is helpful in explaining why no trace has been found of monstrous specimens being exhibited side by side with archeological pieces as well as specimens of the country’s flora and fauna in Mexican pavilions at international exhibitions at the end of the 19th century. I don’t know, maybe the Mexican monster specimens were destined exclusively for the nation, in other words, for internal consumption⁴⁰.

1909. The Partition

In 1909, a year before the outbreak of the Mexican Revolution, - an event that, according to historians, marks a decisive change of course - a small happening took place in the National History Museum: on that year, the collections of natural history consisting of minerals, plants, and animals left the premises.

That was the year in which, so to speak, the history of man was separated from the history of nature and with that change, the teratological collection split in two: while the animal specimens were moved to the natural history collections of the new Natural History Museum of El Chopo (*Museo de Historia Natural del Chopo*), the human specimens remained in the National Museum, to be transferred, years later, to the warehouses of what would later be the National Museum of Anthropology (1964).

The split is not fortuitous. In a way, what happened to the teratological collection on that year summarizes the existing necessity of separating Nature from Culture, or rather of substituting Nature with Culture. After that split, the minerals, plants and animals from the natural history collection ended up disappearing together with the monsters. Especially the monsters, which, after being transferred to the Museum of El Chopo - in a story with few facts and lots of rumors - would be subjected to concealment, burials, and even burned. This was carried to such an extent that today the teratological specimens have practically disappeared, as if they had been swallowed by time⁴¹. 1909 was only a moment in a process that had started before, and of which this could be its timeline: on 1899, Francisco del Paso y Troncoso was assigned director of the National Museum, and from then on the directors were scientists interested in history, archeology and ethnology; on 1901, courses on anthropology, ethnology, archeology and history were inaugurated in the Museum; a few years later, Jesús Sánchez complained in *La Naturaleza* -the organ

of the Mexican Society of Natural History (*Sociedad Mexicana de Historia Natural*)- of the state of “complete inactivity” the Section of Natural History of the Museum was in, “especially because Archeology, Ethnology and History took up attention and expenses from the Management of the Museum”⁴²; on 1909, the section of natural history left the premises to form the Natural History Museum in the street of El Chopo, inaugurated in 1913; and finally, on 1910, midway through the Centennial of Independence, Porfirio Díaz, just before he was overthrown, inaugurated the National Museum of History, Archeology and Ethnography.

It cannot be said that the monsters of the teratological hall “left” the building; they were banished from the National Museum. Together with the natural history collections, those specimens had to be sacrificed so that archeology and history could become the definite and defining heritage of the nation. And the best evidence of this is, perhaps, the fact that today neither monsters nor natural history make up “our national heritage”, in other words, those “inalienable” assets of the state: objects which cannot be sold, exchanged or gifted because they are vested with the authority of our ancestors.

If I talk of banishment it is due to the radical contrast between the contents of the National Museum before and after 1909. Before that year, the Coatlicue, a recently unearthed Mixteca deity and the Sun Stone (*Piedra del Sol*), which had stayed embedded to one of the towers of the Cathedral after being discovered in 1790, used to be exhibited there⁴³; great natural collections were also exhibited, pieces of National History gathered throughout the nation’s independent life, together with new collections of compared anatomy, teratology and anthropology⁴⁴. As if the Museum intended to encompass life in its totality, its halls exhibited everything from the inorganic world to the ethnographic sample; all the pieces, fossils, plants, animals, men and monsters were intertwined to form a natural landscape similar to those great nineteenth-century artworks or those voyage books that named things as they traveled

through the land⁴⁵. On top of this, the task assigned to the monsters in the old precinct must be added, because as they were intertwined with the other pieces in a chain of beings, they linked the natural and the human worlds and therefore reestablished the union of nature and culture. But, after 1909, everything was going to change. I would even speak of a change of paradigm in the sense of a radical historical modification in which a series of discursive statements and practices became part of a new set, which is explained within a new problematic context⁴⁶. In a nutshell, natural history was going to be substituted by anthropology. And I am not talking here of a mere disciplinary substitution, but a complete change in course and content, for the old desire of all naturalistic doctors, like Jesús Sánchez, to insert Mexico in a “universal” history through European natural history, would be substituted by an interest in highlighting the specificity of the nation. If in the 19th century knowledge, authority and power were placed within the discourse of natural history, in the 20th century anthropology became the foundation of an identity that was no longer searching for a generalizing universal science, but for the particularities of national culture.

That is the reason for my contention that this banishment of teratology represented, for Mexico, the beginning of a new scientific, political and legal configuration. Under the paradigm of anthropology, the explanation would not originate from climate or environment, which belong to the realm of natural history, but from the functions of the organism. That change would go from the outside to the inside, from climate to pathological anatomy and psychopathology, from eighteenth-century Buffon to Auguste Morel and his nineteenth-century theory of inheritance, and in this scenario the subject would not appear as the product of specific social and natural relationships, but as a result of his own constitution, which was internal, innate and hereditary, for it is transmitted from parents to children.

Under this new configuration, race would start to play a central role as a biological component, because the state and destiny, not only of particular subjects, but of entire populations, would now depend on that category. Maybe that is why one can say that this particular museum-related event turns out to be paradigmatic, in the sense that it also constitutes an example which summarizes the totality of a period. It is after the inauguration of the new National Museum of History, Archeology and Ethnography (*Museo Nacional de Historia, Arqueología y Etnografía*), and after the outbreak of the revolutionary movement, when the possibility of building the National Museum of Anthropology probably started to be perceived, and physicians would become responsible for preparing a series of public policies aimed to heal the alleged “social and cultural pathologies” of the Mexican race⁴⁷. But by that time, teratology had already disappeared and another story was about to begin.

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3. Without the possibility of telling the Mexican history of the 19th century, I try to draw it with an excerpt from the excellent study by Elías José Palti: “Almost immediately after the Independence, the Mexican political system entered an accelerated process of decomposition, which at mid-century almost reached the point of total disintegration (point from which an embarrassing reconstruction would begin)”. PALTÍ E.J., *La invención de una legitimidad. Razón y retórica en el pensamiento mexicano del siglo XIX (Un estudio sobre las formas del discurso político)*. Argentina, FCE, 2008, p. 43. On the vision of the 19th century by Mexican historiography, see: TENORIO-TRILLO M., *Argucias de la historia. Siglo XIX, cultural y “América Latina”*. México,

- Paidós, 1999; GONZÁLEZ NAVARRO M., *El Porfiriato. La vida social*. In: COSIO VILLEGAS D., *Historia moderna de México*. México, Hermes, 1957.
4. The National Academy of Medicine (*Academia Nacional de Medicina*) was an association linked to the state apparatus and would serve as a platform from which the professionalization of medicine and, later on, its intervention in public policies would be propelled.
 5. Juan María Rodríguez (1828 – 1894) was a professor at the Obstetrics Clinic in the National School of Medicine, he served several times as president of the National Academy of Medicine and also as Director of the Maternity House (*Casa de Maternidad*). See: TROCONIS ALCALÁ L., *Bosquejo biográfico*. *Gaceta Médica de México* (from now on GMM), 1895; 31, 32. Also see GONZALEZ NAVARRO A., ref. 3.
 6. On the subject see GEOFFROY SAINT-HILAIRE E., *Philosophie anatomique des monstruosités humaines*. Paris, Rignoux, 1822.
 7. For Charles Darwin, the act of generation was essentially conservationist: any adaptive change could only be gradually acquired through a slow accumulation of small steps through multiple successive generations. As monstrosities accounted for sudden and peculiar changes, these, by definition, had no role whatsoever in the creation of species. On the subject see: RICHARDS E., *A Political Anatomy of Monsters, Hopeful and Otherwise*. *Isis*, 1994; 85: 377-411. On the introduction of Darwinism in Mexico see RUIZ R., *Positivismo y evolución: introducción del darwinismo en México*. México, UNAM, 1987.
 8. KARCHMER S., *La ginecología y la obstetricia*. In: ARÉCHIGA H., SOMOLINOS J. (comps.), *Contribuciones mexicanas al conocimiento médico*. México, Secretaría de Salud y FCE, 1993, p. 285.
 9. GMM 1894; 31: 253.
 10. Some doctors who also reported teratological cases were, other than Juan María Rodríguez, Manuel S. Soriano, a member of the *Sección de Estadística Médica* of the *Academia Nacional de Medicina*; Eduardo Liceaga, a specialist on pediatrics and director of the *Consejo Superior de Salubridad*; Lauro Jiménez, botanist and professor of external Pathology; José Peón Contreras, devoted to the study of mental illnesses in the *Escuela Nacional de Medicina*; Román Ramírez, author of the *Catálogo de Anomalías*, and Jesús Sánchez, a naturalist doctor in charge of the teratology hall at the *Museo Nacional*. The cases were reported either in the *Gaceta Médica de México*, Periódico de la Academia Nacional de Medicina, México, Imprenta de Andrade y Escalante, 1864-1915, as in the *El Observador Médico*, Periódico de la Asociación

- Médica "Pedro Escobedo"*. México, Imprenta de Vicente García Torres, and *El Porvenir. Periódico de la Sociedad Filoiátrica y de Beneficencia*. México, Imprenta de I. Escalante, among others.
11. RODRÍGUEZ J.M., *Breves apuntes sobre la obstetricia en México*. Tesis sostenida como candidato para la plaza de adjunto a la cátedra de clínica de obstetricia de la Escuela de Medicina. México, Imprenta de José María Lara, 1869, p. 5. In spite of the doctors' knowledge of the works of, GEOFROY SAINT-HILAIRE E., *Histoire naturelle des mamifères et philosophie anatomique*, (1819), GEOFFROY SAINT-HILAIRE I., *Histoire générale et particulière des anomalies de l'organisation chez l'homme et les animaux* (1837), as well as the *Dictionnaire classique d'Histoire naturelle* (1827), it can be said that the theoretical backing of Mexican teratology was delineated from clinical necessity; in other words, each sample, each case, drove to a reflection over a certain theme.
 12. For more information on the theoretical positions of the doctors of that time, see MARTÍNEZ CORTÉS F., *La medicina científica y el siglo XIX mexicano*. México, FCE-SEP, 1987; VIESCA C., *Las ciencias médicas en el México independiente*. In: ARÉCHIGA H y SOMOLINOS J., ref. 8, pp. 59-84.
 13. RODRÍGUEZ J.M., CAPETILLO I., *Doble aplicación de fórceps para extraer un feto vivo a término*. GMM, 1872; 7: 277.
 14. GEOFFROY SAINT-HILAIRE E. ref. 6, p. 110 (the citations are translated by me).
 15. RODRÍGUEZ J.M., *Descripción de un monstruo humano cuádruple, nacido en Durango el año de 1868*. GMM, 1870; 5: 35.
 16. RODRÍGUEZ J.M., *Teratología*. GMM, 1872; 7: 390.
 17. RODRÍGUEZ J.M., *Unas cuantas palabras sobre melanismo y albinismo en la especie humana*. GMM, 1887; 22: 308.
 18. Description of the umbilical region of a diplogenesic human monster. RODRÍGUEZ J.M., *Descripción de un monstruo humano diplogenésico, monocéfalo, autositario, enfalósito, no viable*. GMM, 1869; 4: 164; y Roderiguez, ref.13, respectively.
 19. RODRÍGUEZ J.M., *Descripción de un monstruo cíclope perteneciente al género cerdo (sus Linneo) nacido en Romita (Estado de Guanajuato)*. La Naturaleza. Periódico Científico de la Sociedad Mexicana de Historia Natural, México, Imprenta de Ignacio Escalante, 1869-1870; I: 279.
 20. CONTRERAS J.P., *Teratología. Idioidia Microcefálica*. GMM, 1872; 7.
 21. *Ibid.*, p. 269.
 22. *Ibid.*, pp. 270-271.

23. FREUD S., *Tótem y Tabú, Obras Completas*. España, Biblioteca Nueva, 1997, Tomo 5.
24. CONTRERAS J.P., ref. 20, p. 270.
25. SÁNCHEZ J., *Relaciones de la antropología y la medicina*. In: MORENO R. (comp.), *La polémica del darwinismo en México. Siglo XIX*. México, UNAM, 1984, pp. 320-339. (Original source: GMM, 1898; 35: pp. 193-206, and 36: 112-122). Jesús Sánchez was a student of Gabino Barreda, member of the *Academia Nacional de Medicina* and founding member of the *Sociedad Mexicana de Historia Natural*. On the National Museum of Mexico see CASTILLO LEDON L., *El Museo Nacional de Arqueología, Historia y Etnografía 1825-1925*. México, Imprenta del Museo Nacional, 1924; FERNANDEZ M. Á., *Historia de los Museos en México*. México, Banamex, 1987; MORALES L.G., *Orígenes de la museología mexicana*. México, Universidad Iberoamericana, 1994; FLORESCANO E. *La creación del Museo Nacional de Antropología y sus fines científicos, educativos y políticos*. In: ID. (comp.), *El patrimonio cultural de México*. México, FCE, 1993, pp.145-163.
26. *Trabajo leído en la sesión del día 25 de febrero de 1877 por Pedro Noriega*. In: MORENO R., ref. 25, p. 47.
27. The theory of embryonal stalling recognized by German national philosophy as part of the theory of recapitulation, was delineated by E. Geoffroy Saint Hillaire and taken to its ultimate consequences by Ernest Haeckel. On the theme see, among others, REHBOCK P.F., *Transcendental Anatomy*. In: CUNNINGHAM A. and JARDINE R. (eds.), *Romanticism and the Sciences*. Cambridge University Press, 1990; GOULD J.S., *Ontogeny and Phylogeny*. Cambridge (Mass.), Harvard University Press, 1977.
28. SÁNCHEZ J., ref. 25, 322.
29. GALINDO Y VILLA J., *Breve noticia histórico-descriptiva del Museo Nacional de México*, México, Imprenta del Museo Nacional, 1896, p. 13. This is how Jesús Sánchez referred to the inauguration: "Convinced of its usefulness and of the necessity of giving greater pull to that kind of studies, I had the pleasure of creating the sections of general Anthropology, compared Anatomy and teratology at the National Museum a few years ago, which initially were put in charge of doctor Francisco Martínez Calleja". *Relaciones de la Antropología y la Medicina*. GMM 1899; 36: p. 122.
30. SÁNCHEZ J., ref. 25, p. 121.
31. Cited by SALDAÑA J.J., CUEVAS C.C., *La invención en México de la investigación científica profesional: el Museo Nacional 1868-1908*. Quipu, September-December 1999, p. 328.

32. See, for example, RODRÍGUEZ J.M., *Estudio sobre varias monstruosidades ectromelíanas y más, particularmente sobre Pedro Salinas, natural de Tejupilco, Estado de México*. GMM, 1872; 7: 394.
33. Apparently, it was John L. Stephens, a traveler from the first half of the 19th century, who started the tale. In his own words, in 1842 he made a trip through Central America and there discovered Máximo and Bartola, two alleged descendants from a claimed extinguished race of priests. Later, the news of the discovery spread and from 1850 Máximo and Bartola were exhibited in fairs and circuses from the United States, where they were presented as living copies from the bas-relief figures of Palenque and examined by the most important scientists from England, France and Germany. COMAS J., *Dos microcéfalos "Aztecas"*. México, Instituto de Investigaciones Históricas, UNAM, 1968. See also, STEPHENS J.L., *Illustrated Memoir of an Eventful Expedition into Central America resulting in the discovery of the idolatrous city of Iximaya in an unexplored region, and the possession of two remarkable Aztec children, Maximo (the man) and Bartola (the girl)*. n.c., n.p., 1841.
34. *Descripción de un monstruo cíclope perteneciente al género cerdo (sus Linneo) nacido en Romita (Estado de Guanajuato)*. La Naturaleza, 1869-1870; 1: 280.
35. *Teratología. Estudio sobre varias monstruosidades ectromelíanas y más particularmente sobre Pedro Salinas, natural de Tejupilco (Estado de México)*. GMM, 1872; 7: 382.
36. SÁNCHEZ J., ref. 25, p. 122.
37. On the drawing of the "Man with a horn" see RAMÍREZ R., *Catálogo de Anomalías coleccionadas en el Museo Nacional. Precedido de unas nociones de teratología*, ref. 1; *Diccionario Universal de Historia y Geografía*. México, Imprenta de F. Escalante, 1855, tomo VI, pp. 648-649. On the professional path of Dr. Montaña see VIESCA C., ref. 12.
38. What I know today of the teratology hall in the National Museum is through the *Catálogo de Anomalías coleccionadas en el Museo Nacional*, of which only one copy is kept at the Library of the National Museum of Anthropology.
39. On the history of natural history at the National Museum see, among others, SANCHEZ J., *Fundación del Museo Nacional de Historia Natural*. La Naturaleza, 1910; 1; DE GORTARI E., *La ciencia en la historia de México*. México, FCE, 1963. TRABULSE E., *Historia de la ciencia en México*. México, FCE-CONACyT, 1985.
40. On international exhibitions, especially see the work by TENORIO-TRILLO M., *Mexico at the World's Fairs. Crafting a Modern Nation*. California, University of California Press, 1996.

41. The information was provided by members of the *Instituto de Biología de la Universidad Nacional Autónoma de México*, the *Museo del Chopo* and the Museum Coordination at the *Instituto Nacional de Antropología e Historia*. It is possible that the human specimens of the Anthropology Museum are kept in some warehouse to which access was not available. Some examples can still be found in showcases that belong to some of the Institutes at the UNAM. Two of them, for example, with their alcohol vases, are exhibited at El Chopo, a present-day contemporary art museum, to remember what the place had been used for.
42. SANCHEZ J., ref. 39.
43. For both pieces, see ACHIM M., *La Piedra del Sol*. In: ESCALANTE GONZALBO P. (coord.), *La idea de nuestro patrimonio histórico y cultural*. México, Conaculta, 2011, pp. 182-187.
44. The section of compared anatomy, placed next to teratology, exhibited “76 skeleton specimens, 33 skulls, 40 brains and 38 diverse pieces, mostly of mammals and birds, some other stuffed pieces, around two hearts, a human larynx and arm, eight fetuses of different ages”. GALINDO Y VILLA J., ref. 29, p. 13. The anthropology section, set in the first floor, exhibited photographs of several races from the country, pieces of human skeletons from several excavations, a good number of skulls and paintings of observations that referred to criminal anthropology. HERRERA A.L., CICERO R.E., *Catálogo de la Colección de Antropología del Museo Nacional*. México, Imprenta del Museo Nacional, 1895.
45. See GALINDO Y VILLA J., *Museología. Los museos y su doble función educativa e instructiva*. Memorias de la Sociedad Científica “Antonio Alzate” 1921; 39: 415-473.
46. See AGAMBEN G., *Signatura rerum. Sobre el método*. Barcelona, Anagrama, 2010.
47. See PALTÍ E.J., *La invención de una legitimidad. Razón y retórica en el pensamiento mexicano del siglo XIX (Un estudio sobre las formas del discurso político)*. Argentina, FCE, 2008, p. 313. On the subject, see: SAADE M., *El Mestizo no es “de color”*. *Ciencia y política pública mestizófilas (México, 1920-1940)*. Tesis de doctorado de la Escuela Nacional de Antropología e Historia, México, 2009; URÍAS B., *Historias secretas del racismo en México (1920-1950)*. México, Tusquets, 2007.

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