

Degeneration Theory in Naturalist Novels of
Benito Pérez Galdós

A DISSERTATION
SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL
OF THE UNIVERSITY OF MINNESOTA
BY

Michael Wenley Stannard

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

Ofelia Ferrán, Advisor

April 2011

Acknowledgements

I should like to record my sincere thanks to Ana Paula Fereira, the Department of Spanish and Portuguese and the University of Minnesota (Twin Cities) for having given me the opportunity to realize a dream of many years. My graduate career in Minnesota has been a life-changing experience, and I would not have missed it for anything. Financial support from the department to study at the *Biblioteca Nacional* in Madrid, to study Portuguese at the *Universidade de Lisboa* in Lisbon and to contribute to a conference at *Universidad Complutense* in Madrid helped significantly in rounding out my graduate student experience, as well as enabling me to collect essential material for this dissertation.

I should like to thank my adviser, Ofelia Ferrán, for her help and guidance and to record my additional debt to Toni Dorca and Jaime Hanneken, who listened generously and counseled. To Toni Dorca I owe my introduction to Galdós's Naturalist novels which has formed the background of this dissertation. I have seen myself fundamentally as a *galdosista* at heart ever since. I should like to thank J.B. Shank for allowing me to prevail upon him to direct me in a course of reading that proved invaluable preparation for the study of biological and medical thought in eighteenth and nineteenth century France. I should also like to thank Nicholas Spadaccini for being prepared to serve on my committee and to chair the proceedings of the defense. Like many others, I have learned to revere him as a model of kindness and scholarly distinction.

I should like to add grateful recognition of Chris Isett, Tom Misa and Dan Philippon, whose passion for teaching caused them to welcome a somewhat untypical graduate student to their classes, and whose enthusiasm and knowledge made a deep impression on me. Some of the debates in their classes left me with a feeling of having experienced graduate education at its best.

I should like to record with gratitude the kindness shown to me by professors Rafael Huertas García-Alejo and Ricardo Campos Marín both of the *Instituto de Historia* of

the *Consejo Superior de Investigaciones Científicas* in Madrid. Foremost historians of psychiatry, public health and degeneration theory in nineteenth century Spain, I have capitalized on their extensive contributions in these fields, as the following pages show. They offered generous interest, support and advice at the time this dissertation was being planned

I should like to express my admiration and appreciation for the achievement of Wendy Lougee, chief librarian, and all at the Wilson, Wangenstein, Walter, Biomedical and McGrath Libraries who, from my point of view, appear to run a very complex organization with immense competence. My personal experience of the libraries has made me regard them as a model of what a good university library system should be. I should like to thank Rafael Tarrago, librarian of Iberian and Latino studies, for his assistance. I owe special thanks to the staff of the Illiad inter-library loan service who scoured two continents for unusual medical texts on my behalf and, particularly, to Alice Welch, who showed rare skill in finding copies of obscure texts when my searches were fruitless.

I should like to express my gratitude to the University of Minnesota's Department of Academic and Professional Development, and to Noro Andriamanalina its director, for organizing such a spectacular program of workshops and support groups for graduate students to help see them through their theses and beyond. Though I attended only a fraction of the available sessions, I always found them useful and have very much appreciated the support and interest that they demonstrate.

Finally, on a more prosaic but no less important plane, I should like to pay tribute to the University and to the staff running the Campus Connector service, whose efficiency and dedicated thoroughway make it the most enlightened urban transit system I have experienced

Dedication

I dedicate this dissertation to the memory of my parents,
Elsie (Elsa) Stannard and Wenley John Stannard,
and to my wife,
Becky,
without whose love and support
it would have been impossible.

Table of Contents

Introduction.....	p. 1
Chapter 1: Degeneration Theory in Eighteenth and Nineteenth Century France and the Rise of Naturalism.....	p. 52
Chapter 2: Degeneration Theory and Naturalism in Spain.....	p. 118
Chapter 3: <i>La desheredada</i>.....	p. 183
Chapter 4: <i>El doctor Centeno</i>.....	p. 231
Chapter 5: <i>Lo prohibido</i>.....	p. 258
Chapter 6: <i>Fortunata y Jacinta</i>.....	p. 288
Chapter 7: Conclusions.....	p. 331
Works Cited.....	p. 351

Introduction

Every theory is a critical response to the interests of the theorist

One can think of causal belief as an explanatory tool for understanding the physical world and it is programmed into our brains

Lewis Wolpert

The point of departure for this dissertation was my study in 2007 of Galdós's *La desheredada*. I became aware that Galdós had incorporated the theory of degeneration, one of the great explanatory myths¹ of the nineteenth century, into the narrative of the novel. The discourse of this theory permeated philosophy and the biological and social sciences of its time and encountered a striking resonance in

¹ the great explanatory myths: I use this phrase advisedly to indicate not only, "A widespread but untrue or erroneous story or belief" (Oxford English Dictionary [OED]), but also "a story [...] that at one time functioned to explain ways of the world [...] at one time regarded as true by a specific cultural group, but is only discussed as myth if it is not held as true by those involved in the discussion" ("myth," *Columbia Dictionary of Modern Literary and Cultural Criticism*). An alternative term used in relation to the theory of degeneration in this dissertation is *discourse*, which I employ in the Foucauldian sense of a, "specific form of language" as in academic, medical, legal and military discourse that, "governs the production of knowledge within it" and describes, "the surface linkages between power, knowledge, institutions, intellectuals, the control of populations and the modern state" (Bové 54-55). Another summary is that of, "systems of thoughts, composed of ideas, attitudes, courses of action, beliefs and practices that systematically construct the subjects and the worlds of which they speak" (Lessa, 285). The conception of Foucault is rewarding as far as knowledge/power/control are concerned but less accurate in relation to its restriction, given the widespread diffusion of degeneration theory in the discourses of numerous disciplines (see below). If the discourse of degeneration was limited in any way, it was to the professional middle classes, predominantly those in the practice of medicine, rather than to any specific discourse community. A third equivalent term for degeneration that I employ is that of *metanarrative* in the sense of, "a piece of narrative, especially a classic text or other archetypal story, which provides a schematic world view upon which an individual's experiences and perceptions may be ordered" (OED). The ancient roots of degeneration theory indicate that it was nothing if not an archetypal story.

contemporary discoveries in the realm of physics. I learned that, although of ancient origin, it was elaborated as a scientific metanarrative in the new circumstances of the eighteenth and nineteenth centuries by a community of thinkers, most of whom were physicians. The combination of the growth of cities with the emergence of medicine and psychiatry of the masses produced an, “interaction at a particular phase in European history, of the culture of the city, psychological medicine and Darwinian natural selection [that] authorized a specialization of the discourse of degeneration not known before” (Greenslade 30). This more far-reaching version of that discourse became prevalent throughout Western Europe and extended to the Americas. In the context of Spanish literature, further reading revealed that the theory was expressed in other novels of the 1880s by Galdós and that, while the majority of critical writing about Galdós’s Naturalist novels relates to their literary and historical contexts, there has been much less attention paid to the medical and biological *milieux* in which he wrote. This is surprising given Galdós’s profound admiration, not to say envy, of the medical profession, and his links with close friends who were prominent doctors. This dissertation seeks to redress a lacuna in Galdós studies by tracing the development of degenerationist thought in the nineteenth century, its introduction into Spain via medicine, its later incorporation into Zola’s Naturalism, and its subsequent immanence in a group of Galdós’s novels written in the 1880s.

1) Development of the theory ² of degeneration ³

² theory: I use the more general sense of this word as, “A scheme or system of ideas or statements held as an explanation or account of a group of facts or phenomena.” (OED)

³ degeneration: the word is related to, and sometimes used interchangeably with, locutions such as *degradation* and *decline* such that absolute distinctions are difficult. The word *degenerate*, however, still preserves something of its Latin sense of “*dēgenerāre* to depart from its race or kind, to fall from its ancestral quality” (de-, *genus -eris* race) (OED), whereas *degradation* usually involves the subject alone and lacks the sense of the subject’s ancestry, (de-, *gradus*

The concept of degeneration, a change from better to worse in relation to man and society, is as old as history. In his *Works and Days* in the seventh-century B.C.E., the Greek poet Hesiod described the myth of the deterioration of man when he wrote of Zeus, the son of Cronos, creating and destroying successively, “a golden race of mortal men” who, “lived like gods without sorrow of heart” to be followed by a silver race, a bronze race, and a race of heroes before declining upon the base “race of iron” whose members, “never rest from labour and sorrow by day, and from perishing by night” and that continued into his day (Hesiod, 2-3). Genil-Perrin quotes the Hindu laws of Manu, the Manava Dharma Shastra, of about 500 B.C.E. that threatened death to the nation where lax marriage customs permit intermixing and consequent degeneration of the purity of the four castes (Genil-Perrin 22). From very early on, it seems, the idea of degeneration was associated with an element of minatory control, with threats of physical and moral degeneration⁴ inextricably linked. At about the same time, the book of Genesis took its current form and, in chapter III, tells the story of The Fall with the expulsion of Adam and Eve from paradise and the loss of bliss that they and all their descendents were destined to suffer as a result of their Original Sin. The guilt of this inherited degeneration from grace, with its potential for

degree) as in, “to reduce from a higher to a lower rank, to depose *from* a position of honour or estimation” (OED). *Decline* has a more generalized sense still, being derived from the Latin *dēclīnāre* to turn or bend away or aside from the straight course, (de-, -*clīnāre* (in comb.) to bend) as in “to fall off or fail in force, vigour, or vitality; to decay, wane, diminish, decrease; to fall from prosperity or excellence, to deteriorate” (OED). Again the reference to antecedents is weaker than in *degenerate* and *degeneration*. This distinction appears to be preserved in the quotation of Swart in the footnote immediately below.

⁴ physical and moral degeneration: this is eloquently summarized in his first chapter, “The Old Fears,” by Koenraad Swart, “The idea of living in a period of political and cultural decline did not originate in the nineteenth century, but is as old as recorded history [...] assuming that the world was doomed to endless repetition of the same pattern of degeneration [...] Brahmanism, Buddhism, and Jainism all taught that the present era was a period of darkness, the so-called age of Kali, in which man was biologically, intellectually, ethically and socially far inferior to his ancestors” (Swart 1-2).

redemption through faith, was to be one of the pillars upon which Christian doctrine was to be built.

In the fourth century B.C.E. Plato taught that inferior animals arose from man by a process of degeneration and that, in the transmigration of the human soul to lesser life forms or *metempsychosis*, the soul would degenerate in the process (Archer-Hind 285 n. 13). In the first century B.C.E., Horace wrote in his Third Ode of, “our fathers, viler than our grandfathers, begot us who are even viler; we shall bring forth a progeny more degenerate still” (Horace). Livy and Juvenal criticized the moral degeneration of imperial Rome, the former noting that it seemed to be associated with the growth of the population of the city (Fox, 124). Three hundred years later, at the end of the classical era, St Cyril of Alexandria wrote of sickness from the root of Adam which spread to the rest of the tree, that is, the entire human race. This gave rise to the doctrine of Ancestral Sin which was incorporated into the teaching of the Eastern Orthodox Church. At the same time in the Catholic tradition, St Augustine of Hippo, forced to confront the more permissive interpretation of the Pelagians,⁵ enunciated a hard-line doctrine of Original Sin⁶ which preached not only inherited moral degeneration as a result of the fall of Adam but also, in contrast to the Orthodox church, an inherited guilt which could only be relieved by recourse to divine grace (“Original Sin”). Again, an element of coercion associated with the concept of

⁵ Pelagians: follower of Pelagius (c.354- c.420/440 C.E.): a Celtic Culdee (*Céli Dé*) monk who traveled to Rome to teach his ascetic practices. He is said to have died in Palestine after the collapse of Rome.

⁶ doctrine of Original Sin: López-Beltrán comments, “The link between the Christian (Augustinian) notion that hereditary physical ailments stem from a divine punishment linked to the original sin (and from then on to sinful bloodlines) and the substantialization of hereditary diseases into a reified entity *hérédité* seem to me undeniable” (López-Beltrán, *Cradle* 41-42). The connection between inheritance, degeneration and Original Sin is thus firmly perpetuated.

degeneration is clear, and persisted within the Church of Rome throughout the Middle Ages.⁷ It was confirmed in the *Decree Concerning Original Sin* of the Council of Trent in 1546 when anathema was declared against those who deny that the transgression of Adam transfused not only death and pain of the body but sin also (Waterworth, 22).

In the sixteenth century, as a result of the contact of explorers with “primitive” peoples, an explanation had to be drawn from familiar sources to account for the strangeness of this newly-discovered Other. In Margaret Hodgen’s words,

the theory of degeneration of savagery was a corollary of that even gloomier and more inclusive doctrine by which the condition of all men everywhere, uncivil or civil, was regarded as the outcome of corruption [...] inferences from the ancient and medieval belief, still viable in the Renaissance, that the world and man were subject to inevitable and progressive decay. The savage was only a little more corrupt than anybody else. (Hodgen 378)

A theory of degeneration was thus here used to articulate interracial relations long before it was used to assert the superiority of Western Europeans as a pretext for slavery.

The idea of degeneration was pervasive. In England in the early seventeenth century Lord Bacon argued for his inductive accumulation of scientific knowledge on the grounds that it would help to restore Man to the perfect knowledge he had

⁷ degeneration [...] throughout the Middle Ages: for fear of decay, decline and degeneration before the Enlightenment see Swart chapter 1.

enjoyed in Eden and from which he had degenerated since the expulsion. In 1621 Richard Burton, listing the dangers of gluttony in *The Anatomy of Melancholy* wrote, “Thus they many times wilfully pervert the good temperature of their bodies, stifle their wits, strangle nature, and degenerate into beasts” (Burton I 1434). The latter seems to have been a favorite phrase of Burton’s for he uses it to describe the consequences of various forms of social vice, anticipating post-Darwinian usage in the nineteenth century.

The theme of cyclical decline of civilization, owing much to the vision of the classical world, reappeared in the theory of tropes in history of the great Italian historiographer Giambattista Vico ⁸ who, in the early eighteenth century, proposed, “a four-stage cycle through which all civilizations passed, from the “age of the gods” through the “age of heroes” to the “age of man” and thence finally to the age of decadence and dissolution, the age of the famous *ricorso*” (White 254-45).

In France of the eighteenth century Enlightenment, as will be discussed in a following chapter, the concept of degeneration became integrated into the thinking of social critics, like Rousseau and Tissot (Swiss but wrote in French), and natural philosophers like Buffon, Geoffroy Saint-Hilaire and Cuvier. In 1774, the Englishman Edward Long made it integral to his protest against the miscegenation of English with Caribbean-African peoples on the grounds that admixture with an “inferior” race was

⁸ Giambattista Vico (1668-1744): Italian political philosopher, rhetorician, historian and jurist. Vico’s major statement of the decline of civilizations is to be found in his *Principi di Scienza Nuova d'intorno alla Comune Natura delle Nazioni* (1725).

the inevitable prelude to extinction.⁹ In the first half of the nineteenth century the range of subjects of which the idea of degeneration became part exploded to include nascent psychiatry (*aliénisme* in France), social science (Herbert Spencer), biology (Darwin, Dohrn, Lankester), racial theory (Gobineau), history (Burckhardt) and philosophy (Hegel,¹⁰ Schopenhauer,¹¹ Nietzsche¹²). The Swedish physician, Magnus Huss, used the word degeneration¹³ to describe the effect of his newly described *alcoholismus chronicus* upon the population of his country. Friedrich Engels uses the image of regression of savages to a more degenerate state in attempting to trace the role played by labor in the evolution of man from ape.¹⁴

The last decade of the nineteenth century saw interest in degeneration at its height,¹⁵ although it was to continue into the first half of the twentieth century associated with ideas of biological regression and hereditary criminality promulgated by the Italian, Cesare Lombroso. At the same time, the Hungarian Max Nordau, who lived in Paris but wrote in his adopted German, used degeneration as a catch-all category for any person with a trait or talent that contravened his conservative social

⁹ prelude to extinction: this theme of degeneration leading to extinction of the family line was thus being articulated more than 80 years before Morel popularized the idea in 1857. See chapter I.

¹⁰ Hegel: the concept was incorporated by Hegel in his “The philosophical history of the world” in an account of national spirit and the rise and fall of cultures (Hegel 56),

¹¹ Schopenhauer: degeneration is discussed in volume I of *The World as Will and Representation* (1818).

¹² Nietzsche: *degeneration* appears in *Ecce Homo* (1888) and in *The Use and Abuse of History*, “The Roman of the Empire [...] lost himself in a crowd of foreigners [...] and degenerated amid the cosmopolitan carnival of arts, worships and moralities.” (Nietzsche, *Use* 36)

¹³ Magnus Huss [...] degeneration: I quote from the translation of Lancereaux (*alcoholisme* 32), “à propos de l’énorme extension de l’eau-de-vie en Suède: ‘Il es un fait irrécusable, c’est que, sous la rapport des forces physiques et de la stature, le peuple en Suède a dégénéré de ses ancêtres.’” I have been unable to locate a translation into English of Huss’ landmark work.

¹⁴ evolution of man from ape: Friedrich Engels. “The Part Played by Labour in the Transition from Ape to Man” (1876).

¹⁵ interest in degeneration at its height: “En la década de 1890, el degeneracionismo alcanza su mayor nivel de popularización en toda Europa” (Campos Marín, *profesionalización* 199).

philosophy. Degeneration theory was later adapted by twentieth century fascist regimes to underpin their policies against racial minorities and societal sub-groups against whom they wished to discriminate. Hans Frank, Minister of Justice under the Third Reich declared in 1938, “National Socialism regards degeneracy as an immensely important source of criminal activity [...] rooted in miscegenation between a decent representative of his race and an individual of inferior racial stock [...] a link between racial decadence and criminal manifestations.”¹⁶ The Spanish military psychiatrist Vallejo-Nágera applied degenerationist thinking to a mixture of politics and racial theory in his *Eugenesia de la hispanidad y regeneración de la raza* (1937) in order to provide an ideological and psychological offensive against Franco’s opponents.¹⁷

There were early protests against the use of the term “degenerate.” Freud, having used the concept repeatedly in the course of his early publications, finally came to the conclusion by 1920 that “it is a judgement of value---a condemnation instead of an explanation” (Gilman, *Difference* 209). In Britain, with the availability of full employment in the years of the First World War, the ‘unemployables’ considered “wholly degenerate” in 1885, “proved impossible to find,” for the war, “showed that

¹⁶ racial decadence: quoted by Pick (28).

¹⁷ ideological and psychological offensive: A recent study of Vallejo Nágera states the aim of, “explicar qué sugiere Vallejo Nágera cuando califica a todos aquellos liberales, demócratas y marxistas, enemigos del Movimiento Nacional o del General Franco, como locos o imbéciles [...] Para evitar la degeneración de la raza española, Vallejo Nágera prescribe su tratamiento: España debe recuperar su matriz de fe religiosa y voluntad imperial, haciendo los valores castellanos universales y manteniendo el orden social” (Sosa-Velasco 147). Passages from Vallejo-Nágera’s *Eugenesia de la hispanidad* (1937) seem to come directly from the 1880s, “La tuberculosis, la sífilis y el alcohol son las noxas patológicas a que se deben más de la mitad de las enfermedades mentales graves” and, “Corroído el plasma germinal por el alcohol, los efectos sobre la progenie son catastróficos: disminución de la natalidad, aumento de los degenerados físicos y psíquicos” (Vallejo-Nágera 90-91). The anxiety-producing cluster of conditions associated with degeneration: alcoholism, tuberculosis, syphilis and madness is unchanged.

the existence of the casual poor had not been the effect of some deviant mutation induced by the degenerating influence of city life. The casual poor were shown to have been a social and not a biological creation” (Stedman Jones 336). Much later in a sociological study in the United States published in 1944, the Swedish sociologist Gunnar Myrdal commented on how black inferiority and mulatto degeneracy were “contrast conceptions,” serving psychologically as the “antithesis of progress” (Stepan 115). It was not until 1950, however, in the first UNESCO *Statement on Race* that the scientific community publically rejected racial degenerationism and, “the well-worn themes of noncosmopolitan races and ‘hybrid’ degeneration” (Stepan 115), asserting that the human race was a single species, with a common adaptability, mentally and physically, and that there was no evidence that racial crossing was biologically pernicious. As late as the mid-1940s, however, the degeneration concept still appeared in a standard medical text in the USA.¹⁸ A brief report in a contemporary provincial Mexican newspaper suggests that, in some quarters at least, the concept of chronic diseases as forms of human degeneration still exists ¹⁹ (Zarza).

In the following decades, with a perspective provided by time, a number of important texts ²⁰ studying decadence and the general role of degeneration theory in

¹⁸ standard medical text: Mark Lubinsky quotes the appearance of the word in the phrase, “status degenerativus, a genetic ‘state of biological inferiority, lower resistance, greater morbid predisposition’” in Julius Bauer *Constitution and Disease* 2nd ed. New York: Grune and Stratton, 1945. (Lubinsky 90)

¹⁹ the concept of [...] human degeneration still exists: the article states that, “La Dra. Gabriela Rodríguez Barrón, directora de la clínica del IMSS [...] subrayó que las enfermedades crónicas degenerativas entre la población adulta, como son hipertensión arterial y diabetes, se ha presentado unos 50 casos mensualmente en dicha clínica.” (Zarza)

²⁰ number of important texts: others might include Robert Nye’s *Crime, Madness and Politics in Modern France. The Medical Concept of National Decline* (1984), Koenrad W. Swart’s *The Sense of Decadence in Nineteenth-Century France* (1964) and A.E.Carter’s *The Idea of Decadence in French Literature* (1958). A much older text on decadence in modern Spanish history, without a specific discussion of degeneration theory, is Sanz y Rodríguez’ *La evolución de las ideas sobre la decadencia española* (1925). A recently published account of European

Western European social and cultural history have been published. I shall refer to the two books most closely relevant to nineteenth-century literature in France and Spain and shall then review several book chapters and articles more specifically focused on Spain and on Galdós's Naturalist novels.

2) Literature about Degeneration Theory

The history, diffusion and application of degeneration theory in the English-Italian- and French-speaking countries have been described in detail in the seminal and much-cited study of Daniel Pick *Faces of Degeneration: A European Disorder c. 1848-c.1918* (1989). His focus is the use of the theory from the mid-nineteenth century onwards tracing its “culture, politics and language” in various disciplines without any special reference to its appearance in fiction (Pick 2). Though it also contains no specific reference to degenerationism in Spain, there are many observations relevant to the Spanish experience. Writing of the loss of faith in liberal progressivism in France, the revolution of 1848 and the foundation of the Second Empire, he describes, “a deep sense of confusion about the patterns of historical change and repetition” and suggests that the theory of degeneration, “needs to be understood as an ideological production, a complex process of conceptualizing a felt crisis in history” (Pick 54). I believe that this observation can be extended to Spain in the 1870s and 1880s where the liberal revolution of 1868 was incapable of initiating stable government and where the price of order and civil peace proved to be the restoration of the Bourbon monarchy, reassertion of the influence of the Catholic Church and the institution of a sham democracy, in the form of Canovas' *cacique-*

degenerationism in the context of nineteenth-century social and political thought is Richard G. Olson's *Science and Scientism in Nineteenth-Century Europe* (2008).

mediated *turno pacífico*. On the one hand, the comfortable middle-class was apprehensive of a restless and growing urban underclass that was organizing under the banners of anarchism and socialism and appeared to pose a threat to civil order. On the other hand, liberals like Galdós realized that the ideals of the *Gloriosa* revolution had been betrayed and were disgusted by what they saw as the middle-class's accommodation with the *status quo* in the interests of personal profit. With the continually debated *cuestión social*,²¹ the *masa obrera*²² on the move, a corrupt political system, the middle-class seen as unfit to lead, a cholera epidemic²³ and the economic down-turn of the mid-1880s, Spaniards could be forgiven for feeling that they had a “crisis in history” of their own. I shall show that the theory of degeneration provided a means of condemning the social vices popularly associated with the *masa obrera* while, at the same time, offering a distancing, intellectual security that bolstered the identity of middle-class professionals.²⁴ The latter were notable for applying their theory to almost anyone in society apart from themselves, preferentially to those seen as the more threatening elements²⁵ of the urban poor.

²¹ *cuestión social*: urban poverty, made particularly pressing in Madrid in the latter third of the nineteenth century by the large influx of people from the countryside in search of work, only to find no industry, like that of Barcelona, Bilbao or Asturias, that would provide employment

²² *masa obrera*: Galdós used this phrase to describe the underclass of Madrid in preference to the alternative *proletariado*, emphasizing that the industry associated with the latter was underdeveloped in *la Corte*.

²³ cholera epidemic: in the 18-month period about 1885, it is estimated that there were more than 120,000 deaths from cholera in Spain (Hauser, *Madrid* 45).

²⁴ bolstered the identity [...] middle-class professionals: “Degeneration involved [...] an explanation of ‘otherness’, securing the identity of, variously, the scientist, (white) man, *bourgeoisie* against superstition, fiction, darkness, femininity, the masses, effete aristocracy.” (Pick 230)

²⁵ threatening elements: Pick cites Morel who refers to the, “profond malaise moral dont est travallée la société moderne” and localizes that malaise to the, “sien de cette société si civilisée existent de *veritables variétés* [...] qui no possèdent ni intelligence du devoir, ni le sentiment de la moralité des actes, et donc l’esprit n’est susceptible d’être éclairé ou même consolé par aucune idée de l’ordre religieux. Quelques-unes de ces variétés ont été désignées à juste titre sous le nom de *classes dangereuses* [...] tend à démontrer l’importance de l’étude des causes qui amènent chez l’individu una dégradation physique et morale, constituent pour la société un état de danger permanent” (Morel, *dégénérescences* 461, author’s italics).

Pick also cites the unsettled social environment in Paris that provided the background to Morel's foundational *Traité de dégénérescences* (1857), "Morel's text [...] must be understood in a wider context of social anxiety about the city at a time of sustained urban immigration and demographic flux" (Pick 53). Listing the consequent, "massive squalor, overcrowding, misery and disease of city life," he continues, "Morel's work is seen to reflect that crisis and to offer on behalf of his profession the, 'solution' of a benevolent social medicine" (Pick 53). Thus while Pick's account has no direct reference to Spain, I shall endeavor to show that his observations about the role that Morel's theory played in response to forces threatening social instability in France are directly transferrable to the Madrid of the Restoration in which Galdós located three of the four Naturalist novels examined in this study.

A valuable series of essays edited by J. Edward Chamberlin and Sander L. Gilman *Degeneration: the Dark Side of Progress* (1985) emphasizes, as its title indicates, an inherent, oppositional relationship between progress and degeneration²⁶ in the nineteenth century. Failure to live up to the promises of positivism was often laid at the door of degenerative processes in society, be they racial, related to disease, or responsible for madness or the impaired fitness of the nation. While the essays contain no reference to the situation in Spain, many of the observations expressed about degeneration theory are pertinent to the Iberian Peninsula. A striking feature of

²⁶ oppositional relationship between progress and degeneration: this had been long perceived. In his review of Morel's *Traité* in 1857, Philippe Buchez writes of the value of this antinomy in validating his ideas about human perfectibility by means of the opposing concept of degeneration, "Ainsi l'on n'a la perception claire de la dégénérescence de l'individu et de l'espèce dans l'humanité qu'en acquérant celle de leur progressivité. L'idée de perfectibilité définit celle de dégradation par son opposition même." (Buchez, *Rapport* 458)

the anthology is its demonstration of the pervasiveness of the degenerationist vision across nineteenth-century intellectual fields. As an explanatory metanarrative it was taken up by historians, anthropologists, sociologists, racial theorists, physicians, naturalists and politicians as well as by the novelists who reflected and represented the world about them in Naturalist literature. It became a powerful image in the physical sciences with the enunciation of the second law of thermodynamics (1850), expressed as *entropy* in 1865, that predicted the heat-death of the universe. Degeneration, it seemed, was a universal truth that could be used to explain everything from the lack of eyes of sightless crustaceans in perpetually dark caves to the decay of every star in space. The topic was one in which, “the nineteenth-century mind [...] organized its most troubling thoughts and feelings.” (Chamberlin & Gilman xii)

The authors continue with the observation that degeneration and regeneration²⁷ are linked and that just as, “Birth and death went hand in hand in the nineteenth-century” so degeneration became a, “balance to the idea of progress” (Chamberlin & Gilman xiii). The sense of a counterpoise between the positivist ideal of human progress and disillusionment with the failings of positivist promise, which became increasingly apparent as the century progressed, are memorably encapsulated in the editors’ expression of degeneration as, “the institutionalization of fear” (Chamberlin &

²⁷ degeneration and regeneration: this binary opposition is an old one. As Alvarez-Uria comments, “Es imposible comprender [...] el regeneracionismo en España [...] sin referirse al concepto clave de degeneración” (Alvarez-Uria 184). Morel ends his great work on degeneration with the assertion that his programme of prophylaxis will obtain for the patient, “Amélioration intellectuelle, physique y morale de l’homme [...] sa Régénération” (Morel, *Traité* 693). Buechez sanguinely noted that, “L’idée de dégénérescence est [...] corrélative à l’idée de perfectibilité” (Buechez, *Rapport* 459), while Maximien Rey describes the work of “le médecine moraliste” in working for “la *régénération humaine*” in abolishing a list of degenerative conditions (Rey 12, author’s italics).

Gilman xiv). Degeneration seen as an intellectual construct in this way dovetails very well with the nineteenth-century thinking person's reaction to Pick's "felt crisis in history." The latter, if prolonged, leads naturally to the former.

The purpose of this dissertation is to study contemporary sources to show how an apprehensive response to crises in society was at the root of the cluster of ideas that surrounded the degeneration *motif*, both in nineteenth-century France and in Spain as a whole, and more specifically in Madrid in the Naturalist novels of Benito Pérez Galdós. Threatening social change in France, aggravated by the events of the Franco-Prussian war and the Paris Commune, had contributed to firm establishment of degenerationism in that country and to its subsequent incorporation by Zola into the theory of his Naturalist writing. Equivalent social changes in the Madrid of Galdós made degenerationist explanations attractive to the social thinker, the hygienist and the forensic psychiatrist. Though less widespread than in France, those explanations were part of an accepted way of interpreting social problems and disease in Spain and were accordingly used by Galdós as he fused them with the Spanish Realist tradition to create the aesthetic of his Naturalist novels. How he did this will be the theme of this study.

That there has been a striking deficiency in critical attention to the non-fictional and scientific context of Galdós's novels has been well summarized,

A great deal of Galdós criticism has, quite rightly, made much of intertextual references in Don Benito's work, but with regard to the presence of non-

fictional work, and specifically scientific works, there has been a notable absence of research or even interest. (Bell 179)

It is my intention to remedy part of this deficiency in the critical literature by focusing on the recurrence of the contemporary, scientific metanarrative of degenerationism in a group of Galdós's Naturalist novels.

3) Degenerationism as a Theme in Literature

Degenerationist themes appeared in the Naturalist fiction of many countries both in Europe and in the Americas.²⁸ From English literature,²⁹ Pick lists Gissing's *The Nether World* (1889), Wilde's *The Picture of Dorian Gray* (1890), Stevenson's *The Strange Case of Dr Jekyll and Mr Hyde* (1886) and Bram Stoker's *Dracula* (1897). Some of Conan Doyle's stories including *The Lost World* (1912) and H.G.Wells' *The Time Machine* (1894) also owe a significant part of their thematic content to the concept of degeneration. Gillian Beer's (2000) *Darwin's Plots* finds degenerationism not only in the writings of Darwin himself but also in *Primitive Culture* (1871) of the anthropologist Edward Taylor and *The Water Babies* (1863) of

²⁸ Degenerationist themes [...] in Naturalist fiction [...] in the Americas: examples would include Eugenio Cambaceres' *Sin rumbo* (1885), Manuel Zeno Gandía's *La charca* (1894) and Rómulo Gallegos' *Doña Bárbara* (1929).

²⁹ Degenerationist themes [...] English literature: a specific study is that of William Greenslade *Degeneration, Culture and the Novel 1880-1940* (1994).

Charles Kingsley. David Baguley finds degenerationism and determinism in Hardy's *Tess of the D'Urbervilles* (1891).

By contrast, there appears to be no overview of degeneration theory in Spanish culture, as a whole, or in Spanish literature. One might ask why this should be. The theory appears never to have been as fully developed nor as widely accepted in Spain as it was in France³⁰ and while the theory did infiltrate Spanish medicine and literature, it was in a much more fragmented form.³¹ Its adoption as a mode of interpreting social problems has been described in detail by the historians of medicine, Rafael Huertas (Rafael Huertas García-Alejo) and Ricardo Campos (Ricardo Campos Marín).³² The latter's *Alcoholismo, medicina y sociedad en España (1876-1923)* (1997) describes the part played by French degeneration theory in interpreting a prevalent social vice in the later nineteenth century. Huertas together with Campos and José Martínez describe the application of degeneration theory in Spain in relation to psychiatry, criminology, infant psychosis and other social ills in

³⁰ nor as widely accepted in Spain: "A diferencia de los alienistas franceses, que hicieron de la teoría de la degeneración un poderoso instrumento de legitimación profesional y de explicación de los fenómenos sociales, los frenópatas españoles fueron bastantes cautelosos, al menos en un primer momento, en la aceptación y aplicación de la misma en la clínica psiquiátrica" (Campos, Martínez & Huertas 8). Their caution in the application of degeneration theory in the field of forensic psychiatry and public health, however, appears to have been much less.

³¹ more fragmented form: "las aportaciones de la psiquiatría española al degeneracionismo fueron confusas. Con frecuencia se mezclan conceptos o se hacen interpretaciones contradictorias, resultando muy difícil valorar el grado de penetración y, sobre todo, de comprensión de la doctrina original." (Campos, Martínez & Huertas 17)

³² Rafael Huertas and Ricardo Campos: the contribution of these two medical historians of the *Consejo Superior de Investigaciones Científicas* in Madrid to the study of degeneration and psychiatry in nineteenth century Spain has been enormous, easily exceeding that of other authors. A little confusingly, however, their publications sometimes list the shorter version of their names, without the matronymic, and sometimes the full. An idea of their range of publications may be obtained by consulting the Works Cited chapter of this dissertation. Representative review articles by them include Ricardo Campos Marín and Rafael Huertas' "La teoría de la degeneración en España (1886-1920)" in *El darwinismo en España e Iberoamérica* and the series of four papers by Rafael Huertas in English under the title "Madness and Degeneration" (1993).

Ilegales de la naturaleza: medicina y degeneracionismo en la España de la Restauración (1876-1923) (2001). While both authors have written extensively on psychiatry and social medicine in Restoration Spain and their links with French thought, Huertas has also studied Naturalism and its theme of degeneration in the novels of Émile Zola. Beyond an incidental note referring to Galdós's *Lo prohibido* (Huertas, *Madness I* 404), however, he appears not to have discussed degeneration theory in the Spanish novel. By contrast, the intention of this work is to extend the study of the role of degeneration theory in a group of Galdós's novels and, in so doing, to correct a number of errors and misapprehensions that have been repeated by authors who seem have been unfamiliar with some of the primary sources.

A contribution to the understanding of degeneration theory in literature, specifically in Galdós's *La desheredada*, is made by Michael Gordon in "The Medical Background to Galdós' *La Desheredada*" (1972) and in "Lo que falta a un enfermo le sobra a otro': Galdós' Conception of Humanity in *La desheredada*." (1977). He relates the events of the novel to contemporary thinking in psychiatry and to the trial of the would-be regicide Francisco Otero whose circumstances closely parallel those in Galdós's portrayal of Mariano (*Pecado*), the retarded brother of the heroine. Gordon recounts the defense of Otero on the grounds of insanity by the Madrid *alienista*, José María Esquerdo,³³ and appropriately notes the great esteem in which the latter was

³³ José-María Esquerdo y Zaragoza (1842-1912): Leading Madrid psychiatrist, orator, politician and friend of Galdós mentioned by the latter in his novels. Esquerdo founded a much-praised private asylum in Carabanchel Alto in 1877 (Villasante, *instituciones* 92). A street in Madrid south of the *Plaza de Manuel Becerra* is named after him. His bronze bust in the tiny park half way down the street appears to be the same as that which once adorned the entrance to the asylum of Carabanchel (see Llorca Baus 42).

held and his capacity for inspiring a group of disciples,³⁴ despite his absence of original thought and scanty publications.³⁵ From the outset, Gordon makes a point of emphasizing the, “*psychological* degeneration as the result of heredity and environment” (Gordon, *medical* 67, my italics) and claims that, “in the period 1860-85 psychiatry was dominated by the belief that mental illness was invariably a symptom of degeneration” (Gordon, *medical* 67). He later links, “the ravings of Tomás Rufete in the Leganés asylum, the psychological quirks of Isidora and the epileptic degeneration of Mariano” suggesting that, “Galdós [...] seems more interested in the *symbolic* value of this link than he is in using it to emphasize the importance of heredity in Mariano’s downfall” (Gordon, *medical* 75, my italics). In the later article, Gordon asserts that, “Galdós adapts the naturalistic theory of the degenerative family neurosis [...] One of the major attractions [of which] was its clearly protean character.” (Gordon, *falta* 30)

Whilst recognizing Gordon’s contribution in indicating the importance of degeneration theory in Galdós’s novel, I intend to demonstrate in the course of this dissertation that the, “degeneration as a result of heredity and environment” was far more than purely psychological, as can be illustrated by the emotional and intellectual retardation of Mariano and the very physical disease of Isidora’s macrocephalic son

³⁴ group of disciples: Jan Goldstein describes the tradition of the “circle of patronage” which played a large part in establishing patterns of thought in French psychiatry, citing the groups of disciples inspired by Pinel and Esquirol (Goldstein, *Console and Classify* ch. 4). In Barcelona, Giné y Partagas inspired a similar following while the charismatic Esquerdo of Madrid, himself a disciple of Pedro Mata, developed the loyalty and admiration of a cluster of the next generation of physicians that included Luís Simarro, Jaime Vera, José María Escuder, Manuel Tolosa Latour, Victoriano Garrido and Ángel Pulido, all committed to the concept of a biological basis for mental disease (Campos Marín, *Criminalidad* 117).

³⁵ scanty publications: noting Esquerdo’s preference for oral presentations, which had to be transcribed by others in order to be published, Villasante describes him as “fundamentalmente ágrafo.” (Villasante, *concepto* 65)

Riquín. Where Gordon is predisposed to regard the latter as portrayed for, “moral and symbolic purposes³⁶ [...] as a kind of ironic commentary on the figurative swollen-headedness of his mother”(Gordon, *falta* 30), I would lean toward emphasizing the literality of the infant’s large head as the end-stage of the degenerative process described by Morel (Morel, *maladies* 585), prefigured in fiction by an equivalent instance in Zola where Jacques-Louis Lantier also represents the end of a family line, suffering from *oligofrenia con hidrocefalia*³⁷ (Huertas García-Alejo, *Herencia* 30). I hope to make clear that, in the period 1860-85, psychiatry was far from being, “dominated by the belief that mental illness was invariably a symptom of degeneration”³⁸ and that Isidora was suffering from something more serious than a “psychological quirk.” In sum, I propose to show that the theory of degeneration was much more all-encompassing than Gordon suggests and comprised physical, sexual and social applications at the time that Galdós wrote.

³⁶ moral and symbolic purposes: Chamberlin also stresses the symbolic character of Riquín’s macrocephaly without appearing to be aware that it also had a “scientific,” degenerative basis (Chamberlin 271).

³⁷ hidrocefalia: it is worth noting that Galdós’s portrayal of Riquín, for which a mild form of spina bifida may have been the model, suggests an infant of relatively normal intelligence in that he is able to play normally with the Castaño children and to develop strong bonds of affection with Emilia Castaño and the *Sanguijuelera*. The fact that Riquín is allowed to make his own decision to stay in the Castaño household rather than to accompany his mother, Isidora, suggests that all concerned respected his judgement. The striking cranial deformity, associated with abnormal lower limbs, such as can be seen in mild spina bifida, was attributable to hereditary degeneration as Miquis suggests in his comment about Isidora’s “descendencia de cabezudos raquíticos” (Pérez Galdós, *desheredada* 290). *Raquítico*, in figurative parlance can simply mean *delgado y débil* (DRAE) and does not necessarily signify that *Riquín* suffers from vitamin D deficiency rickets.

³⁸ psychiatry [...] “dominated by the belief that mental illness was invariably a symptom of degeneration: I have cited elsewhere an assessment of a much more confused situation, “las aportaciones de la psiquiatría española al degeneracionismo fueron confusas. Con frecuencia se mezclan conceptos o se hacen interpretaciones contradictorias, resultando muy difícil valorar el grado de penetración y, sobre todo, de comprensión de la doctrina original.” (Campos, Martínez & Huertas 17)

Jo Labanyi makes a contribution to the understanding of degeneration theory in Galdós in her *Gender and Modernization in the Spanish Realist Novel* (2000), in which she studies *La familia de León Roch*, *La desheredada*, *Lo prohibido*, *Tormento*, *La de Bringas* and *Fortunata y Jacinta*. She makes the valuable point in her Introduction about the frequency in discourse of the *degeneración-regeneración* polarity that was “common currency in the 1880s” (Labanyi, *Gender* 28) and anticipated the increasingly anguished debate in Spain in the following two decades. In her discussion of the fate of Isidora’s brother, Mariano, in *La desheredada*, she writes of the influence of French *alieniste* thinking,

the 1870 Penal Code under which Mariano would be tried showed the beginnings of the influence in Spain of Morel’s *Treatise on Degeneracy*, which viewed crime and madness as related lapses into a ‘primitive’ stage of human development. In describing the delinquent Mariano as a savage and an animal, and in raising the issue of hereditary transmission of degenerative traits (Rufete’s ‘monomania’ is passed on to Mariano and Isidora, and Isidora’s child is deformed by rickets, suggesting malfunctionings whose origin is socio-economic may be transmitted genetically). (Labanyi, *Gender* 125)

I shall show in the chapters to come that Morel’s version of degeneration theory was, in fact, based on literal adherence to the account of Genesis where the earlier forms of human development were more, not less, perfect and in which all subsequent ills were the result of degeneration from the original state of grace. The “lapse into a

‘primitive’³⁹ stage of human development” is a distinctly post-Darwinian concept that characterized the evolutionary version of degeneration theory developed by Morel’s disciple, Valentin Magnan, not by Morel himself. I shall also show that “monomania,”⁴⁰ a persisting idea in Spain in the 1880s, was derived from the descriptive classification of Esquirol, Morel’s predecessor, and was one that Morel did his best to discredit as he fought to establish his contrasting, causal classification theory of degeneration. Further, while it could be argued that Isidora is indeed in the grip of an obsession about one subject, which would justify Esquirol’s term of monomania, the mental and emotional retardation of Mariano and the hallucinating

³⁹ lapse into a ‘primitive’ stage: Morel’s phrase is, in fact, “*déviations maldive d’un type primitif*” (Morel *Traité* 5), *from* a primitive type not *to* it. For the fundamentalist Morel, the primitive was closer to the God-created and perfect, so that degeneration and crime represented a fall from that primitive state of grace. Dowbiggin observes that, “Morel based his theory on his observations of working-class communities in Rouen and families in isolated rural areas. The degenerative mental and physical characteristics of these families constituted a deviation *from* the “primitive type” of the human species, a type Morel equated with the biblical Adam” (Dowbiggin, *inheriting* 118, my italics). My point is that any talk of atavistic regression reflects Magnan’s secular, post-Darwinian take on Mariano’s degenerative disturbance, not Morel’s Catholic, pre-Darwinian vision of it.

⁴⁰ monomania: I have to observe that Labanyi’s footnote 31 on p. 126 where she says, “The theory of ‘monomania’ was developed in Spain in the late 1850s and 1860s under the influence of Morel by (the same) Pedro Mata” is incorrect. While *monomania homicida sin delirio* became a recognized entity for legal defense as a result of the labors of Pedro Mata, then professor of legal medicine in Madrid (Martínez Pérez, *problema* 517), the concept of monomania was coined by Esquirol in about 1810 (Goldstein, *Console* 152) and enjoyed a vogue in the 1820s such that up to 45% of admissions to the Charenton Hospital received the diagnosis (Goldstein, *Console* 153). There were many varieties of which the modern dipsomania, nymphomania and pyromania survive. For the influence of the concept of monomania in French medico-legal psychiatry between 1825-1840 see Saussure (1946). Morel and Falret worked hard to discredit monomania as a nosological entity with such success that it had disappeared as a diagnostic category at the Salpêtrière Hospital by 1870 (Goldstein, *Console* 152). In Spain, however, alienistas continued to make free with the term in the 1880s with texts to guide them like the Spanish translation of Guislain’s *Lecciones orales sobre las frenopatías* (1881) which has 47 references to many types of monomania. Esquerdo referred to monomania ten times in his *Preocupaciones reinantes de la locura* (1878), 10 times in his *Locos que no lo parecen* (1880). Galcerán used the term in 1884, while Garrido’s *La cárcel o el manicomio* (1888) has many references to both monomania and degeneration. Clearly the Esquirol and Morel classifications coexisted in Spain much longer than in France. This nosological free-for-all has been described as, “la compleja mezcolanza conceptual [monomanía, neurosis, degeneración] que convivía todavía en la psiquiatría española.” (Campos Marín, *Criminalidad* 117)

paranoia of Tomás Rufete are disturbances that are far too global to qualify as manias restricted to one theme.

In a discussion of degeneration theory as it relates to *Lo Prohibido*, Labanyi links it with the, “economistic vision of society” of Herbert Spencer in which individuals struggled for “survival of the fittest” (Spencer’s coinage) in unregulated markets where the winners would be equivalent to successful capitalists. Being profoundly influenced by Darwin, Spencer seized upon the idea of evolutionary regression manifest by racial deterioration and physical and moral degeneration. Labanyi attributes José María’s degeneration to his “excess consumerism” (*locura crematística* in Montesinos’ coinage) with an over-expenditure that is not only financial but also sexual (Labanyi, *Gender* 132-133). She correlates José María’s woeful state to the newly invented condition of neurasthenia,⁴¹ a state of exhaustion due to the stresses of modern and, more specifically, urban life. Labanyi’s observation of the close correspondence between Monlau’s *neurosisismo* [...] *diátesis del siglo* and Augusto Miquis’ judgement on the Bueno de Guzmán clan as having *el mal de siglo* [...] *una diátesis neuropática* suggests transmission of the idea. She very usefully links the idea of exhaustion of physical and sexual energy to the concept of entropy, the term coined in 1865 by Rudolf Clausius,⁴² to express the universal tendency of all

⁴¹ newly invented condition of neurasthenia: Labanyi quotes Monlau as describing the condition as *neurosisismo* in 1868, “el *neurosisismo*, en fin, que es la diátesis del siglo, la *endemia de la civilización contemporánea*, debida á la preponderancia del sistema nervioso” (Monlau, *Estudios* 19, author’s italics). I question whether *neurosisismo* is, in fact, an accurate translation of neurasthenia since Beard’s article in *The Boston Medical and Surgical Journal* propounding the new condition was not published until the following year (Beard 217). Showalter shows that, despite Charcot’s demonstration that hysteria was not infrequently a male as well as a female condition, male prejudices of the time preferred to restrict its usage to women and used the less demeaning label of *neurasthenia* for similar behavior in male subjects (Showalter 294 ff.).

⁴² Rudolf Clausius (1822-1888): German physicist and mathematician

energy systems in the universe to degrade. The significance of this discovery⁴³ was not lost on Herbert Spencer, who could no longer regard human beings as fixed-energy systems, whose resources could be stored, and only served to increase his obsession with degeneration (Labanyi, *Gender* 134). Labanyi further describes José María as becoming feminized by his consumerism, by his incestuous relations with his cousins and finally by the stroke that gives him a high-pitched, feminine voice.

Labanyi sees two concepts of degeneration in *Fortunata y Jacinta*, one a regressive exhaustion of resources by aggressive, consuming, bourgeois capitalism and the other the “savage” *pueblo* which has regressed to lower, less complex evolutionary forms (Labanyi, *Gender* 200-1). She maintains of Mauricia la Dura that, “her moral degeneracy is indicated by her masculine features and voice-developed only after her ‘backsliding’ into prostitution and alcoholism [...] for earlier stages of evolution were supposedly less differentiated” (Labanyi, *Gender* 201). While moral and physical degeneration have always been thought of as linked, it is my purpose in the following chapters to show that alcoholism and prostitution in Spain were considered as inherited and biological forms of degeneration and that Mauricia’s ambiguous sexuality was regarded as a degenerative perversion beyond the scope of

⁴³ significance of this discovery: William Thompson (Lord Kelvin) outlined the cosmic significance of entropy in his essay *On the Age of the Sun’s Heat* in 1862, as a result of which it appeared that degeneration in human society was mirrored by that of the universe. Even more preoccupying for contemporaries, who were appalled at the prospect of the relatively immediate heat death of the universe, was Thompson’s assertion that, “inhabitants of the earth can not continue to enjoy the light and heat essential to their life for many millions years longer unless sources not unknown to us are prepared in the great storehouse of creation” (Thompson 6). This calculation ran counter to Darwin’s estimate of the time necessary for the erosion of the Weald of Kent of the order of 300 million years (Darwin, *Origin* 68), as a result of which Darwin withdrew his estimate from further editions of *On the Origin of Species*. Thompson’s estimate was in error by many orders of magnitude, however, since nuclear fusion as the source of the sun’s heat was unknown not being discovered until the twentieth century. It is ironic that a biologist’s estimate of the antiquity of the earth should have been closer to the mark than that of the most famous physicist of his age.

the merely moral. Labanyi's discussion of Maximiliano Rubín revolves about his weakness and his regression, "into effeminacy and infantilism" (Labanyi, *Gender* 202) and continues with a description of what she sees as Maxi's hysteria which, "is connected with both psychological and physical disorders, the latter in the form of impotence (Labanyi, *Gender* 202). "Regression," she comments, "masculinizes women (in the context of Fortunata) and feminizes men," the latter referring to Maxi.

I propose to show in contrast that in Maxi Rubín Galdós gives us a compelling clinical picture of one of the most feared diseases attributed to degeneration of his age with which, in comparison, hysteria would have been the least of Maxi's problems. Galdós in his physicianly mode ⁴⁴ as novelist creates for us a representation of almost all the known features of delayed congenital syphilis that many of his readers were meant to recognize. From my perspective, it seems almost bordering on the perverse to disregard them. An article with references to Maxi's syphilis and to degeneration theory is that of Álvaro & Martín Burgos (2007) in which they review the portrayal of neurological disturbances in *Fortunata y Jacinta*, *La de Bringas* and *Tormento*. The authors devote a short paragraph to some of the physical features of delayed congenital syphilis and note the connection with the 1875 Spanish translation of the treatise of Lancereaux, though they do not mention the original recognition of the condition in 1858 by Hutchinson or its detailed description, reminiscent of Maxi, published by Fournier in 1886. A later reference by Álvaro and Martín Burgos to *enfermedades degenerativas* is followed by the commonly repeated but erroneous opinion that Morel originated the idea, without any indication that the authors

⁴⁴ physicianly mode: see the following section, "Galdós's Approach to his Naturalist Novels."

realized that it was both cause and effect not only of alcoholism but also a spectrum of *vicios sociales* and madness.

The theory of degeneration as it was used to interpret alcoholism is studied by Teresa Fuentes Peris in her *Visions of Filth: Deviancy and Social Control in the Novels of Galdós* (2003).⁴⁵ She appropriately observes that Morel, “had established the influence of the social environment as one of the drivers of degeneration” (Fuentes Peris 111) and that alcoholism was high on Morel’s list of factors producing social ills and insanity. She also repeats the erroneous commonplace that it was Morel who first formulated degeneration theory (Fuentes Peris 111), while I shall argue that the theory was already in use beforehand and that Morel’s role was more as proponent and propagandist for the theory than as its originator. She stresses admirably some of the ambiguities of degeneration such as that it was viewed as both a cause and a product of social ills (Fuentes Peris 113) and was attributed both to the ills of excess civilization and to those of regression to an uncivilized state (Fuentes Peris 126). She quotes Campos Marín & Huertas García-Alejo’s (1991) discussion of an additional ambivalence in that contemporary commentators referred interchangeably to alcoholism in terms of moral vice and of illness (Fuentes Peris 92). I would add that such linking of moral and physical degeneration is entirely consistent with the long history of the theory as an explanatory device in which the two have always been inextricably connected, probably depending most of all upon the perspective of the observer. The moralists of history have ever interpreted sickness and physical events in moral terms.

⁴⁵ *Visions of Filth*: Fuentes Peris also explores the themes of degeneration and alcoholism in Galdós’s *Ángel Guerra*, as well as the issue of poverty in *Halma* and *Misericordia*. I restrict my consideration to the part of her book dealing with *Fortunata y Jacinta*, relevant to this study.

In relation to alcoholism ⁴⁶ in novels of Galdós, Fuentes Peris studies the portrayal of Mauricia la Dura in *Fortunata y Jacinta* and notes that she is representative of the working-class public drunkenness which occasioned middle-class contempt (Fuentes Peris 91) for its manifestation in a woman, whose assigned roles in society as domestic nurturer and *ángel del hogar* ⁴⁷ made female inebriety seem much more serious. She perceptively comments on the contrast between the vivid portrayal of Mauricia's drunkenness and the de-emphasized picture of habitual intoxication of José Izquierdo, whose moral and physical degeneration is treated much more lightly by Galdós (Fuentes Peris 109). In this dissertation, I propose to extend Fuentes Peris' consideration of degeneration in Mauricia to include her other features which would have confirmed, in the eyes of Galdós's contemporaries, her profoundly degenerate state, since Fuentes Peris devotes little space to the consideration of Mauricia's madness, to her prostitution and to her ambiguous sexuality all of which were viewed at the time as degenerative processes.

An analysis of degeneration theory in Galdós's novels by Collin McKinney (2010) has been published during the course of the preparation of this dissertation. In *Mapping the Social Body. Urbanization, the Gaze and the Novels of Galdós*,

⁴⁶ alcoholism: Fuentes Peris cites conflicting opinions as to the status of alcoholism as a moral failing or as a disease (Fuentes Peris 91). My impression is that Huss considered it as a disease while Morel (Morel, *Traité* 79 ff.), quoting Huss extensively, considers the disease in a chapter entitled "Dégénérescences par las agents intoxicants," scarcely a purely moral mechanism. Esquerdo clearly held similar views in 1881 when he writes, "muchos dipsomaniacos no son otra cosa que paralíticos progresivos" (Esquerdo, *Garayo* 24). The latter entity was very much recognized as a disease to the extent that a visiting psychiatrist, Donald Fraser, reported in 1878 that Esquerdo was treating it with phosphorus (Fraser 349), a decade before its syphilitic cause began to be established by Fournier.

⁴⁷ *ángel del hogar*: the bourgeois ideology of ideal, domestic womanhood that served to distinguish the middle-class from the pueblo and from the aristocracy. As with so many ideologies, it represented a form of control. Its appearance in Galdós has been the subject of a monograph by Bridget Aldaraca (1991).

McKinney focuses on the roles the city, the dominant sensory mode of the nineteenth century, vision, and the physiognomy of Lavater as he studies *La desheredada*, *Tormento*, *La de Bringas*, *Fortunata y Jacinta*, *Nazarín* and *Misericordia*. He stresses the extent to which Lavater's theory influenced Morel who, "subscribed to the same connection between exterior form and inner nature" (McKinney 124) and devotes several pages to discussion of the theory of degeneration in relation to Isidora (*La desheredada*), Maxi Rubín (*Fortunata y Jacinta*) and Ándara (*Nazarín*). He also quotes the criminal anthropology work of Cesare Lombroso.

McKinney omits to explain, however, how an abnormal physiognomy can be an essential feature of degeneration in Tomás Rufete and Mariano (Isidora's brother, *Pecado*) while being so notably absent in Isidora, whose charm and good looks are repeatedly emphasized throughout the novel. I intend to clarify this by showing that pathological facial features, in themselves, were not considered an essential feature of degenerative disease.⁴⁸ McKinney describes the influence of Lombroso's description of atavistic facial features in the context of Rufete, Mariano and Maxi. I shall show in contrast, as McKinney's quote of Maristany's observation confirms, that the height of Lombroso's influence in Spain was in the mid-1890s, and that while criminal anthropology many have been influential in the representation of Ándara in *Nazarín* (1895), Lombrosian ideas were much less likely to have entered into the composition

⁴⁸ pathological facial features [...] not considered an essential feature of degenerative diseases: the assessment of Pick is instructive, "the medico-psychiatric discourse inaugurated by Morel continually invoked some notion of the degenerate, a given individual whose physiognomic contours could be traced out and distinguished from the healthy. But degeneration also connoted invisibility and ubiquity—thus suggesting the inadequacy of traditional phrenology and physiognomy; it was a process which could usurp all boundaries of discernible identity, threatening the very overthrow of civilization and progress" (Pick 9). This hidden quality of degeneration is also well described by Kershner, "a crucial aspect of degeneracy was that it could not be recognized by any one physical or behavioural symptom: it was the transmission of an "organic disposition" from parents to children." (Kershner 423)

of the novels published between 1881 (*La desheredada*) and 1886-7 (*Fortunata y Jacinta*).

McKinney follows his quotation of Galdós's description of Maxi Rubín in the first chapter of the second part of the novel (Galdós, *Fortunata y Jacinta I* 449, 456) with the comment that the listed features are, "all classic signs of degeneracy" (McKinney 126). I consider that such an evaluation betrays a fundamental misunderstanding of the theory of degeneration,⁴⁹ since degeneration was not interpreted in the early 1880s as a complex of signs and symptoms that could necessarily be recognized by looking at a person, so much as being a theory of causation.⁵⁰ In contrast to the early French proto-psychiatrists (*aliénistes*) Pinel and Esquirol who attempted to classify mental disease on the basis of its clinically apparent features, the approach of Morel, (a psychiatrist not "psychologist" *pace* McKinney p. 124), in 1857 was to propose a classification based on causes,⁵¹ one of which was degeneration. As examples, patients with the suppurative neck lymph nodes of scrofula, the alcoholic and the sexual "pervert" might have none of the physical features or *stigmata* of Maxi Rubín and yet have their conditions categorically ascribed to degenerative processes. Equally, the physically unsullied Isidora in *La desheredada* is the daughter, granddaughter, niece, sister and mother of individuals clearly belonging to a degenerative pedigree, according to the beliefs of

⁴⁹ fundamental misunderstanding: I note that, in his bibliography, McKinney cites only one of the dozens of articles on degeneration in Spain by the historians pre-eminent in this field, Ricardo Campos and Rafael Huertas.

⁵⁰ theory of causation: as Koehler expresses it "It was believed that certain diseases confirmed the presence of degeneration in a family" (Koehler 29). Diseases were considered a manifestation of underlying degeneration. Degeneration was an etiology, not an independent disease.

⁵¹ classification based on cause: In contrast with Pinel and Esquirol, "Morel recommended instead a method of classification based on cause." (Dowbiggin, *Inheriting* 119)

the time, and she suffers from obsessive ideas and detachment from reality that mark her as belonging to the same degenerate pattern. She is, however, the model of physical attractiveness and has no physical “stigmata” such as McKinney lists. While it is true, as I shall show, that early attempts were made by an intern of Morel to establish physical features in degenerative madness such as a long skull with a receding forehead, abnormal ear lobes and undersized genitalia (Doutrebente 205-6), Morel himself appears to have placed no great emphasis on physical features ⁵² and it was left to the criminal anthropologist Cesare Lombroso to list a larger number of physical features supposedly associated with the criminality he attributed to developmental regression.

The time span of Galdós’s novels that McKinney considers (1881 *La desheredada* to 1897 *Misericordia*) seems to cause him to conflate the arrival in Spain of the influence of Morel with that of Lombroso.⁵³ In contrast, I shall show that the

⁵² physical features: it appears to me that the so-called “stigmata of degeneration” associated with Morel were often behavioral, such as sexual variation, depression or delusional psychosis. McKinney, however, states that, “According to Morel, the degenerate would display signs and symptoms, which he called physical stigmata, of his degeneracy” (McKinney 124-5). Elsewhere he states, “According to Morel, the degenerate displayed signs and symptoms of his or her degeneracy, which included a vast range of physical abnormalities that Morel called physical stigmata” (McKinney 61). McKinney gives as his source the essay of Carlson in Chamberlin & Gilman’s *Degeneration: The Dark Side of Progress* (1985) and gives no citation from either Morel’s *Traité de dégénérescence* (1857) or his *Traité de maladies mentales* (1860) to support his claim. Carlson, in contrast, states that Morel used the word *stigmata* only twice. I have not been able to encounter the French word *stigmaté* in either of Morel’s books. “The vast range of physical abnormalities” that McKinney refers to is, therefore, something of a mystery. Unlike Carlson, who correctly makes a distinction between a sign (a recognizable physical or behavioral manifestation) and a symptom (a patient’s complaint), McKinney confuses the two as physical abnormalities.

⁵³ conflate the influence of Morel with Lombroso: McKinney’s sentence runs, “As Luis Maristany’s *El gabinete del doctor Lombroso: Delincuencia y fin de siglo en España* (1973) as well as his follow-up article “Lombroso y España: nuevas consideraciones” (1983), Lily Litvak’s article “La sociología criminal y su influencia en los escritores españoles de fin de siglo” (1974), *Lombroso y la escuela positivista italiana* by Mariano Peset and José Luís Peset, and “La teoría de la degeneración en España (1886-1920)” by Ricardo Campos Marín and Rafael Huertas all demonstrate, degeneration theory arrived somewhat late in Spain, but took hold of

arrival of the two theories was not concurrent and that, in the space of the fast-evolving decade of the 1880s, Morelian degeneration theory preceded the ideas of Lombroso by many years. This is particularly significant when one considers that the majority of Galdós's great Naturalist novels were written before 1888, the year in which Rafael Salillas gave his conference *La antropología en el Derecho Penal* at the *Ateneo* of Madrid (Maristany, *gabinete* 33) that ushered in the decade of Lombroso's greatest influence in Spain (Maristany, *gabinete* 84).⁵⁴ That influence reached its peak of intensity between 1894-97, at the time of a series of anarchist attacks (Maristany, *nuevas* 362) and after a series of articles of rebuttal penned by Emilia Pardo Bazán in 1894 under the title *La nueva cuestión palpitante* (Maristany, *gabinete* 55). By 1898, Lombrosian criminal anthropology was on the wane and already becoming of mostly historical interest (Maristany, *gabinete* 35).

McKinney's two comments that, "degeneration theory arrived somewhat late in Spain, but it took hold of both the professional and popular imagination of Spaniards" (McKinney 44) are interesting. As far as the first part of the statement is concerned, he may be thinking of the statement "La recepción del degeneracionismo en España fue tarde [...] Hay que esperar, en efecto, a la década de 1880 para encontrar en la literatura médica española las primaras adhesiones e interpretaciones

both the professional and popular imagination of Spaniards" giving as a supporting footnote works including Sander Gilman's "Sexology, Psychoanalysis, and Degeneration: From a Theory of Race to a Race to Theory" (1985) and Daniel Pick's *Faces of Degeneration: A European Disorder c. 1848-c. 1918* (1989). I find no reference to Spain in either of these latter two works. Lily Litvak's article lists many Spanish publications on criminal anthropology, almost all after 1890, and cites their influence on Azorín, Unamuno and Pío Baroja but does not mention Galdós.

⁵⁴ greatest influence in Spain: while *L'uomo delinquente* appeared in Italy in 1876 (Maristany, *gabinete* 7), its major influence in Spain had to wait until the French translation *L'homme criminel* (1887) began to circulate in the Peninsula (Maristany, *gabinete* 31; Goode 245). Consistent with this, a Galdosian reference to Lombroso does not appear until *Torquemada en el purgatorio* (310) published in 1894.

del concepto de la degeneración” (Campos Marín & Rafael Huertas, *teoría* 232). If so, he chooses to disregard the complete first sentence which ends, “fue tarde y *desigual*” (my italics). The assimilation of degenerationist ideas in Spain always was very incomplete⁵⁵ and was conditioned by various social and professional factors that I discuss in chapter 2. What I shall show in that chapter is that degenerationist discourse appeared in Spain at least as early as 1846 with Monlau’s *Remedios del pauperismo* and was used in the 1860s and 1870s⁵⁶ by other physicians such as Méndez Alvaro (1864), Laorden y López (1867), Henry Maudsley (1875) and Étienne Lancereaux (1875) (the latter two in Spanish translation) and García Viñas (1877) indicating that the statement of Campos & Huertas needs to be qualified. The conclusion that I shall demonstrate is that Morelian degenerationism arrived in Spain much more than a decade before Lombroso’s criminal anthropology became influential. It was thus French degeneration theory, either through trans-Pyrenean influence on Spanish medicine and psychiatry, or Zola’s later essays and novels, among other possible sources, that formed part of Galdós’s intellectual background as he wrote between 1881 and 1887.

It is clear from this review of the few studies of degeneration theory in Galdós’s novels, that while the writers have made useful contributions, they have also shown themselves unaware of many of the features of the theory and the ways in which it was interpreted in Madrid in the 1880s. I venture to hope that the review of contemporary sources in the following chapters will clarify common

⁵⁵ assimilation of degenerationist ideas in Spain always was very incomplete: “La aceptación por parte de los alienistas españoles de la teoría de la degeneración no fue, ni mucho menos, unánime.” (Campos Marín & Huertas, *teoría* 233)

⁵⁶ degeneration discourse [...] in the 1860s and 1870s: I would also cite the anonymous news article, “Las guardillas y las casas de vecindad” that appeared in *La Voz de la Caridad* in December 1875.

misapprehensions and place an assessment of the theory in Galdós's Naturalist novels on a firmer basis.

4) Galdós's Approach to his Naturalist Novels

In 1913 near the end of his writing career, the almost blind Galdós chose to reveal one of the secrets of his professional preparation for writing *Misericordia* (1897),

hube de emplear largos meses en observaciones y estudios directos del natural [...] y para penetrar en las repugnantes viviendas donde celebran sus ritos nauseabundos los más rebajados prosélitos de Baco y Venus, tuve que disfrazarme de médico de la higiene Municipal. (Galdós, *Prefacio* 5-6)

We can choose to interpret this unusual account of disguise as a physician in a number of ways: could Galdós have been employing a respectable fiction to hide the fact that he had visited *repugnantes viviendas* not disguised as a physician, or was he admitting to a desire to see life through physicians' eyes? Was it essential for him to dress as a physician to be able to investigate what he saw? Could he not have seen almost as much as a non-professional guest of these establishments?

I believe that answers to these questions are suggested by two other first-hand accounts of Galdós's relationship to the medical profession, one by his close friend and personal medical attendant, Gregorio Marañón, and the other by Galdós himself. In the former, Marañón, a famous physician and author in his own right, records the

prestige that physicians held for liberals in the nineteenth century and that in the Galdós's household, “siempre hubo en aquella casa un médico que tenía mágica autoridad” (Marañón, *Elogio* 171). Describing his own relationship with the great writer, Marañón writes of, “una suerte de devoción suya, como ante un poder superior, que para él lo eran mis conocimientos médicos” (Marañón, *Elogio* 171). Such an attitude of awe in an experienced and critical observer of the world like Galdós is highly significant. This adulation was expressed by Galdós, himself, in his quasi-confessional *prólogo* to a collection of short stories by his much-loved pediatrician friend, Manuel Tolosa Latour.⁵⁷ In that essay he depreciatingly compares himself as novelist with a physician,

Comprendo sin esfuerzo que los hombres consagrados al examen del mal físico sientan verdadera avidez por expresar en forma artística los que ven y oyen en su continuo comercio con la humanidad doliente, que es la humanidad más espiritual [...] [si bien] los más viven siempre apartados de toda tentativa de este género, callándose muy buenas cosas, archivando experiencias y casos que nos serían muy útiles á los que tenemos por oficio el pintar la vida y el dolor, y estudiamos nuestro asunto menos directamente que el médico [...] fijándonos en la naturaleza moral antes que en la física. Creo que es más fácil llegar al conocimiento total de aquélla por el de ésta, que

⁵⁷ Manuel Tolosa Latour (1857-1919): distinguished Madrid pediatrician noted for his efforts in legislation to benefit children and in the foundation of an orphanage. His generosity of spirit caused Marañón to refer to him as, “ejemplar arquetípico por sus muchas bondades y su caridad” (Marañón, *Elogio* 172). His close relationship to Galdós (“very intimate friend” according to Berkowitz, *Gleanings* 286) as a friend and inspiration for the latter’s fictional ideal physician, Augusto Miquis, has been recorded by Ruth Schmidt in her collection of their correspondence. A memorial bust to Tolosa was erected in the Retiro Park in 1925, where it may still be seen in the *La Rosaleda* garden. Details of the bust are available online at ([http://www.casinodemadrid.es/sp/revista/Revista46/PDF/056-057%20Tolosa %20 Latour.pdf](http://www.casinodemadrid.es/sp/revista/Revista46/PDF/056-057%20Tolosa%20Latour.pdf)).

dominar la moral sola y sin tener en cuenta para nada ó para muy poco el proceso fisiológico. Por eso envidio tanto á los que poseen la ciencia hipocratica, que considero llave del mundo moral. (Pérez Galdós, *Niñerías* vii-viii)

Galdós here tells us of his passion to come to terms with the moral nature of his subjects and envies what he sees as the advantage of medical men who attend to physical suffering and, as he imagines, witness the most spiritual aspects of mankind. He speculates that some doctors do not have time for, or resist the literary impulse and remain silent about many human dramas that would be most useful to writers. He sees himself hampered by his lack of medical knowledge and his inability to study the physical and physiological features of his subjects that prevents him from seeing them more completely. In a striking comparison of himself as a distant and unsuccessful suitor,⁵⁸ he continues,

vivo en continua *flirtation* con la Medicina, incapaz de ser verdadero novio suyo,⁵⁹ pues para esto se necesitan muchos perendengues; pero mirándola de

⁵⁸ distant and unsuccessful suitor: It would appear that Galdós speaks feelingly for, according to Pattison, his distant adoration of the enchanting Juanita Lund was rudely frustrated in 1879 with the news of the announcement of her marriage to another. Pattison comments, on Marañón's authority, that "Juanita remained the great love of Galdós' life, the woman whom he admired from afar and regretted having lost" (Pattison, *Manso* 139). Pattison also records that he met Doña Juana Lund de Achúcarro, then at the age of 93, in 1951 and writes that she was still, "very bright and active," that she remembered meeting Galdós in 1876 and that she, "became a very close friend of Galdós's sisters." (Pattison, *Creative* 36)

⁵⁹ incapaz de ser verdadero novio suyo: the metaphor appears to haunt Galdós, for he assures Tolosa Latour, "tu amor á las letras no excede á la pasión que á mí me inspira la noble ciencia que ejerces, pasión silenciosa, resignada, como esos noviazgos platónicos y desiguales en que el galán se pasa la vida mirando de lejos á la que cree novia [...] mas sin atreverse á pretenderla en matrimonio" (Pérez Galdós, *Niñerías* ii). The sense of marriage frustrated is further emphasized as he refers to his love of children, "la parte de la humanidad, los chiquillos, que á mí me gustan tanto, como sabes, y con los cuales hago muy buenas migas." (Pérez Galdós, *Niñerías* iii)

continuo con ojos muy tiernos, porque tengo la certidumbre de que si lográramos conquistarla y nos revelara el secreto de los temperamentos y de los desórdenes funcionales, no sería tan misterioso y enrevesado para nosotros el diagnóstico de las pasiones. (Pérez Galdós, *Niñerías* viii)

He is thus describing his admiration for medicine in terms of the most powerful of all human passions and proclaims his faith that in medicine would lay the Holy Grail of the novelist, the well-springs of human behavior and passions, *el secreto de los temperamentos* and, *el diagnóstico de las pasiones*.

If we examine the novels of Galdós, however, we find that they are packed with exactly the kind of physical and physiological detail that he claims is beyond him. It is a truism that his description of Maximiliano Rubín's physical disease and madness in *Fortunata y Jacinta* is, for all practical purposes, a clinical portrait ⁶⁰ and the same might be said of his descriptions of the deaths ⁶¹ of José Relimpio in *La desheredada*, of Alejandro Miquis in *El doctor Centeno*, of Pepe Carrillo in *Lo prohibido* and of Mauricia la Dura and Fortunata herself in *Fortunata y Jacinta*. It is clear to me that Galdós's *envidia* of physicians' powers to delve into the moral nature of man, which so fascinated him, and his *flirtation con la Medicina* were so powerful that he could not prevent himself, consciously or unconsciously, from attempting to study his

⁶⁰ clinical portrait: Álvaro and Martín Burgos (the former from a neurology department in Bilbao) make a similar observation, "La precisión alcanza a los cuadros clínicos, pero también a los mecanismos de la enfermedad, a teorías en vigor en su época." (Álvaro & Martín Burgos 67)

⁶¹ descriptions of the deaths: Montesinos makes a similar observation, "Galdós [...] no deja ya morir a nadie sin auscultarlo y tomarle el pulso, ni deja de puntualizar los síntomas, sin ahorrarse tecnicismos" (Montesinos II 88). This is scarcely the approach of a writer content to portray only the moral features of his characters.

subjects as might a doctor.⁶² In his zeal to imagine the hearts and minds of his created characters as might a physician, Galdós visualized them physically and observed them closely after the manner of his admired medical friends.⁶³ In order to do this he had, in some measure, to think as they did. With degeneration an increasingly pervasive explanatory theory among the doctors about him, it is perfectly natural that he should assume it for his own purposes.

In a project that I believe to be new, I intend to show in the following chapters that this apparently obscure self-revelation⁶⁴ by Galdós contains the key to an important aspect of the poetics of his Naturalist novels. In Galdós's desire to represent his fictional characters physically as well as morally, in the way that doctors might see them, he found himself using a theory of disease and social vice that was current in medical circles in his time, that is, the theory of degeneration. He used this prevailing explanatory theory in order to portray some of the more tragic and unpleasant aspects of the human condition, as the new Naturalist vision demanded, in a way that had previously been impossible. In that, "most curious amalgam of art and science, literature and medicine" (Huertas, *Madness IV* 309) that fused to form the Naturalist literary movement of the 1880s in Spain, of which Galdós was the major contributor, the theory of degeneration played an essential part.

⁶² study his subjects as might a doctor: even to the extent of impersonating a physician (see above).

⁶³ admired medical friends: Interchange between author and physician was not uncommon at the time. Jagoe notes that, "en el siglo XIX, la distancia que hoy se mide entre las ciencias y las letras era much más corta y fácilmente navegable, presentando el aspecto no de una barrera infaranqueable sino de un canal de frecuentes y fértiles intercambios." She goes on to list six well-known physicians of the time who wrote fiction and three novelists who had studied medicine (Jagoe, *sexo* 306). It is my ambition that this dissertation should be in the tradition of this *fétil intercambio*.

⁶⁴ apparently obscure self-revelation: Galdós's revelation is not, in fact, obscure as Harriet Turner has contributed a most detailed and useful analysis (Turner 441-447).

As a corollary to his assumed medical vision, Galdós could not but be as concerned as his hygienist and alienist contemporaries with the disease and suffering afflicting Madrid society.⁶⁵ His study of *la humanidad doliente* would give him ample opportunity to represent *la humanidad más espiritual* in his novels. As a novelist-physician, however, his concern is not only with the fate of individuals, but also with the effect their collective suffering would have upon society as a whole and how much the future of that society might be threatened. The discourse of those fears, institutionalized in degeneration theory, represents the “felt crisis in history” articulated by Pick. Those fears were exacerbated further by disenchantment with the results of the liberal revolution that had been abandoned by the very middle-class that had prosecuted it. Fear of medicalized, social vices, which seemed out of control, fear of a rebellious Madrid underclass⁶⁶ and apprehension about the capacity of the governing classes to cope with both are inescapable features of Galdós’s Madrid.

5) Critical Approaches to be employed in this Dissertation

The essence of this study is an examination of some of the contemporary ideas in medicine and biology that Galdós used to write some of his finest novels. As the few

⁶⁵ disease and suffering afflicting Madrid society: this theme forms the basis of Vernon A. Chamberlin’s dissertation, “The Blind and other Physically Handicapped Characters in the Novels of Benito Pérez Galdós” (1957).

⁶⁶ fear of a rebellious Madrid underclass: it is extraordinary that in a city so different in many ways as London, a very similar fear should be articulated, “the theory of urban degeneration bore little relation to the real situation of the London casual poor in the late Victorian period. What it provided, was not in fact an adequate explanation of London poverty, but rather a mental landscape within which the middle class could recognize and articulate their own anxieties about urban existence” (Stedman Jones 151). Galdós describes having visited Whitechapel and the East End of London and being unable to decide, “entre aquella miseria y la del bajo Madrid, no sé cuál me parece peor” (Pérez Galdós, *Prefacio* 6). Degeneration theory presumed to explain both.

quoted publications in the critical literature indicate, theories of degeneration have received little attention in writing about Galdós's novels and there has been scanty examination of their role in his Naturalist work. With this in mind, I have attempted to confine myself, in a historicist approach, to the medical, psychiatric, social and public health literature using degenerationist discourse on or before the publication of the second half of *Fortunata y Jacinta* in 1887. As with so much else in the 1880s, the period in which Galdós wrote most of his Naturalist novels, intellectual and political developments were a foretaste of what would become much more pronounced in the 1890s. Anarchism, socialism, degenerationism and Lombrosian criminology would all loom much larger in the last decade of the nineteenth century when, in addition, Freudian psychoanalysis would make its debut. It appears to be not uncommon for critics to apply intellectual currents anachronistically ⁶⁷ from the 1890s to the 1880s. In order to avoid this, I have tried to maintain an acute awareness of the chronology of publication of important ideas, which I believe is essential if one is to identify the sources that Galdós and his contemporaries were exposed to and which were available to influence Galdós as he wrote in the 1880s.

As a result of my education in the humanities and in medicine, my perspective of Galdós has the potential to be especially revealing. It is a commonplace that each succeeding age tends to interpret a great artist in its own image and the same might be postulated for literary critics. Joan Ullman sees Galdós as a proto-Freudian

⁶⁷ writers to apply intellectual currents anachronistically: I would cite as examples Ullman and Allison (1974) who place a debate about the conflict between the somatic and psychogenic origins of mental disease in the 1880s, which I have not been able to confirm. I suspect that it may belong more properly in the 1890s. Giné y Partagás and Galcerán in Barcelona and Esquerdo and his half dozen disciples in the Madrid of the 1880s were all dedicated to the somatic hypothesis. Ullman and Allison would have us regard Galdós as a Freudian *avant la lettre*. Similarly McKinney (2010) applies to the 1880s an influence of Lombrosian criminology that would not, in fact, flourish until the following decade.

analyst, for instance, while Akiko Tsuchiya sees him as a semiotician. My view is inevitably colored by my training as a physician, but is also based on Galdós's own confession of a passion for what he imagined to be the unrivalled insights of the physician into the workings of the human soul and its passions. In addition, I can document Galdós's admiration of (and, I believe, identification with) medicine with the unusually large number of clinical descriptions of his characters and his introduction of medical details of varying degrees of obscurity and relevance to his narratives. My background as a doctor devoted to the recognition of human pathology enables me to recognize, in the four Naturalist novels of Galdós studied here, the perceptions of a diagnostic physician *manqué*.⁶⁸ Physicians were responsible for so much of the scientific endeavor that led to the Naturalist vision that it is arguable that the poetics of the Naturalist novel could not have developed without them. I believe it to be no accident that the great summing up in the last of Zola's *Rougon Maquart* novels should have been in the form of the meditations of a physician, *Le docteur Pascal*. As a degenerationist and determinist physician, only Pascal has sufficient understanding of heredity and human nature to understand the pattern and meaning

⁶⁸ diagnostic physician *manqué*: I find that Walter Rubin has also made this observation, for not only does he comment, "Galdós ve al médico como a un ser superior, un ser idealizado" but also that he had, "una afición sincera, un casi consuelo a una frustrada vocación: la suya por la medicina" (Rubin 77-78). It is notable that while there are good and bad priests in the Galdosian obra, physicians are almost uniformly represented as idealized lovers of humanity and science (Luís Granjel 175). In his dissertation, "The *Médico* as a Literary Personage in the Works of Benito Pérez Galdós," Jack Willey finds, "only three unfavorable cases were recorded that qualify as exceptions to the author's consistently benevolent attitude towards the medical profession and its members" (Willey 175). Of these three only one, Zayas who essays to treat the dying Pepe Carrillo (*Lo prohibido* 323), appears in the four novels of this study. Galdós's description of physicians is, almost entirely, that of, "una especie de caballería entre científica y religiosa" (Galdós, *Niñerías* iv). Vozmediano suggests an influence of Galdós's medical reading on the aesthetics of his novelistic vision, "Galdós parece haber asimilado un sustrato de lecturas de carácter médico, que habían de influir en su concepción del hombre y de su visión del mundo y de la realidad imperante" (Vozmediano 681). This is, in my view, an endorsement of my contention that Galdós identified with the outlook of the physician in the aesthetic of his novels.

of the lives of the four generations of the Rougon and Maquart families that preceded him.

I believe that insufficient attention has been paid to Galdós's astonishing clinical observations and the depth of his medical learning. I echo Fuentes Peris' plea to, "look beyond previous spiritual readings of the texts, by focusing attention on Galdós's critical engagement with contemporary discourses on deviancy and control" (Fuentes Peris 198), of which the discourse of degeneration is so prominent an example.

The origins and circulation of degenerationism in the middle-class of which Galdós was a member, and which influenced his interpretation of madness and social vices in Madrid society, will also be a theme of this study owing much to the insights of Foucault. So, too, will be the way in which Galdós used degenerationism to create the specific poetics of this group of his Naturalist narratives. I shall also argue that degenerationism was a form of social control, though the medium of knowledge-power⁶⁹ in that it not only constrained Galdós in the writing of his novels but also had the potential for influencing the way in which his readers saw themselves, and for changing their view of other sectors of society. Such power-through-knowledge indicates that Galdós's project of describing the "middle-class" had a Foucauldian capacity for control, given that the lives of his fictional characters provided a lens

⁶⁹ knowledge-power: "A more extensive and finer-grained knowledge enables a more continuous and pervasive control of what people do, which in turn offers further possibilities for more intrusive inquiry and disclosure" (Rouse 96). It is difficult to imagine finer grained social representations of the age than those which emerge from Galdós's novels. I find a certain irony in the fact that a prime illustration of knowledge-power in the academy has been that of Foucault's own ideas; in works of sociohistorical criticism, his ideas are highly pervasive.

through which not only the middle-class of Madrid could be interpreted but also, in its ideological struggles for power,⁷⁰ how the *Other* of the *masa obrera* could be kept in its place. Together with this technique of power comes that of normalization, the power to establish prescriptive norms,

a whole range of degrees of normality indicating a membership of a homogeneous social body but also playing a part in classification, hierarchization and the distribution of rank. In a sense the power of normalization imposes homogeneity, but it individualizes by making it possible to measure gaps, to determine levels, to fix specialities. (Foucault, *Discipline* 184)

This circulation of normalizing power through the discourse of literature inevitably remained in the hands of the literate middle-class that was determined to maintain its position of dominance. This is particularly well illustrated by the medical profession that, both in France and Spain, endeavored to establish a *regime of truth*, a formulation of Foucault's that is summarized by Fuentes Peris as a discourse, "when the professional group that produces it, motivated by vested socio-political interests, uses its position of power to make it true and underwrite its scientific validity" (Fuentes Peris 90). The theory of degeneration can thus be interpreted as a physicianly *regime of truth*. It was perceived as a metanarrative strong enough to elicit an opposing reaction in the form of the anarchists' degenerationist counter-narrative directed at the *bourgeoisie* in whom anarchists saw self-interest, corruption

⁷⁰ ideological struggles for power: this, of course, is not necessarily a conscious process as Rouse emphasizes, "Agents may [...] exercise power unbeknownst to themselves, or even contrary to their own intentions, if other agents orient their actions in response to what the first agents do" (Rouse 106).

and degeneration, each betraying the welfare of the rest of society. The anarchist movement attempted to subvert established structures and systems of power by turning their degenerationist rhetoric back upon them.

My study will be guided, in addition, by Foucault's views specifically relating to degeneration theory that he expressed in a series of lectures at the Collège de France in 1974-75. In one of these lectures tracing the evolution of ideas in French nineteenth-century psychiatry, Foucault argues that at the beginning of the century, the specialty was seen less as a branch of medicine than as a variety of public hygiene. He continues that it was necessary to codify madness as an illness in order that it fall beneath the rubric of medicine and be regarded as a hazard from which society had to be protected (Foucault, *Abnormal* 118). Passing from the codification of these social dangers in the classification-system of the monomanias, Foucault records the evolution of a notion of degeneration that, "provides a way of isolating, covering, and cutting out a zone of social danger while simultaneously giving it a pathological status as illness" observing that,

psychiatry seems to need and has constantly paraded the specifically dangerous character of the mad as mad. In other words, since psychiatry has functioned as knowledge and power within the general domain of public hygiene or protection of the social body, it has always sought to discover the secret of the crimes that all madness is in danger of harboring, or the kernel of madness that must haunt all individuals who may be dangerous for society. In short [...] that madness belongs fundamentally to crime and crime to madness. (Foucault, *Abnormal* 119-120)

Foucault here clearly expresses his view of the medicalization of power relations in society and the conflation of two varieties of the deviant, the criminal and the mad. Tracing the expression of degenerationist theory he notes the importance accorded to family history, “Finding a deviant element at any point in the hereditary network will be sufficient to explain the emergence of a condition in an individual descendant” and that, “it can give rise to any other kind of illness of any type whatsoever” (Foucault, *Abnormal* 314). He continues to argue that the sheer amplitude of the degenerationist vision ends up being, “the major theoretical element of medicalization of the abnormal” so that if, “it became possible for psychiatry to link any deviance, difference, and backwardness whatsoever to a condition of degeneration, it thereby gained a possibility of indefinite intervention in human behavior” (Foucault, *Abnormal* 315). Foucault’s interpretation of psychiatry’s bid for power in society has more relevance to France than to Spain since, for very good historical reasons, Spanish psychiatry was less prestigious and well-established in the nineteenth century. The *alienistas* of Esquerdo’s generation ⁷¹ in the 1880s were fighting for professional status and recognition in the courts in a way comparable to Morel’s generation of *aliénistes* in France in the 1860s. Foucault’s conception of the imbrication of degeneration theory with knowledge and power and its use to discriminate against the subordinate Other, however, is a valuable one which I shall use as I explore the role of degeneration theory in Galdós’s novels.

⁷¹ *alienistas* of Esquerdo’s generation: as late as 1888, Esquerdo employed much of his *Prólogo* to Garrido’s *La cárcel ó el manicomio: estudio médico-legal sobre la locura* fulminating against the continued refusal of the *tribunales* to accept forensic psychiatrists’ evidence on the insanity of defendants. Members of the legal profession in Spain, in addition to the many non-psychiatrist physicians, whose evidence was given equal value to that of *alienistas*, remained to be convinced that a defendant in a case of homicide could be mad without being obviously raving.

The Marxist interpretation of power relations and the means of production has less relevance to the Madrid of the 1880s, where industrial development was as yet negligible, than to the industrial capitals of Paris, London and Barcelona. In *la Corte*, the majority of lower-class employment was devoted to serving the needs of the *bourgeoisie* and there was no proletariat comparable to that of the industrial regions in Spain of Barcelona, Bilbao and Asturias. An awareness of the pre-industrial, socioeconomic environment of Restoration Madrid is essential, however, if the context of Galdós's novels is to be understood. Great disparity in wealth existed between Spaniards manifested by a rigidly-defined class system, in which the influence of the old aristocracy had given way to the power of the bourgeois *nouveaux riches*, and in which steady immigration from rural regions of Spain and absence of regular employment resulted in a huge, impoverished and potentially rebellious underclass. The roots of Galdós's narratives, deeply embedded in nineteenth-century Spanish history and in the social history of Madrid, must be recognized by those who study his novels, as Sherman Eoff's oft-quoted apothegm ⁷² emphasizes. Eoff also enlarges on, "the choice of nineteenth-century thought ⁷³ as a broad base on which to observe the intrinsic nature of a Galdosian novel" (Eoff, *Galdós* 4). The degenerationist aspect of that, "intrinsic nature" in four of Galdós's novels will be the

⁷² Sherman Eoff's oft-quoted apothegm: "the student of Galdós is obliged to become a student of the nineteenth century." (Eoff, *Galdós* 4)

⁷³ nineteenth-century thought: as examples Eoff cites, "the heavy presence of evolutionism in the nineteenth century and the general emphasis on the concepts of adaptation, change and growth" (Eoff, *Galdós* 4). He continues, "The extension of thought involved reaches out in all directions to include physiology, psychology, sociology, the physical sciences, technology, the consequences of the Industrial Revolution, the prominence of the *bourgeoisie*, the rise of the proletariat; and over all this a philosophical consciousness attuned to a historical (evolutionary) conception of the universe" (Eoff, *Galdós* 4). I would add that the "evolutionary conception of the universe," as already noted, included the notion of the universe in a process of irreversible decay.

theme of this dissertation, an aspect that, up to the present, that appears to have received insufficient scholarly attention.

Another Marxist insight, however, has more relevance to Restoration Madrid where the overwhelming control of society had passed to the middle-class. Galdós illustrated this in *Fortunata y Jacinta* by the complacency of the well-to-do Santa Cruz family on hearing of the return of the Bourbon monarchy, showing that, “la burguesía es indiferente a las formas de gobierno porque puede seguir controlando la vida del país” (Rodríguez-Puertolas, *dominante* 737), since it had, “finally managed to obtain all control and, in the end, even created a bourgeois king for itself” (Blanco-Aguinaga 15). It was inevitable, therefore, that the dominant conceptions of the of the 1870s and 1880s should be those of the *bourgeoisie* given that, “the ruling ideas of each age have ever been the ideas of its ruling class” (Marx & Engels 25), and that their ideology should have served to maintain that middle-class in its position of dominance at the expense of exploited sectors of society. The theory of degeneration as a form of ideology ⁷⁴ was developed exclusively by the middle-class in the nineteenth century, before the 1880s, and served to bolster the middle class’s self-esteem by differentating itself from the *masa obrera* who they used for their own purposes. It was part of Galdós’s provocative genius as a novelist that he should choose to puncture this ideology by showing that, for all the pretensions of the *alta burguesía*, they had their own share of degenerative vices and disease.

⁷⁴ theory of degeneration as an ideology: the uses of the word *ideology* by Marx and Engels have been studied by Raymond Williams who finds at least two senses, first that of illusion, false consciousness or unreality, which he finds predominant in their work, and secondarily, “forms in which men become *conscious* of the conflict arising from [...] changes of conditions in economic production” (Raymond Williams 156). The latter is clearly much more down-to-earth and is to be distinguished from the former, which was, in turn, contrasted with *science*. There are senses in which both usages can be applied to the theory of degeneration.

The need to study primary sources at first hand ⁷⁵ is underlined by Michael Schnepf's very pertinent observation that, "Each generation reads from a distinct perspective and with a progressively limited amount of knowledge about the political, social, and historical events that were taking place at the time of publication" (Schnepf, *Scandal* 45). While much social and political history of later nineteenth-century Spain may be learned from standard texts,⁷⁶ those on the history of ideas in biology and medicine, which were evolving rapidly in Galdós's lifetime, are much more scattered and mostly to be found in articles and books in Spanish ⁷⁷ of more restricted circulation. While the turbulent events of Restoration Spain are relatively well known, the ideas that were shared by psychiatrists and public health physicians have to be hunted for in their original publications and in the specialist literature. Many of the ideas that were then commonplace seem decidedly alien from the point of view of the twenty-first century, for it was before Freudian psychoanalytic theory, before the infectious origins of many diseases were understood and before the rediscovery of Mendelian genetics permitted a modern understanding of heredity. It was also before the general acceptance of August Weissman's discovery of the barrier between somatic and germ plasm cell lines that invalidated the almost universal belief

⁷⁵ primary sources at first hand: my personal observation is that many of the poorly substantiated statements and errors that are repeated in the literature, such as Morel as the originator of degeneration theory, that schizophrenia was most commonly associated with degeneration and that Ido de Sagrario's *borracheras de carne* were due to pellagra, are due to authors citing secondary texts as a substitute for consulting primary sources.

⁷⁶ standard texts: I would cite Carr's *Spain 1808-1939* (2000), Tuñón de Lara's *La España del siglo XIX*. (2000) and Bahamonde and Martínez' *Historia de España siglo XIX* (2007).

⁷⁷ articles and books in Spanish: prominent would be Campos, Martínez & Huertas' *Los ilegales de la naturaleza. Medicina y degeneracionismo en la España de la Restauración (1876-1923)* (2000), Pattison's *El naturalismo español* (1965), González Duro's *Historia de la locura en España* (1995) and López Piñero, García Ballester & Faus Sevilla's *Medicina y sociedad en la España del siglo XIX* (1964), and Philip Hauser's "El siglo XIX considerado bajo el punto de vista médico-social" *Revista de España* (1884).

in the inheritance of acquired characteristics.⁷⁸ Yet those seemingly alien ideas reflected the best scientific opinion of Galdós's day and were accepted by the most advanced thinkers of his time. The theory of degeneration was among them.

The climate of ideas in the 1880s also affected that other literary factor of the literary equation which is more difficult to penetrate at the distance of 130 years, the understanding of Galdós's readers and their reception of his novels. Though the literacy rate must have been higher in Madrid than in Spain as a whole, it was still appalling low by modern standards.⁷⁹ Galdós's reading public⁸⁰ was primarily of the middle-class in which knowledge of the intellectual currents of the day would have been mainly the province of men who could hear them aired at institutions like the *Ateneo* and at the innumerable *tertulias* of the Madrid cafés. With outstanding exceptions like Emilia Pardo Bazán and Concepción Arenal, most women's education, if they received any at all, was directed toward marriageability with limited awareness of trends in science or medicine.⁸¹ The question remains, how much did Galdós's

⁷⁸ barrier between somatic and germ plasm: an advance notoriously ignored by Vallejo-Nágera, among others, in 1937.

⁷⁹ literacy rate: According to the census "Población de España" published by Jimeno Agius in the *Revista de España* in 1885, the literacy rate among males in the province of Madrid was almost 62% and among females, 39%. At the other end of the scale, male literacy in the Canary Islands was reported as 15% and female literacy in the province of Orense 4% (Jimeno Agius 568-570).

⁸⁰ Galdós's reading public: Pura Fernández quotes a possible reading public of 5 million. Clarín in 1882 more gloomily estimated the number as 2 million (Pura Fernández, *Bago* 126).

⁸¹ trends in science or medicine: this statement must be qualified by reference to the thriving trade in books aimed at middle-class women such as Pedro Monlau's *Higiene del matrimonio ó el libro de los casados* 5^a ed. (1881) and Ángel Pulido's *Bosquejos médico-sociales para la mujer* (1875), which kept them abreast of contemporary medical thinking while, at the same time, reinforcing current practices of restricting the woman's sphere of influence to motherhood and the home. Consistent with this policy of control, Pulido's chapter in his *Bosquejos* entitled, "peligros de la lectura para la mujer" is an attempt to warn women away from fiction with an over-exciting or sexual content, with warnings of, "irritabilidad de su sistema nerviosa" to the point that, "estremecería convulsivamente [...] con un terrible susto, muy fácilmente mortal." (Pulido, *Bosquejos* 62)

readers understand of the science and medicine that went into his novels? To what extent were they able to understand Galdós's veiled references to taboo topics such as sexual "perversions," prostitution and venereal disease? We know from the great commercial success of the explicit novels of Eduardo López Bago, Alejeandro Sawa, José Zahonero and R. Vega Armentero, among others grouped under the rubric of Sawa's coinage, *Naturalismo radical*,⁸² that the decade of the 1880s saw the growth of an enormous appetite for sexually-orientated fiction.⁸³ The capacity of many of Galdós's readers to understand literary nuances on sexual matters should, therefore, not be underestimated.

6) Conclusions

The approach to this study, therefore, will be to assess the presence of degeneration theory in a group of Galdós's Naturalist novels and to show the way in which he used degeneration theory to write them in an entirely new way. I propose to critique the novels from historicist, medical and Foucauldian perspectives that will reveal aspects of the novels previously ignored or under-appreciated in the critical literature.

I shall pursue the proposition that degeneration theory served the purpose of articulating fear of social change that was perceived as undermining the stability of

⁸² *Naturalismo radical*: "el proyecto de renovación literaria bautizado como 'naturalismo radical' o de 'barricada' por uno sus secutores, A. Sawa." (Pura Fernández, *Bago* 5)

⁸³ enormous appetite for sexually-orientated fiction: especially after the *succès de scandale* of López Bago's *La Prostituta* in 1884, Fernández records that it, "mueve(n) al público a consumir masivamente sus obras" in, "un momento histórico caracterizado por una marcada receptividad ante las novedades científicas, los temas relacionados con la vida privada y el polémico naturalismo francés, cuyas traducciones se multiplican a lo largo de toda la década de 1880." (Pura Fernández, *Bago* 125)

society and, specifically, the status of a newly established, governing *bourgeoisie*. I shall argue that, exacerbated by a tumultuous backdrop of war, revolution, industrialization and urban poverty, the cluster of social vices of alcoholism, tuberculosis, syphilis and madness, primarily considered to be associated with the urban poor, was seen to be especially dangerous. I shall show that currents of thought in biology and medicine in the nineteenth century were used by professional classes to adapt an old degenerationist metanarrative to form a discriminating, “scientific” theory of degeneration.

I propose to show that this theory served many purposes. In the hands of psychiatrists and hygienists it provided a conceptual means of coming to terms with fearful social realities. Degeneration theory was, in a phrase attributed to Clifford Geertz, a “meaning imposed on reality to make it understandable,” and once understandable, more readily controllable. At the same time it enabled physicians, as presumed distanced and objective specialists, to claim special knowledge as they exploited their professional understanding to enhance the status of their nascent professions, to elicit governmental support and to argue for increased power in society, both inside and outside the confines of the institutions of reclusion: the hospital, the asylum and the prison. I shall show that degenerationist thinking passed into the discourse of many fields of intellectual endeavor and that it was instrumental in the transition of Realist literature into that of Naturalism. I shall argue, furthermore, that degenerationism was an essential tool for Zola in France, for Galdós in Spain, and their contemporaries in the Naturalistic representation of the harsher realities of disease and of man’s biological nature. I shall emphasize the role of this middle-class-mediated theory, very much the construct of physicians, in defining the

feared Other of the impoverished urban masses and, consciously or otherwise, attempting to control and dominate it.⁸⁴

I shall also show that the few references to degeneration theory in Galdós's novels by previous critics reveal misunderstandings. Some of these have been thrown into relief by the extensive work of Spanish medical historians in the last two decades. Others appear to be perpetuations of misstatements in the secondary literature that have been relayed by authors who appear not to have consulted the primary sources that I have in preparation for this dissertation. While the resources of a master novelist of Galdós's stature are legion and it is true that, "Galdós structures his novels around political, social, and aesthetic questions much more readily than around scientific notions (Pratt 39), I shall show that the theory of degeneration, underappreciated as it has been in the world of Galdós criticism, is an essential and enabling part of the poetics of his Naturalist novels.

7) Structure of this Dissertation

There are six chapters followed by a Works Cited section. The first chapter studies the evolution and medicalization of the concept of degeneration in France in the period extending from the eighteenth-century Enlightenment to Zola's Naturalist movement and his manifesto of its aesthetic in his Preface to the second edition of *Thérèse Raquin* (1868) and in *Le Roman expérimental* (1880). The second chapter

⁸⁴ feared Other [...] attempting to control and dominate it: in the context of the English experience, Greenslade writes, "Degeneration theory was at the root of what was, in part, an enabling strategy by which the conventional and respectable classes could justify and articulate their hostility to the deviant, the diseased and the subversive" (Greenslade 2), converting their, "class fear into biological fact" (Greenslade 23). These observations are entirely transferable to the situations in Spain and France.

explores the adoption of degeneration theory in Spain firstly by public health physicians and proto-psychiatrists (*frenópatas, alienistas*), secondarily by writers like Galdós following the arrival of Zola's novels in Spain in the 1870s and latterly as a feature of the rhetoric of the anarchist movement. The third to sixth chapters study the way in which Galdós used degeneration theory in four of his great Naturalist novels: *La desheredada*, *El doctor Centeno*, *Lo prohibido* and *Fortunata y Jacinta*. The appearance of degenerationist ideas, the way Galdós used them creatively in a manner unique to each novel, together with the appearance of common themes, will be emphasized. A summary of the findings of the study appears in the Conclusions of chapter 7.

Chapter 1: Degeneration Theory in Eighteenth and Nineteenth Century France and the Rise of Naturalism

Tout se passe comme si les médecins étaient amenés à traduire dans un langage scientifique les fantasmes que hantaient la bourgeoisie de leur temps.

Alain Corbin

l'écrivain se prend pour un médecin et théorise son faire en langage médical.

Henri Mitterand

1) Introduction

This chapter will trace the evolution of the concept of degeneration from the discourse of French Enlightenment natural philosophers to its adoption by early psychiatry or *aliénisme*,⁸⁵ its increasing application to social and medical thought in the nineteenth century and to its incorporation by Émile Zola into his theory of the Naturalist novel. The development of degenerationist thinking in the new fields of public health (*hygiène*) and psychiatry will be described followed by its blossoming into an all-encompassing theory of insanity and environmental disease as a result of

⁸⁵ *Aliénisme*: defined as, “Partie de la médecine qui traite de l’aliénation mentale” (*Grand Robert de la langue française*). *Grand Robert* goes on to note that this word, which it claims first appeared in 1833, tended to be associated with mental disturbance in which a physical underlying cause was present, “Durant le xix^e siècle, âge d’or de l’aliénisme, les psychiatres vont chercher l’explication dernière des désordres de la conduite, de l’affectivité et de la pensée dans des causes physiques.” By contrast, *psychiatrie*, which appeared in 1842, was, “rare avant la fin du xix^e” and tended to be associated with, “les maladies mentales, les troubles pathologiques de la vie psychique,” which were more functional in nature. Though not rigidly, I propose in this dissertation to use *aliénisme* and *aliéniste* (*alienismo*, *alienista*) to refer to psychiatry and psychiatrists up to 1890 and to reserve *psychiatrie* (*psiquiatria*) for the growth of modern psychiatry after 1890 founded by the German-language contributors of Austria, Germany and Switzerland.

the visionary endeavors of Bénédict Morel. The parallel developments in the study of heredity, positivist science and social determinism will be mentioned and finally their joint incorporation into Zola's new aesthetic of the novel will be described.

The degeneration concept was commonly used in the mid-eighteenth century to criticize social phenomena such as the perceived ill-effects of urban culture and life, loss of physical vigor in the nation's citizenry, and the harmful influence of certain fields of endeavor such as scholarship. Most writers lived in cities and faced the problems of urban life at close quarters. In common with many city-dwellers, as the long tradition of pastoral literature illustrates, they were apt to idealize the health and vigor of those who pursued a rural existence and to compare the state of those who lived in towns unfavorably with that of country-dwellers. The ill-effects of urban life were considered to affect not only individuals directly, but also their offspring. Well before Lamarck's ⁸⁶ writings on the inheritance of acquired characters, the ill-effects of a bad environment were thought to be hereditarily transmissible. In the latter eighteenth century, natural philosophers were incorporating degenerationist thinking into theories of the origin of species and the races of man. The concept was applied to mental retardation and was used to account for mental disease and any behavior considered aberrant. Degenerationist thinking also entered the discourse of the developing science of *hygiene* or public health. Following the major political and social upheavals in early nineteenth-century France, degeneration came to be applied

⁸⁶ Jean-Baptiste Pierre Antoine de Monet, Chevalier de la Marck (1744-1829) ("Lamarck"): French soldier and naturalist who studied medicine for four years. Mainly remembered for a theory of inheritance of acquired characteristics that reflected received wisdom of his day and that was accepted by many contemporary natural historians. Lamarck elaborated a theory of evolution in accordance with natural laws that involved ascent up a ladder of increasing complexity, associated with adaptation to the environment through use and disuse. A definitive text on his era is that of Pietro Corsi, *The Age of Lamarck* (1988).

as an explanatory tool to account for many of the problems of the nation, real and imagined. It entered not only into the thinking of the medical profession, but also into the discourse of thinkers in the fields of history, sociology, biology, philosophy, anthropology and racial theory. It seems inevitable therefore, that degeneration theory should appear in literature, though, perhaps, less obvious that it should be part of a literary movement as profoundly based on the medical and biological sciences as was the Naturalist aesthetic of Émile Zola.

2) Eighteenth Century Degeneration Theory as Social Critique

The revival of rationalism in the eighteenth century Enlightenment was associated with a conception of science that was quite different from that found in the Middle Ages and the Renaissance (Roger 133). Following the empiricist and Epicurean atomist writings of Pierre Gassendi ⁸⁷ (“Gassendi”) and the mechanistic view of physics and biology postulated by René Descartes ⁸⁸ (“Descartes”), there was a, “rejection of the authority of the ancients, scorn for book learning, and the search for evidence in reasoning and in the certainty of facts [...] the cardinal virtues indispensable to modern scientists” (Roger 133). This is not to suggest that all ideas after 1700 were empirically verifiable in the modern sense,⁸⁹ but it does indicate a new freedom to theorize and to make direct observations, at least partly free from the influence of past authority. Associated with this new, rational vision, however, was the

⁸⁷ Pierre Gassendi (1592-1655): French philosopher, priest, scientist, astronomer, and mathematician. He was one of the first to formulate the modern, scientific outlook characterized by scepticism and empiricism.

⁸⁸ René Descartes (1596-1650): French philosopher, mathematician, physicist, and writer. Much later Western philosophy has been stimulated by his writings.

⁸⁹ empirically verifiable in the modern sense: ideas that are based on empirically verifiable and reproducible data.

paradoxical persistence of the ancient concept of moral and physical degeneration, which was never defined empirically, suggesting that the force of long tradition was sufficient to guarantee its survival in Enlightenment philosophical and scientific discourse.

One of the strengths of degeneration as a concept was the wide range and flexibility of its application. It could be thought of as an ancient and continuous process active since the Fall of Man, it could be seen as something that took place within a generation of corrupting urban life, or alternatively it might be considered the result of the ill-effects of civilization in an intermediate period. The latter is famously illustrated, in the context of social and racial theory, by Rousseau ⁹⁰ who wrote in 1754,

Ajoutons qu'entre les conditions sauvage et domestique la différence d'homme à homme doit être plus grande encore que celle de bête à bête [...] toutes les commodités que l'homme se donne de plus qu'aux animaux qu'il apprivoise sont autant de causes particulières qui le font dégénérer plus sensiblement. (Rousseau, *Discours* 32)

Rousseau argues here that man's degeneration derives not so much from his distant ancestors as from the ills of contemporary civilization. Such ills are also described in his *Préface de Narcisse* (1753), where he extends his condemnation to the over-civilized scholar as, "weakened, cowardly and above all morally degenerate" (Vila

⁹⁰ Jean-Jacques Rousseau (1712-1778). Genevan philosopher, writer and ideologue of 18th-century Romanticism. His political philosophy was influential in inspiring the French and American Revolutions.

104). Following ancient tradition the concept of degeneration, both moral and physical, is a warning about how men should conduct their lives. As with the warnings against miscegenation in ancient Hindu society and against corruption in Imperial Rome, the threat of degeneration is linked to the anxiety of commentators confronted by behavior or events seen as threatening to established, social order. From the time of Rousseau onwards, most of those threatening social changes appear to be related to the growth of cities (Coleman 35), and to the development of unstable polarization of society into leisured and impoverished classes.

Twenty years after Rousseau *Préface* in 1775, Théophile Bordeu,⁹¹ physician and friend of Diderot, writes of the deterioration he saw in Frenchmen as a consequence of the corruption of city life (Vila 47). In 1760, another physician, Antoine Le Camus⁹² was sufficiently concerned by perceived degeneration in both city-dwelling Frenchmen and in the entire nation, that he proposes the proto-eugenic notion of encouraging “well-made men” in their procreative duties and of sending off “regiments of malformed men” to war, as being more dispensable (Vila 87). The Swiss physician Samuel-Auguste Tissot⁹³ in 1768 saw the scholarly life as physically and morally degenerating partly due to a perceived association with onanism (Vila 99, 104). Such critique of the leisured and intellectual élite is found in many contemporary medical treatises. As an example, Tissot concludes that the atrophy which he saw in the genitals of men of letters is the result of attenuation of animal

⁹¹ Théophile de Bordeu (1722-1776): French physician and friend of Diderot, he contributed to the *Encyclopédie*.

⁹² Antoine Le Camus (1722-1772): French surgeon who wrote about physical conditions thought to affect the soul and the means of curing disturbances of understanding and will.

⁹³ Samuel-Auguste Tissot (1728-1797): Swiss physician to kings and princes. He wrote about epilepsy but is most famous for his treatises on masturbation such as *L'onanisme ou Dissertation sur les maladies produites par la masturbation* (1760) and a similar text published in Spain in the same year.

spirits induced by intense and sustained brain activity and laments the rarity with which, “great men had sons worthy of themselves,” suggesting that the scholarly life is, “degenerating not only for the individual that pursues it but for future generations as well” (Vila 99). As in the criticisms of the earliest times, physical and moral are considered interrelated, such that degeneration affects either one or both. Anne Vila describes another of Tissot’s medico-social commentaries on the ill-effects of domestic service on peasants, on whose behalf he fears a degenerative influence (Vila 215). She observes that, “medicine at the height of the Enlightenment was also filled with irresolvable tensions over the meaning of enlightenment and over the ominous specter of human degeneration.” (Vila 107)

Related medico-social criticism was aimed at the artificiality of town life and focused on the affliction of the *vapors* (later interpreted as a form of hysteria) seen, above all, in women. Joseph Raulin ⁹⁴ in 1758, Pierre Pomme ⁹⁵ in 1760, and Jean-Baptiste Pressavin ⁹⁶ in 1770 identify the condition as one of wealthy, urban-living men and women who, under the influence of a soft life, “degenerate” to an equally delicate temperament (Vila 229). Excesses of study or debauchery, and overindulgence in tobacco, chocolate, coffee and fermented liquor are seen to sap the life force of the human race and to contribute to hereditary debility (Vila 233).

3) Degeneration Theory in Eighteenth Century Natural Philosophy

⁹⁴ Joseph Raulin (1708-1784): French physician and accoucheur, physician to Louis XV.

⁹⁵ Pierre Pomme (1735-1812): French physician who taught at Montpellier. Consultant to the king, author of a treatise on the vapors, *Traité des affections vaporeuses des deux sexes* (1760).

⁹⁶ Jean-Baptiste Pressavin (1734-post 1798): surgeon of Lyons and one-time Jacobin. Author of several texts the best know of which is *L'Art de prolonger la Vie et de Conserver la Santé* (1786).

The century of Linnæus ⁹⁷ witnessed a passion for the classification of living things. Through an increasing awareness of the fossil record and a dawning appreciation of an antiquity of the earth, undermining as it did Old Testament narratives, fascination developed for species that had no living representatives. Such an interest was expressed by the Marquis de Chastellux ⁹⁸ when he wrote in 1772, “the enormous size of the bones of [extinct] land animals proves the antiquity of their race and reveals a slow degeneration of species” (Hampson 224) demonstrating, as Hampson observes, that, “genuine scientific evidence could be quoted in support of an untenable theory” (Hampson 224). He continues,

in so far as the evolution of species was admitted at all, it seemed more plausible to think in terms of the transmission of hereditary defects, gradually weakening an original creation, rather than to postulate the evolving of more complex life forms, for which no clear scientific evidence was yet available. (Hampson 224)

suggesting that traditional belief in original perfection at the moment of Creation still carried some weight and that any suggestion of evolution involving improvement would undermine the doctrine of the divinity of the original handiwork. If there was to be any change in species since the Creation, it would have to be for the worse. The age-old metanarrative of degeneration from a distant Golden Age seems to have

⁹⁷ Linnaeus (Carl von Linné) (1707-1778): Swedish botanist, physician, and zoologist, who devised the modern scheme of binomial nomenclature, the father of modern taxonomy.

⁹⁸ Marquis de Chastellux (1734-1788): writer, historian and philosopher. While a soldier, he served in the American Revolutionary War as the principal liaison officer between the French commander in chief and George Washington.

retained its mythic explanatory power despite the Enlightenment's ostensible commitment to rational, empirical thought.

The concept of degeneration was used to explain not only the origin of species of plants and animals but also the diversity of man himself. Accounting for the varied features of human races was an increasingly urgent intellectual problem as a result of contact with unfamiliar aboriginal peoples encountered in the process of French colonial exploration.⁹⁹ In his great *Histoire naturelle, générale et particulière* (1749-1767), Buffon ¹⁰⁰ included an essay *De la dégénération des animaux* (1766) (Buffon, *Histoire XIV* 311), basing his definition of a species on its capacity to produce fertile offspring. Such a definition forced him to conclude, in the face of opposing theories, that the human races were all part of a single species (Sloan 293). In order to explain the differences between races he resorted, in *Variétés dans l'espèce humaine* (1749) (Buffon, *Histoire III* 371), to the idea of degeneration as a result of the influence of variations of food, geography and climate as peoples spread over the globe (Sloan 302, 306). Inherent in this interpretation was the belief that Europe was the site of the creation of man and that degeneration in human races was greatest the further away from Europe they had traveled. Buffon cited the Hottentot in Africa and the aboriginal peoples of North America and even postulated the orang-outang as a

⁹⁹ colonial exploration: the rhetoric of moral retrogression and degeneration was still being employed in England in the 1860s as anthropologists, of whom Alfred Wallace was one, sought to account for the, "sweeping away of every vestige of earlier inhabitants" that was taking place in British colonial settlements all over the world. Phrases such as, "vast intellectual superiority" and a, "flood of civilized life overspreading the globe" are to be found, though these assumptions of European superiority were not unchallenged. Illustrations of the debate are to be found in the reports of Richard Lee and T. Bendyshe before the Anthropological Society of London in 1864 (see works cited).

¹⁰⁰ Georges-Louis Leclerc, Comte de Buffon (1707-1788): French naturalist, mathematician, cosmologist, and encyclopedic author, also director of the *Jardin du Roi* (later *Jardin des Plantes*).

possible terminus of human degeneration (Sloan 319). His views were thus directly opposed to Rousseau's conception of primal perfection in the *noble savage*, a paradox in view of the fact that both he and Rousseau employed a degenerationist discourse to reach their contrasting conclusions.¹⁰¹ It should also be noted that Rousseau's idealization of savage man was purely imagined since he had no first-hand experience of primitive societies.

Two post-Revolutionary successors to Buffon at the Muséum d' Histoire Naturelle, both leading natural philosophers, were Étienne Geoffroy Saint-Hilaire¹⁰² and Georges Cuvier,¹⁰³ who speculated on the role of degeneration as a mechanism for the formation of species in their 1798 paper on orang-outangs (Corsi 164).

4) Degeneration Theory in the Early Nineteenth Century

¹⁰¹ contrasting conclusions: outside France, there were other examples of degenerationist racial theory. The Englishman, Edward Long (1734-1813), British colonial administrator and historian, in his *History of Jamaica* (1774) commented on the degeneration that he observed in the mixture of races near Jamaica, "Let any man turn his eyes to the Spanish American dominions, and behold what a vicious, brutal, and degenerate breed of mongrels has been there produced, between Spaniards, Blacks, Indians, and their mixed progeny; and he must be of opinion, that it might be much better for Britain, and Jamaica too, if the white man in that colony would abate of their infatuated attachments to black women and, instead,[...] by raising in honorable wedlock a race of unadulterated beings" (Long, *II* 327). Long was convinced that negroes constituted a different species of the genus *homo*, that they were degenerate and that, as a result, black-white hybrids, like other inter-species crossings, would eventually become infertile (Stuart Gilman 169). The pragmatic need to justify slavery made this application of degeneration theory dominant during much of the nineteenth century (Stuart Gilman 170).

¹⁰² Étienne Geoffroy Saint-Hilaire (1772-1844): French naturalist, colleague of Lamarck and fellow evolutionist.

¹⁰³ Georges Cuvier (1769-1832): French naturalist and zoologist. He established the fields of comparative anatomy and paleontology by comparing living animals with fossils. He is known for establishing extinction as a fact on the basis of study of illustrations of a specimen of *Megatherium* sent to the Royal Cabinet of Natural History in Madrid in 1789 by the viceroy of Río de la Plata. The skeleton was assembled and drawn by one Juan Bru by 1793 and yet-to-be-published engravings were sent to Cuvier, who published a paper on them in 1796 (López Piñero, *Bru* 158-159).

The concept of degeneration had found its way by the turn of the century into many fields of inquiry. From a dismissive definition by Diderot ¹⁰⁴ in his *Encyclopédie IV* of 1754 under “*Dégénérer Jardinage*” as the deterioration of the seedlings of an onion, its meaning was more broadly interpreted in the 1793 *Dictionnaire* of Abbé Rozier ¹⁰⁵ where both animals and plants were considered to be susceptible to degeneration as a result of adverse changes in climate, nutrition and terrain (Rozier, *Dictionnaire III* 584). Cultivated plant varieties were considered to degenerate if allowed to revert to their wild state and domesticated animals were perceived as producing degenerate progeny when allowed to breed with inferior stock. In 1814, the *Dictionnaire des sciences médicales* of Panckoucke ¹⁰⁶ included a long entry on *dégénération* by René Laennec,¹⁰⁷ the chest physician famous in medicine for his invention of the stethoscope. Laennec briefly notes the general sense of, “le changement de nature d’un objet quelconque, et emporte en même temps l’idée du passage de l’état primitif à un état inférieur ou pire. Les médecins l’ont aussi employé souvent dans se sens.” The majority of his entry, however, is devoted to a definition in the context of pathological anatomy of which Laennec had considerable experience. While noting the common use in medicine of the terms *tuberculous*, *cancerous* or *cartilaginous degeneration*, which may involve several different organs, he proposes that the word should be restricted to, “la transformation d’un tissu quelconque de l’économie animale en un substance de nature différente” and thus limited to changes

¹⁰⁴ Denis Diderot (1713-1784): French philosopher, art critic, and writer. He was co-founder and chief editor of, and contributor to, the *Encyclopédie*.

¹⁰⁵ Jean-Baptiste François Rozier (1734-1793): French botanist and agronomist.

¹⁰⁶ Charles-Louis-Fleury Panckoucke (1780-1844): French writer, publisher and editor, son of the encyclopedist editor Charles-Joseph Panckoucke (1736-1798) famous for his *l’Encyclopédie méthodique*

¹⁰⁷ René-Théophile-Hyacinthe Laennec (1781-1826): French physician who invented the stethoscope in 1816 and pioneered its use in diagnosing chest conditions. He was professor at the *Collège de France* at the time that he died of tuberculosis.

in the tissue of a single organ. He describes bony change within cartilage and fibrous tissue and goes on to comment that, “La dégénération graisseuse du foie est encore assez commune,” an observation that continues to be honored in the form of cirrhosis named after him.¹⁰⁸ Laënnec follows his entry on *dégénération* with one on *dégénérescence*, a relatively recent and uncommon locution that he considers synonymous and redundant. Though the latter variant of the word came to predominate, Laennec’s use of the definition of degeneration in the context of pathological anatomy and histology persists to this day.

A discussion of degeneration almost entirely in a botanical context is that of Jean Baptiste Antoine Guillemin,¹⁰⁹ quoting the work of his mentor the Swiss botanist de Candolle.¹¹⁰ Guillemin’s essay, which appeared in the *Dictionnaire classique d’histoire naturelle* in 1824, attributes to degeneration the appearance of *monstruosités* in the plant kingdom and comments,

Aujourd’hui il es reconnu que la plupart de ces monstruosités son plutôt des retours vers la nature primitive des organs, que des écarts de cette nature, nous avons dû étudier les Dégénérescences comme moyens de distinguer les rapports des Plantes. (Guillemin 383)

¹⁰⁸ Laënnec’s cirrhosis: “usually due to chronic alcoholism” is associated with, “small regenerative nodules, sometimes containing fat.” Fatty degeneration being the, “abnormal formation of microscopically visible droplets of fat in the cytoplasm of cells.” (*Steadman’s Medical Dictionary* 28th ed. 2006)

¹⁰⁹ Jean Baptiste Antoine Guillemin (1796-1842): French physician, botanist and herbalist.

¹¹⁰ Augustin Pyrame de Candolle (1778-1841): Swiss botanist and taxonomist who founded the scientific study of botanical geography.

A prolonged discussion of the nature of degeneration written by Frédéric Cuvier¹¹¹ in the *Encyclopedie des gens du monde* (1833-1844),¹¹² refers to degeneration as being loosely defined as all hereditary change (*Encyclopedie des gens*, VII ii 672). He then goes on to subdivide the phenomenon: 1. Absolute, where organ development is so impaired that survival is limited, 2. Relative, when the organism is less useful and attractive than its human owner would like, and 3. Mixed, where the organism, animal or plant, is bred to a desired state by man only to be weakened and die as a result. Examples of absolute degeneration provided are the silver birch that is stunted and short-lived in the vicinity of glaciers and the extremes of the domestic mastiff and the tiny Bichon lap-dog that Frédéric Cuvier considered stupid with limited capacity for reproduction. Examples of his mixed degeneration are domestic animals such as dogs, cows and horses that do not thrive in extremely hot or cold climates. Cuvier goes on to propound the Lamarckian doctrine, that degenerative changes imposed upon individual animals and plants, as long as they do not destroy them, are perpetuated in future generations, summarizing his view, “C’est ainsi que se forment les variétés et les races, c’est là que se trouve la source de toutes les dégénération.” He sees all of human, animal and plant development subject to the laws of hereditary degeneration influenced by the environment and attributes all of man’s successful breeding of plants and animals to the same process. Interest in horticulture, agriculture and the breeding of farm animals is similarly reflected in the entry of the *Nouveau dictionnaire classique d’histoire naturelle* of 1846 where degeneration is defined as, “ce qui se passe chez l’animal et la plante améliorés par l’homme quand ils retournent

¹¹¹ Frédéric Cuvier (1773-1838): French zoologist and paleontologist, younger brother of George.

¹¹² The date of publication of volume VII of the *Encyclopédie*, directed by Artaud de Montor, is not given, but Frédéric Cuvier’s contribution cannot be later than 1838, the year in which he died.

vers leur type primitif.” The author warns of the risks of degeneration when animals are allowed to breed randomly without the judicious selection of mating pairs by their owner.

The definitions of degeneration ¹¹³ among natural philosophers and physicians between 1793 and 1844 vary greatly according to their interests and professional background. The principal themes may be listed as follows:-

1. A change from better to worse. This may affect a complete human being or may be used more technically to describe morbid anatomical changes seen in disease. It also comprises the deterioration of normal aging.
2. The concept of regression or reversion to a more primitive state is frequent, used to describe reversion to earlier strains of plants and animals even before

¹¹³ definitions of degeneration: A detailed analysis of the usage of *dégénération* and *dégénérescence* from the eighteenth century onwards is provided in the etymological study of encyclopedias and dictionaries of Claude Bénichou (1983). Additional sources from Bénichou not mentioned in the text include the first edition of the dictionary of Adelon of 1823 that summarizes the anatomico-pathological definition of Laennec without adding to it; the dictionary of Bégin of 1823 that lists *dégénérescence* as a synonym of *dégénération* without adding any meaning in addition to a general deterioration; the text of Nysten of 1833 that repeats the observation of Laennec that the word is common among doctors, and appears to be an even more compressed version of his definitions. Similarly, the dictionary of Beaudé of 1849 restricts itself to a purely anatomico-pathological definition. By contrast the entry of Eugène Boeckel in Jaccoud’s *Nouveau Dictionnaire de médecine et de chirurgie pratiques* of 1872 prefers *dégénérescence* to *dégénération* and incorporates Virchow’s work on cell-related, histological degeneration (excluding any reference to Laennec’s work). Boeckel discusses Prosper Lucas on inherited degeneration Morel’s expanded theory as a cause of hereditary madness and alcohol-related decline, as well as racial and national degeneration and the related issue of extinction of species. Boeckel also includes the use of the word to indicate processes associated with normal aging. The *Dictionnaire Encyclopédique des Sciences Médicales* (1882) of Dechambre gives the genealogy of *dégénérescence* from the definitions of Buffon and Laennec with citation of the expanded definition of Morel, also including racial theory.

Darwin gave it an evolutionary significance.¹¹⁴ Plants and animals may produce “regressive” forms independent of undesirable cross-breeding.

3. Loss of the desired characteristic of a cultivated plant or a selectively bred animal variety as a result of uncontrolled breeding with wild or less desirable forms.

4. Degeneration as an “error of nature” (Buffon).

5. Degeneration as a source of variation between related varieties and species, including the races of man.

The flexibility and lack of precision of degeneration theory permitted an unresolved paradox. It could be used to account for the emergence of new life forms on the one hand, and regression to earlier, primitive forms on the other. It could account for the the loss of primitive well-being in the course of civilization, or the reversion to savagery from a civilized norm. The more technical definition of Laennec, applied to changes in pathological anatomy limited to the tissues of a single organ (as distinct from processes that extend across organ boundaries), is found in many of the nineteenth-century dictionaries and encyclopedias that I reviewed and still persists in current medical usage.¹¹⁵

5) Degeneration Theory and Hygiene

¹¹⁴ regression [...] even before Darwin gave it an evolutionary significance: the theme of reversion to an earlier evolutionary form appears repeatedly in *The Descent of Man*. In the summary of that work, he comments that, “man is descended from some less highly organized form [...] the rudiments which he retains, and the abnormal reversions to which he is occasionally liable” (Darwin, *Descent* 629). The fear of reversion undoing civilization’s gains is memorably expressed by Alfred, Lord Tennyson in his *Locksley Hall Sixty Years After* (1886), “Evolution ever climbing after some ideal good and Reversion ever dragging evolution in the mud.”

¹¹⁵ current medical usage: the 2006 edition of *Stedman’s Medical Dictionary* lists 76 distinct varieties of pathological degeneration many of which are recognized under the microscope.

In the first half of the nineteenth century a paradigmatic shift took place in the meaning of degeneration. By the time of his *Considérations sur les causes de la dégénération physique et morale du peuple des grandes villes* (1847) on the great cities of France by Bertulus,¹¹⁶ it had passed from being an intellectual tool to investigate individual aspects of biology and society, to a new, inclusive theory that included the following features:

1. Medicalization, with incorporation into the rhetoric of the new hygiene¹¹⁷ and social medicine that was primarily directed at the poor of the newly expanding cities. Just as public hygiene primarily concerned itself with the medicine of the urban masses,¹¹⁸ so the newly evolved form of degeneration theory focused upon communities, cities and nations.
2. A bourgeois perspective toward the ill, the poor and the Other, the latter being individuals manifesting differences that threaten social control and order (Sander Gilman, *Difference* 21). Degenerationists had always been from the literate professions and, with the emergence of a middle-class in the early nineteenth-century, that tradition continued involving a disproportionately large number of physicians and those such as Taine and Zola (see later), who were profoundly influenced by contemporary medical thought.

¹¹⁶ Joseph-Évariste-Laurant Bertulus (1809-1882): professor of hygiene in Marseilles.

¹¹⁷ new hygiene: the development of the early nineteenth-century French public health movement is described by Ann La Berge. She comments, “private or individual hygiene had been the traditional area of hygienic interest in France until the late eighteenth and early nineteenth centuries when a shift from private to public hygiene occurred.” (La Berge, *Public* 364)

¹¹⁸ medicine of the urban masses: the outbreaks of yellow fever in the major cities of Europe in the 1820s, followed by the devastating arrival of cholera from the Far East in the early 1830s made community-based measures of prevention and improved sanitation even more pressing (Ackerknecht, *Paris* 149).

3. A totalizing vision of degeneration that was seen to account for many physical and psychiatric medical conditions, as well as moral problems affecting society at large. As such, it aspired to assume a social control formerly exercised by the Church. There was associated emphasis on hereditary determinism and the transmission of ill-effects suffered by parents, as a result of noxious physical and moral influences,¹¹⁹ to future generations.
4. The promise that many of the manifestations of degeneration could be minimized, or even reversed, by improved mental and physical hygiene under the supervision of a new generation of medical professionals, the hygienists (public health physicians).

This paradigmatic shift, which fused degenerationist ideas with those of the new sanitary movement in France, resulted in a conceptual framework that could be applied to the whole of society. So powerful, so attractive and so polyvalent was its explanatory power that it appeared in the writings of leading philosophers, sociologists, biologists and physicians for the rest of the nineteenth century.^{120, 121} A

¹¹⁹ physical and moral influences : The concept of hereditary transmission of acquired characteristics is usually associated with the writings of Jean-Baptiste Lamarck (1744-1829) though, in fact, the notion preceded him. Phillip Wilson quotes an observation about Erasmus Darwin's *Zoonomia* of 1794 that it, "biologised the concept of progress" (McNeil 112), and therefore postulates hereditary transmission of acquired features. Wilson concludes, "It might be said, contrary to the usual phrasing, that Lamarck was actually [Erasmus] Darwinian in his thinking" (Wilson 119). Ernst Kraus, in his 1879 biography of Erasmus Darwin, made the same point (Kraus 133), as did Drachman (88). All degeneration theory was inherently "Lamarckian."

¹²⁰ writings of leading philosophers [...] physicians: a list might include Schopenhauer, Nietzsche, Spencer, Darwin, Hardy, Taine, Ribot, Engels, Marx, Lankester, Galton, Haeckel, Charcot, Maudsley and Freud in addition to the French aliénistes and authors mentioned in this text.

¹²¹ writings of leading [...] biologists: A particularly striking illustration of degenerationist thinking is expressed by Darwin, "there is reason to believe that vaccination has preserved thousands, who from a weak constitution would formerly have succumbed to small-pox. Thus the weak members of civilized societies propagate their kind. No one who has attended the breeding of domestic animals will doubt that this must be highly injurious to the race of man.

major influence on the English novel in the second half of the nineteenth century extending into the twentieth has been recorded, exemplified by a novel of Aldous Huxley as late as 1939 (Kershner 422). As early as 1860, by contrast, an editorial article in *The Lancet*, representing informed medical opinion of its time, is entitled “The Degeneration of Race” and deals with, “marriages of consanguinity [which] lead to the intellectual degradation and physical degeneration of the offspring of such unions” (“Degeneration” 619-620). Noting the studies of Ellis,¹²² Spurzheim¹²³ and Esquirol¹²⁴ that commented on the frequency of inherited mental disturbance in the, “great families of France and England,” attributable to inbreeding with a, “rapid extinction of exclusive aristocratic families¹²⁵ [that] has become a common-place in modern times,” the article goes on to observe with alarm the same phenomenon extending to the middle-classes. Warning of damage to the stock of the entire community, the commentator continues that to, “the very numerous marriages of consanguinity [...] we owe a large proportion of the idiots, the epileptics, the

It is surprising how soon a want of care, or care wrongly directed, leads to the degeneration of a domestic race; but excepting in the case of man himself, hardly any one is so ignorant as to allow his worst animals to breed.” (Darwin, *Descent* 168)

¹²² Ellis: a common name not otherwise identified. It probably refers to the well-known Sir William Charles Ellis (1780-1839), physician and superintendant of the Hanwell Asylum in Middlesex. He pioneered humane, “moral” treatment of the insane and pioneered occupational therapy for them within the environment of the asylum.

¹²³ Johann Gaspar Spurzheim (1776-1832): German physician and phrenologist, the latter a term that he coined. He died of typhoid in Boston.

¹²⁴ Jean-Étienne Dominique Esquirol (1772-1840): French *aliéniste* and inheritor of the mantle of Pinel in French psychiatry, Esquirol attempted to supercede the classification of Pinel with a system of monomanias, the term first being coined in about 1810 (Goldstein, *Console* 153). Some of the perceived shortcomings of the monomania nosology were later summarized in an essay published in 1869 (ironically winning the *Prix Esquirol*) by a disciple of Morel, Gabriel Doutebente, (Doutebente 198). The nosology was, however, still current in Spain in the 1890s and is referred to repeatedly in a paper by Rafael Salillas in 1899.

¹²⁵ rapid extinction of exclusive aristocratic families: this seems to have been a favorite theme among degenerationist writers, if the studies of Jacoby and Ireland (see later) are any indication.

scrofulous, the rachitic, the enfeebled, and the incapable,¹²⁶ who afflict and burden the nation” (“Degeneration” 620). In a later letter in the correspondence stimulated by this article, one K. Corbet MD was able to affirm,

In reference to degeneration of race, three facts are known: 1st, It is favoured by consanguinity [...]; 2nd By town life [...] and, 3rd By genius, where progeny, generally speaking, is either wanting, or sadly at fault. These three states predispose to the production of unhealthy semen; and this I conceive to be the cause and origin of all the evil.” (Corbet 170)

Though with less specific detail of a likely mechanism, the theory of hereditary urban degeneration was increasingly espoused by middle-class experts for the rest of the nineteenth century (Stedman Jones 128). The Metropolitan Poor Law Inspector observed in 1871 that, “it is well established that no town boy bred boys of the poorer classes, especially those reared in London [...] attain the above development of form (4ft 10½ inches height, 29 inches chest) at the age of 15. A stunted growth is characteristic of the race” (23rd Annual 207). Somewhat later, James Cantlie ¹²⁷ in his *Degeneration among Londoners* (1885) attributed the process to the lack of ozone in the air (Cantlie 13), while his warnings were repeated in 1889, together with the Morelian concept of generational decline, “it has been maintained with considerable show of probability that a pure Londoner of the fourth generation is not capable of

¹²⁶ the epileptics, the scrofulous, the rachitic, the enfeebled, and the incapable: a good example of the all-encompassing quality of the narrative of degeneration.

¹²⁷ Sir James Cantlie (1851-1926): Scottish physician. After work as a surgeon in London, Cantlie worked in Hong Kong where he successfully battled an outbreak of plague. On return to London he was involved in the foundation of the London School of Tropical Medicine.

existing” (Williams-Freeman ¹²⁸ 50), indicating that belief that it was only by the infusion of fresh, healthy blood from immigrating country-folk ¹²⁹ that the city population could survive. This view is strikingly similar to that held, with some justification, by contemporary public health authorities in Madrid.

Degenerative processes that threatened the entire nation were thus seen to be associated with the growth of great cities, where an increasing proportion of the population lived and where the emerging middle-class was primarily to be found. Fearsome threats to national well-being of this kind had to be met by the delivery of preventative medicine not merely to the individual but to the community at large, if they were to stand any chance of success. Such was the rationale behind the development of hygiene and sanitary medicine.

The incorporation of degeneration theory into hygiene in the mid-nineteenth century occurred in the development of the “sanitary idea” in France that goes back to the Enlightenment (La Berge, *Public* 366) and both Ackerknecht (*Hygiene*) and La Berge (*Parent-Duchâtelet*) describe a vigorous urban public health movement between 1815 and 1848. While the first chair of hygiene was founded in 1794, major developments between 1815 and 1824 were due to contributions of the generation of

¹²⁸ John P. Williams-Freeman (1859-1943): English physician, country doctor and author of *Introduction to Field Archeology*.

¹²⁹ infusion of fresh, healthy blood from immigrating country-folk: “seeing more than a third of the population of London are country bred, and that, in spite of this influx of fresh blood, the death rate is so high, and the mortality in children who are town bred is so very heavy, we are probably justified in saying that London is so unhealthy a district that the Anglo Saxon race is incapable of becoming acclimatized to it. It can exist for 2 or 3 generations, when, if not recruited by fresh blood, it dies out” (Williams-Freeman 217). Stedman Jones (127, 401) appears to be in error in repeatedly listing this author’s name as “Freeman-Williams.”

Louis Villermé ¹³⁰ and Parent-Duchâtelet ¹³¹ and the foundation of *Annales d'hygiène publique et de médecine légale* in 1829 (Elizabeth Williams 152-3). While the study of the work place, shipping and housing were important to the hygienists and they considered the filth in which the lower classes lived to be the source of many of their ills, an influential and countervailing view held that vice in the poor was ingrained and that,

medico-social maladies should be attributed not so much to external influences as to the fixing of vice and pathological inclinations in bloodlines [...] they increasingly tended to argue that pathological patterns became fixed as inherited “tendencies” or “dispositions,” even if they were originally prompted by unfortunate environmental influences. (Elizabeth Williams 154)

The logical consequence of this view was, “the creation of the type of the “degenerate,” the individual whose heredity predisposed him to a range of medico-moral ills and whose potential for therapeutic management was severely limited” (Elizabeth Williams 154-5). The concept of inherited predisposition to disease was described in 1815 by Fodéré ¹³² in his *Traité de médecine légale et d'hygiène publique* (Fodéré, V 565) and, in his observations related to pulmonary tuberculosis, he quotes the earlier

¹³⁰ Louis René Villermé (1782-1863): French physician and sociologist and pioneer in the study of diseases related to the workplace.

¹³¹ Jean Baptiste Parent-Duchâtelet (1790-1836): French physician and hygienist whose posthumously published *De la Prostitution dans la ville de Paris, considérée sous le rapport de l'hygiène publique, de la morale et de l'administration* (1836) was an authoritative text for many years.

¹³² François-Emmanuel Fodéré (1764-1835): French physician, botanist and forensic expert who studied cretinism, goitre, scurvy and pulmonary tuberculosis.

opinion expressed in Erasmus Darwin's *Zoonomia* (1794) in favor of inherited predisposition to that condition (Fodéré, *I* 347).

The idea of degeneration considered as the consequence of urban life in France was expressed by Bertulus in 1847. Bertulus was appalled by the crowding and unhealthy conditions in the major cities of France where bad housing, lack of ventilation, and decomposing animals in the streets produced odors which made the contemporary miasmatic theory of disease ¹³³ seem highly plausible. Bertulus also notes the degenerative consequences of urban inbreeding,

du défaut de croisement des races, on a surtout cité l'exemple des Juifs, qui, ne se mariant qu'entre eux, se transmettent héréditairement certaines maladies et chez lesquels on observe des signes remarquables de dégradation physique et moral. (Bertulus, *Considérations* 801)

with its perceived physical and moral deterioration. He also observes the lethal association of poverty with alcoholism and, influenced by the racial notions of his day, writes of its capacity for affecting not only individuals but the entire human race,

¹³³ miasmatic theory of disease: This notion, which goes back to classical times, held that disease was spread by foul-smelling air and was one of the precursors of the germ theory of disease; the word malaria derives from it. A contemporary treatise on the topic, also by Bertulus, is his *Observations et réflexions sur l'intoxication miasmatique considérée en général dans les différents états pathologiques que en résultent* (1843). Even after the discovery of the organism responsible for cholera by Koch in 1884, leading figures in public health such as Edwin Chadwick, Florence Nightingale and Max von Pettenkofer continued to subscribe to a miasmatic explanation for many years. Chadwick had summarized it in 1846 thus, "All smell is, if it be intense, immediate acute disease; and eventually we may say that, by depressing the system and rendering it susceptible to the action of other causes, all smell is disease" (Halliday 913). Engels made the same observation in 1844, "The filth and stagnant pools of the working-people's quarters in the great cities have, therefore, the worst effect upon the public health, because they produce precisely those gases which engender disease." (Engels 97)

La guerre, la famine et la peste ne lui ont jamais été aussi fatales que l'ivrognerie [...] des nations entières ¹³⁴ soumises à la fatale influence des liqueurs fortes se sont abâtardies, ont diminué peu à peu et ont fini par disparaître de la surface du globe [...] à faire dégénérer notre espèce physiquement et moralement. (Bertulus, *Considérations* 824)

In this description of degeneration related to the social ills of poverty, alcoholism and the consequences to society as a whole, Bertulus anticipates much of the degenerationist thinking of the rest of the nineteenth century.

It appears that the concept of degeneration was widely applied to human problems in the 1840s and 1850s. In his *Nouvelles Études philosophiques sur la dégénération physique et morale de l'homme* (1854), “le docteur” L. Savoyen studies cretinism at length emphasizing what he considered to be its hereditary nature, “le crétinisme est donc toujours congénial” (Savoyen 158) and makes the almost constant connection between physical and moral debility, “L'être [...] nait crétin, soit frappé de dégénération physique et morale” (Savoyen 158). He notes the small head of the cretin, “la petitesse de volume du cerveau tend proportionnellement à la dégénération instinctive” (Savoyen 159) and observes that the condition seems to affect the children of the poor more than those of the well-to-do and better fed, “plus d'êtres dégénérés dans les classes indigentes que dans les classes aisées” (Savoyen 186). Extending his observations from individuals to larger groups, he emphasizes the problem of trans-generational transmission, “qu'une population, une fois envahie par le fléau

¹³⁴ nations entières: it is of interest that Bertulus anticipates by a year the identical observation of Magnus Huss on the effects of chronic alcoholism upon the Swedish nation.

dégénérateur, n'arrivât, de génération en génération, à s'atrophier et à succomber à un marasme physique et moral" (Savoyen 186). Extending the scope of the problem even further he considers, "la dégénération de l'espèce" (Savoyen 186), the degeneration of all mankind. Almost all the features of later degeneration theory are here to account for severe mental retardation: hereditary influence, deterioration across generations, relation to poverty, association with cranial anomalies, association of physical with moral debility and the larger threat of degeneration to the nation and to the species. The breadth and intimidating power of the concept of degeneration from the pen of yet another physician are plain.

Another physician closely associated with the theory of degeneration in the 1840s and 1850s was Philippe Buchez.¹³⁵ A restored Catholic, Buchez' professional life spanned the period in which degeneration theory evolved from being an explanatory device in the biological sciences to one of astonishingly ambitious pretensions in early psychiatry (*aliénisme*) and in public health. He had studied under the great natural philosophers, Cuvier, Lamarck and Geoffroy Sainte Hilaire in the early nineteenth-century (Pick 63), took his medical degree in 1824 and, in the following year, authored with Ulysse Trélat a popular handbook of hygiene *Précis élémentaire d'hygiène* intended to aid the masses in helping themselves (Elizabeth Williams 214). He later founded the Catholic-socialist party with a vision of improving the well-being of the poor by helping to relieve what he saw as their regression and hereditary degeneration, ultimately attributable to Original Sin. He later helped found the *Annales Médico-psychologiques* in 1843 and the *Société médico-psychologiques* in 1852 (Dowbiggin, *Inheriting* 86) in association with his friend and protégé, Bénédict

¹³⁵ Philippe Joseph Benjamin Buchez (1796-1865): French physician, sociologist, historian and politician.

Morel, whose enthusiasm for degenerationist theory he shared. Their friendship was such that secured for Morel an appointment at the asylum of Maréville in 1848

In Buchez' early *Introduction à la science de l'histoire* (1842), he describes the indigenous peoples of Papua and resorts to an explanation of degenerative regression, reminiscent of Buffon, to account for what he sees as their lamentable savagery,

“Ils sont aussi laids que débiles; aussi inintelligens que misérables. Ils vivent peu et ne semblent avoir été conservés que pour nous montrer un exemple de l'état de dégradation auquel peut descendre l'espèce humaine lorsqu'elle abandonne la lumière du devoir et se laisse aller aux uniques tentations de sa nature animale. (Buchez, *Introduction* 360)

when subject to what he saw as the temptations of their animal nature, bereft of civilized moral obligations. This text, published 15 years before the book commonly referred to as originating degeneration theory, also includes references to inherited predisposition to disease, “les prédispositions malades se transmettent des parens aux enfans” (Buchez, *Introduction* 360), with a specific reference to inherited madness, “un couple prédisposé à tel ou tel genre de maladies nerveuses ou mentales, engendre des enfans nerveux et prédisposés à telle ou telle forme de folie” (Buchez, *Introduction* 344). A profoundly moralistic tone is present in his account of the trans-generational consequences of parental immorality,

Cependant, que l'on examine une suite de générations, dans une même famille, où l'immoralité est héréditaire et continue, on verra cette race

successivement s'appauvrir; on verra à des enfans robustes, succéder des enfans chétifs; à des individus acquérant un âge avancé, succéder des individus qui vivent peu; à des générations fécondes, des générations stériles ou au moins n'engendrant que des enfans mourant avant de parvenir à la puberté. En un mot, ou la famille s'éteindra, ou elle s'amoindrira, et deviendra physiquement incapable des actions qui caractérisent la virilité humaine.

(Buche, *Introduction* 344-5)

being those of inherited weakness, loss of virility and extinction of the family line. Buchez' profound Catholic beliefs permit him to envisage a reversal of this dreadful chain of events as a result of Christian faith, "la réversibilité, tant spirituelle que physique, est un fait parfaitement certain" (Buche, *Introduction* 345), and behind it all he sees suffering as a consequence of Original Sin, "la dégradation qui succéda au péché primitif de désobéissance" (Buche, *Introduction* 361). All of these ideas, with perhaps the exception of faith in the reversibility of degeneration through faith, would appear in the encyclopedic work of Bénédict Morel.

The appearance of Morel's landmark *Traité de dégénérescences physiques, intellectuelles et morales de l'espèce humaine* (1857) was greeted with acclaim partly, perhaps, because as Ruth Friedlander observes, "Morel mostly owed his fame to those who agreed with him" (Friedlander 406). This is particularly evident in the enthusiastic review of the treatise by Buchez in the *Annales médico-psychologiques* in the year that the *Traité* appeared. Buchez encomium for his protégé is effusive but is largely a platform for his own ideas rather than Morel's and airs his own philosophical leanings when he compliments Morel for establishing the concept of degeneration

since, by antinomy, it endorses Buchez' commitment to the idea of the perfectability of man, "Ainsi l'on n'a la perception claire de la dégénérescence de l'individu et de l'espèce dans l'humanité qu'en acquérant celle de leur progressivité. L'idée de perfectibilité définit celle de dégradation par son opposition même ¹³⁶ (Buchez, *Rapport* 458). He continues to promote his moralistic vision by observing that gout, cancer and tuberculosis cannot be considered as degenerative,¹³⁷ in the way that madness and alcoholism can, because "quelque mortelles qu'elles solent, n'abaissent pas la dignité de l'homme, n'alièrent pas sa nature morale" (Buchez, *Rapport* 461), they do not compromise man's dignity and moral nature.

Buchez' promotion of Morel's work leads him to odd assertions such as, "le mot *dégénérescence* lui-même est un mot nouveau. Le Dictionnaire de Trévoux, édition de 1771, qui passait pour complet, n'en fait pas mention" (Buchez, *Rapport* 455), omitting to observe that it had been defined by Laennec in Panckoucke's *Dictionnaire des sciences médicales* in 1814 and referred to as a synonym for *dégénération* in Nysten's *Dictionnaire de médecine* in the same year, fully 43 years before Buchez' review.¹³⁸ In an additional burst of promotional enthusiasm, Buchez praises the novelty of Morel's work, "son ouvrage es le premier traité général enterpris sur les dégénérescences dans l'espèce humaine" (Buchez, *Rapport* 467), claiming it to

¹³⁶ perfectibilité...opposition même: As far as I am aware, this philosophical aside has no equivalent in Morel's *Traité*.

¹³⁷ gout, cancer and tuberculosis cannot be considered as degenerative: Buchez here directly contradicts Morel, who writes, "Ansi la prédisposition aux maladies nerveuses, à l'épilepsie et à la folie est transmissible par voie de génération, aussi bien que la prédisposition aux affections goutteuses, rhumatismales, dartreuses, scrofuleuses, tuberculeuses" (Morel, *Traité* 323). Buchez was thus expressing his own ideas rather than Morel's, "Buchez was not so much reviewing Morel's *Treatise des Degenerescences* (sic), as he was extolling the concept of degeneration. (Friedlander 394)

¹³⁸ *dégénérescence*: the usage of the word *dégénération* in the eighteenth century and the later appearance in the early nineteenth century, of the cognate *dégénérescence* have been studied by Claude Bénichou (1983).

be the first on degeneration in man thereby ignoring Savoyen's ¹³⁹ *Nouvelles études philosophiques sur la dégénération physique et morale de l'homme*, which had appeared in Paris three years earlier. What is quite transparent, however, is Buchez' long-term conviction of the reality of human degeneration interpreted from a perspective strongly colored by Catholic, moral considerations. Assuredly, degeneration theory was not Morel's invention.

6) Bénédict Morel, Degeneration Theory in the Evolution of *Aliénisme*

The physician Bénédict-Augustin Morel ¹⁴⁰ has been repeatedly described, however, as the originator of degeneration theory (Hauptert 43; Dowbiggin, *Professional* 314; Martindale 177; Gold 38; Scheider 224; Fuentes Peris 111). If one follows the OED definition of a theory as, "scheme or system of ideas or statements held as an explanation or account of a group of facts or phenomena," however, it will be apparent that the theory in this sense was widespread in the Enlightenment well before Morel. As explained above, the more extended form of the theory to include madness, alcoholism and the moral ills associated with urban poverty was fully expounded by physicians like Bertulus, Savoyen and Buchez before Morel's landmark treatise of 1857. In my view, therefore, Morel should be more properly regarded as the route of major diffusion of degeneration theory into mainstream French psychiatry by virtue of his books, articles in the *Annales Médico-psychologiques*, and his medico-

¹³⁹ L. Savoyen: of Moutiers, director of thermal baths at Salins at Tarataise and investigator of cretinism and goitre. In 1856, he wrote on cholera and its relation to climate.

¹⁴⁰ Bénédict-Augustin Morel (1809-1873): French physician, aliéniste and writer. A former candidate for the priesthood, he studied under the aliéniste Jean-Pierre Falret, was influenced by Prosper Lucas and was a friend of Claude Bernard. Becoming a doctor in 1839, he was appointed physician-in-chief at the asylum of Maréville in 1848 and, in 1856 until his death, was medical director of the asylum of St-Yon near Rouen.

political activities in the *Société médico-psychologique*. What does appear to be new in Morel's *Traité*, however, is the encyclopedic range of conditions that he included in his work. His ambition to develop a nosology¹⁴¹ based on cause led to a profound awareness of the influence of the environment upon his patients' physical and mental health and made him consider factors such as nutrition, soil, industrial and occupational health, alcohol and drug-dependence, and poverty. The purview of his work includes the application of contemporary ideas about heredity and morality not only of mixing of human races but also to a wide variety of conditions such as cretinism,¹⁴² malaria, scrofula and rickets. Associated with this is a review of the opinions of many other physicians throughout Europe including even the archbishop of Chambéry, with whom he corresponded and disagreed, on the causes of cretinism. The *Traité* is a remarkable labor of synthesis which elevated degeneration theory to a new level of comprehensiveness.

Born in Vienna, Morel received a religious education and studied for the priesthood (Coffin 153), but was forced to leave the seminary in 1831 because of liberal leanings (Liégeois 422). He studied medicine in Paris between 1831 and 1839 and befriended Claude Bernard,¹⁴³ a fellow medical student with whom he shared

¹⁴¹ Nosology: A classification or arrangement of diseases (OED)

¹⁴² Cretinism, Cretins: Med. severe mental and physical retardation from birth caused by lack of dietary iodine and consequent inability to synthesize thyroid hormones (hypothyroidism). Historically, the condition was observed throughout the world in regions remote from the sea, which is the main source of iodine. It still exists in the under-developed world today. A mid-nineteenth century account of cretinism incorporating degenerationist thought was published by Linus Brockett in *The Atlantic Monthly* (1858). Gregorio Marañón studied the condition in the Las Hurdes region in the province of Cáceres in the 1920s and later wrote *El bocio y el cretinismo* (1927). Las Hurdes continued to be associated with the cretinism-degeneration debate, for in 1934 the physician, J. Goyanes, published photographs of many cretinous Hurdaños in his report "Las Hurdes, foco de degeneración redimido (Degeneración racial)."

¹⁴³ Claude Bernard (1813-1878): French physiologist, widely considered the father of physiology, and philosopher of science. He discovered the digestive function of the pancreatic juice and the liver's role in synthesizing sugar. He was the first to define the term *milieu*

living quarters (Dowbiggin, *Inheriting* 118), going on to spend most of his working life as medical director of the asylum of St-Yon near Rouen. At that time, the city of Rouen was a growing industrial region whose proletariat provided many of his patients (Huertas, *Madness I* 402) and was an example of the degeneration-provoking urban poverty in the cities of France that was lamented by many public health physicians (Léonard 153). Morel consequently had ample opportunity to observe the ill-effects of unhealthy living and working conditions (Dowbiggin, *Inheriting* 118, 148) that he would incorporate into his theory of inherited, degenerative mental disease.

In 1844, as a trainee *aliéniste*, he had gone on an extended European tour as a companion and medical guardian of a severely depressed patient (Friedlander 8), and was able to observe large numbers of cretins in the high Alpine valleys of Savoy where he met a Dr Guggenbühl who had founded an institution at Abendberg specifically for their care (Friedlander 25, 103). In 1857 Morel, using his original observations of endemic cretinism ^{144,145} as a basis, formulated a degenerationist model for inherited, environment-related disease (Friedlander 19) that included a wide range of mental

intérieur and to recognize its constancy. He was also one of the first to suggest the use of double blind experiments to ensure the objectivity of scientific observations. His manifesto of the scientific method was *L'Introduction à l'étude de la médecine expérimentale* (1865), which profoundly impressed Zola.

¹⁴⁴ original observations of endemic cretinism: Morel corresponded with the archbishop of Chambéry, Alexis Billiet, on their different views on the causes of cretinism in the Savoy and their letters were later published (Billiet 1855). Ironically, the archbishop's views, culled from the observations of his parish priests, were closer to modern understanding of the disease than Morel's. The latter had already published his views in his *Considérations sur les causes du gôitre et du cretinisme endémiques*. (1851)

¹⁴⁵ endemic cretinism. as noted above, Savoyen had published an account of the moral and physical degeneration associated with cretinism in 1854. It would appear that Alpine cretins were something of a magnet for medical investigators. Noel A. Humphreys (1885) records an anecdote about the pioneer English physician, epidemiologist and statistician, William Farr (1807-1883), who measured the heads of, "a hundred of those miserable beings, the Crétins" while visiting Switzerland in his student years in the 1830s.

disturbances and social ills. Unlike his *aliéniste* predecessors Pinel¹⁴⁶ and Esquirol, Morel chose to classify mental disease not on the basis of clinical manifestations, but rather on the basis of cause. As a further break with earlier authorities in mental disease, he actively collaborated with his *aliéniste* colleague, Jean-Pierre Falret,¹⁴⁷ in dismantling the monomania¹⁴⁸ nosology of his predecessor Esquirol (Goldstein, *Console* 189). Responding to a perceived increase in the numbers of the insane¹⁴⁹ and to the, “concern with heredity [which] became not only an important focus of the human sciences but a virtual obsession” (Elizabeth Williams 248), Morel undertook a study of the genealogy and social environment of each of his patients. The unequivocally organic nature of heredity which this involved had the attraction for many contemporaries in that it compensated for, “the general failure of localization studies on the 1830s and 1840s [that] had left the field without any satisfactory material explanation for mental pathology” (Elizabeth Williams 249). In Morel’s hereditarian view, poor diet, alcoholism, immorality and unhealthy living and working conditions were responsible for a pathological lineage in families that gave rise to mental alienation, imbecility and ultimate sterility over the course of a few generations consistent with the universally accepted understanding of the inheritance of acquired characteristics. Morel wrote, “il n’est pas toujours nécessaire qu’ils

¹⁴⁶ Philippe Pinel (1745-1826): French *aliéniste* at the Bicêtre hospital. He pioneered the humane treatment of the insane and the abolition of physical restraint of patients. He devised an early classification of mental disease and the so-called *moral treatment* which emphasized functional and behavioral methods rather than the physical treatment that had formerly prevailed.

¹⁴⁷ Jean-Pierre Falret (1794-1870): French *aliéniste*, pupil of Esquirol and teacher of Claude Bernard. Falret was physician at the asylum of the Salpêtrière hospital in Paris.

¹⁴⁸ monomania: a single pathological preoccupation in an otherwise sound mind (Goldstein, *Console* 155).

¹⁴⁹ perceived increase in the numbers of the insane: “La progression incessante en Europe , non seulement de l’aliénation mentale, mais de tous ces états anormaux qui sont dans des rapports spéciaux avec l’existence du mal physique et du mal moral dans l’humanité” (Morel, *Traité* vii-viii). Articles of Lunier in 1870-74 have a similar theme. As early as 1822, a doctor Pariset, director of the Bicêtre Hospital in Paris, had attributed the increase in the numbers of the insane to, “great and rapid social change.” (Pick 69 n. 132)

arrivent au dernier degré de la dégradation pour qu'ils restent frappés de stérilité, et conséquemment incapables de transmettre la type de leur dégénérescence" (Morel, *Traite* 5). Intrinsic to the theory was his belief in the literal interpretation of Genesis such that degeneration was considered to be the result of the Fall from Adam's state of perfection in Paradise. Such literalism is attributable in part, no doubt, to his training as a seminarian and to his subsequent, close professional links with the clergy (Goldstein, *Console* 229). In his *Traité*, Morel observes that degeneration is almost invariably progressive and that humanity is preserved from its consequences because it is essentially self-limiting,

a moins de certaines circonstances exceptionnelles de régénération, les produits des êtres dégénérés offrent des types de dégradation progressive. Cette progression peut atteindre de telles limites que l'humanité ne se trouve préservée que par l'excès même du mal [...] l'existence des êtres dégénérés est nécessairement bornée." (Morel, *Traite* 5)

and terminates in sterility. It is, in fact, the end result of deterioration from an earlier, more perfect type, "la dégénérescence de l'espèce humaine, est de nous la représenter *comme une deviation maldive d'un type primitif*." (Morel, *Traite* 5, author's italics)

Morel argues further that acquired flaws of the nervous system give rise to a predisposition or *diathesis*¹⁵⁰ toward a variety of psychiatric, neurological and other

¹⁵⁰ Diathesis: *Med.*: A permanent (hereditary or acquired) condition of the body which renders it liable to certain special diseases or affections; a constitutional predisposition or tendency (OED). In contrast, the definition of Galdós's time exemplified by the *Diccionario de medicina*

diseases, an idea which goes back to Hippocrates but which enjoyed a new vogue in Paris around 1800 (Ackerknecht, *Diathesis* 329). In the chapter of his *Traité* (1857) entitled, “Des lésions organiques et des troubles fonctionnels, dans leurs rapports avec la manifestation des dégénérescences chez l’individu et dans l’espèce,” Morel avers,

Ansi la prédisposition aux maladies nerveuses, à l’épilepsie et à la folie est transmissible par voie de génération, aussi bien que la prédisposition aux affections goutteuses, rhumatismales, dartreuses, scrofuleuses, tuberculeuses, etc., etc. (Morel, *Traité* 323)

This idea of inherited predisposition, which appears in 1813 in Fodéré’s ¹⁵¹ *Traité de médecine légale et d’hygiène publique* (Fodéré, V 365), would become hugely influential in medicine, partly as a result of its usefulness in convincing the French state and the law courts of the special expertise of the *aliénistes* and their potential value in advising the suitability of particular marriages (Cartron 128) in order to avoid inherited degeneration.

In order to advance the acceptance of heredity and inherited predisposition to mental disease even further, Morel and his colleague Moreau (de Tours) (see below) found themselves engaged in an ongoing debate in the *Société médico-psychologique*

(1878) of Bouchut and Després, encompasses more conditions than would be included now, “una constitución morbosa que [...] produce enfermedades de idéntica naturaleza sobre diferentes puntos de la economía. *El linfatismo, la escrofula y la tuberculosis; le reumatismo y la gota; el herpetismo; la sífilis; la hemorragia y el cancerismo* son las diátesis que se observan generalmente.” (Bouchut & Després 437, authors’ italics)

¹⁵¹ François-Emmanuel Fodéré (1764-1835): French physician and botanist. Professor of legal medicine, he published studies of cretinism, goitre, scurvy and pulmonary tuberculosis.

from 1868 onwards with an opposing faction that denied the role of heredity in any but specific instances such as epilepsy (Dowbiggin, *Inheriting* 120). Over the course of the 1860s and 1870s, the hereditarian view gained support from the new generation of psychiatrists¹⁵² and even in the writings of the experimental psychologist Théodule Ribot.¹⁵³ Morel's campaign was supported by the apparently successful search for objective stigmata that could be linked with hereditary madness published in the award-winning essay by one of his interns, G. Doutrebente published in the *Annales médico-psychologiques* in 1869. This essay lists deformed ears, chorea (writhing movements), squint, hydrocephalus, microcephaly, flattening of the cranium, receding forehead, undersized genitalia, compulsion to suicide, murder and other fixed ideas, and erratic behavior since childhood in mentally ill patients (Doutrebente 205-6) and appears to anticipate the criminal anthropology studies of Cesare Lombroso that would appear in the following decade. It should be noted that many of the signs attributed to hereditary degenerative madness by Doutrebente are behavioral rather than physical. For example, he lists facial tics, profound mood swings and, "leur désir d'extravagances auront été attirés et favorablement impressionnés par le récit d'une aventure fantastique ou la vue d'un acte insensé" (Doutrebente 205), as well as, "la suspension de la fonction de reproduction" (Doutrebente 208). Such lists imply the need to observe a patient over time and that degeneration was not necessarily something that could be recognized from physical stigmata seen at a brief physical inspection.

¹⁵² new generation of psychiatrists: following the debates in the *Société médico-psychologique*, the number of Morel's contemporary *aliénistes* writing about degenerationism increased, to include Trelát, Foville, Cullerre, Laurent, Marcé and the Moreau de Tours, father and son. (Huertas García-Alejo, *Magnan* 362)

¹⁵³ Théodule Ribot (1839-1916): French philosopher and founder of experimental psychology in France.

Morel's interest in the deleterious influences of a bad environment led him to study toxicology in an attempt to establish a causal mechanism for disease. He draws upon some of the studies of his, "ancien condisciple et ami, M. Claude Bernard" to consider the extent to which, "la physiologie expérimental pouvait éclairer la question de dégénérescences (Morel, *Traité* xiii). He notes, "l'action des agents intoxicants sur las animaux, peuvent aider à faire des rapprochments utiles pour ce qui regarde la pathologie humaine" and he later lists Bernard's studies on the effects of mercury, phosphorus, strychnine and hydrogen sulphide, all substances to which workers might be occupationally exposed (Morel, *Traité* 282). He cannot resist, however, a moralistic aside concerning, "les conditions dégénératrices que les infractions à la loi morale et l'absence de culture intellectuelle apportent dans l'évolution normale de l'homme physique" (Morel, *Traité* xiii) implying, as many others did before and afterwards, that the uneducated poor were partly responsible for their condition. Pursuing findings directly relevant to humans, Morel goes on to cite the postmortem studies of the toxicologist and industrial hygienist Louis Tanquerel des Planches ¹⁵⁴ that showed metal deposits in the tissues and brains of men who had succumbed to acute encephalopathy (brain swelling) of lead poisoning (*encéphalopathie saturnine*), and copper in the bodies of industrial copper workers (Morel, *Traité* 312-3). Morel reflects on the likelihood of a, "double rapport de sa dégradation primitive et de sa dégradation secondaire o consécutive" (Morel, *Traité* 315), that is, both inherited and environmental degenerative influences.

¹⁵⁴ Louis-Jean-Charles-Marie Tanquerel des Planches (1810-1862): French physician and agronomist known for his studies of occupational lead poisoning.

Morel's attempts to understand the societal roots of degeneration are unsurprising given the association of *aliénistes* with the public health movement since 1829 and the foundation of the *Annales d'hygiène publique et de médecine légale* (Goldstein, *Psychiatry* 158). His interest in degenerative intoxication by industrial poisons and by alcohol inevitably led him to a consideration of the well-being of society as a whole, "Nous ne sommes plus en effet en face d'un homme isolé, mais en présence d'une société" (Morel, *Traité* 77). In Morel's view, as Dowbiggin summarizes it, "what was necessary was the extension of the asylum's techniques of hygiene, behavior modification, and moral instruction to society itself to eliminate the social factors that caused insanity" (Dowbiggin, *Inheriting* 136). In order to protect society from, "leur prédispositions héréditaires et a toutes les conditions organiques maldives qui constituent des anomalies de l'ordre intellectuel et physique [...] en un mot, des dispositions dégénératives," Morel proposes nothing less than, "la moralization des masses" (Morel *Traité* 686). Only this, he claims, can mitigate the dangers of the "classes dangereuses" and, "cet état de profond malaise moral dont est travaillée la société moderne" (Morel *Traité* 461). Morel's ambition to improve the lot of society thus extends well beyond asylum walls to involve all of society, an ambition which appears to correspond well with Foucault's observations on the use of knowledge-power and the medicalization of insanity as means toward social control. One of the motives for that desire for control, reinforced by the recent events of 1848,¹⁵⁵ appears to be fear of a repeat revolt by the *classes dangereuses*, the dangerous elements in society.

¹⁵⁵ the recent events of 1848: the end of the July monarchy of Louis-Philippe was largely due to the "classes dangereuses" of Paris, when the working and middle classes threw up barricades after a bloody confrontation with the military. The stability of the ensuing Second Republic was undermined by the activity of the revolutionary Paris citizenry, largely of the working class, leading to the June Days Uprising that provoked a conservative backlash in favor of

We may conclude that while Morel did not originate the theory of degeneration,¹⁵⁶ he extended its range with the extraordinary breadth and documentation of his studies and that these features were important in persuading his contemporaries not only of its explanatory power but also its medico-political advantages. His 1857 book was a landmark which Dowbiggin appraises, “few nineteenth-century books on science exerted more influence over popular and professional opinion than Morel’s *Traité de dégénérescence*” (Dowbiggin, *Magnan* 388). As an emerging and initially little-regarded *specialité* in the medical profession that was, between 1815 and 1840, seriously overcrowded especially in Paris (Cartron 123; Goldstein, *Contagion* 200), the *aliénistes* had to convince the government that they had special expertise and knowledge not possessed by general physicians. In addition, the *aliénistes* found themselves in opposition to the religious orders that were reasserting themselves after the establishment of the July monarchy,¹⁵⁷ and who had traditionally cared for the insane (Cartron 125). Furthermore, the *aliénistes* had to be able to establish themselves in the eyes of their own professional colleagues, many of whom regarded non-generalists with suspicion (Dowbiggin, *Inheriting* 128).

order. That order was re-established by Louis Napoleon, who founded the Second Empire after the *coup d'état* of 1851. The short-lived French revolutionary republic, despite differences of many details, shows striking parallels with the First Republic of Spain, some 20 years later. Both were born as a result of liberal revolution, both were too chaotic to maintain order, and both betrayed many of their promises when desire for order and stability led to reversion to more authoritarian rule.

¹⁵⁶ Morel did not originate the theory of degeneration: a functional analogy with Darwin may be perceived. Darwin did not originate the idea of evolution but documented it with a groundbreaking thoroughness such that it could no longer be ignored (especially in conjunction with his original theory of natural selection). Morel was far from the first to employ the metanarrative of degeneration, but he documented the theory so comprehensively and argued for it so effectively that his influence was felt for the rest of the nineteenth century, such that present day writers still credit him with the origination of the theory. There, of course, the parallel ends.

¹⁵⁷ July Monarchy: The reign of Louis-Philippe, formerly duc d’Orléans, (1830-1848) installed after the revolution of 29th July 1830.

In a remarkable political move, the *aliénistes* defended their inability to cure the majority of the patients in their overcrowded asylums by claiming that patients came too late from an unhealthy societal environment for a cure and that preventative mental hygiene in the community at large was going to be necessary if the perceived epidemic of degenerative insanity was to be stemmed (Dowbiggin, *Inheriting* 136-8). In conjunction with public health physicians Morel argues that, “seule l’autorité administrative peut exercer d’une manière utile, nous sommes en droit de réclamer son intervention” (Morel, *Traité* 77). Given, in addition, “the passionate debate in medicine and lay society [...] over the biological fitness and political future of the Gallic race” (Dowbiggin, *Inheriting* 151), Morel felt able to demand from the government nothing less than the right of his colleagues to control the sanitary, mental and moral fabric of the nation. The profession, of which Morel was a leader, was anxious to secure its social status and to benefit from governmental support and accordingly, “exploited hereditarianism as a way of assuring that they would continue to enjoy institutional and legal prerogatives within French society” (Dowbiggin, *Inheriting* 161). Few better examples of the exercise of Foucauldian *knowledge-power* can be imagined.

In summary, Morel’s landmark work may be thought of as uniting as least three streams of early nineteenth century thought in a powerful new vision and these can be related to Morel’s frequently repeated criteria of man, the *intellectuel, physique et moral* (Morel, *Traité* 692). Under the *intellectuel* one might subsume the latest developments in degeneration theory involving hereditary degeneration not only in individual patients but in society at large. Under *physique*, one could arguably include all the environmental hazards that had recently been identified in the fields of food

(alcoholism, ergotism and pellagra), industry (mercury, copper, lead and arsenic poisoning), drugs (opium, hashish and tobacco) as well as those related to more diffuse factors such as poverty and living near miasmatic marshes. The *moral* element is a very powerful one in the view of this devout former candidate for the priesthood. He writes of, “la foi vive et profonde que m’encourage et m’anime” (Morel, *Traité* 693) and concludes that, “l’aliénation mentale est une dégénérescence” and, as a result, seeks to apply the, “indications curatives de l’hygiène physique et morale que nous comptons appliquer à toutes les dégénérescences de l’espece” (Morel, *Traité* 682). His crusade continues, “le traitement moral qui n’est que l’application des devoirs imposés par la loi morale, divine, fixe et immuable” (Morel, *Traité* 685), which leads to the imperative that, “il faut *moraliser les masses* pour préserver la société de l’activité dévorante des causes dégénérectives” (Morel, *Traité* 682, author’s italics). Morel was thus not only an innovative *aliéniste* but he was also a zealot. He was, as Foucault observes, ambitious to impose his vision upon society with asylums and prisons, by faith and by fear.

7) Morel’s Contemporaries

There was a strong impression among Morel’s contemporaries, backed by the new science of bio-medical statistics and studies compared with those of other countries, that the incidence of insanity was on the increase (Lunier, *Augmentation* 21; Jacoby 443), even before the horrors of the Franco-Prussian War of 1870 and the Paris Commune of 1871 had resulted on a fresh wave of mental disturbance in the traumatized population (Lunier, *Commutations* 14; Hospital 12). Some idea of the influence of degeneration theory can be derived from the number of influential

aliénistes and social thinkers in France whose thinking was affected by it.¹⁵⁸ Foremost among these was Valentin Magnan,¹⁵⁹ former student of Morel and Lucas, who substituted Darwinian thinking for biblical interpretation in his version of degeneration theory by viewing degeneration as atavistic regression. From 1882 onwards, he promoted alcoholism as a chief paradigm of social and hereditary degeneration in contrast with cretinism that had been the starting point for Morel (Dowbiggin, *Magnan* 389-390; Huertas Garcia-Alejo, *Magnan* 362). This change from Morel's doctrine of degeneration that, "arose through the definitive consolidation of bourgeois values in society" (Huertas, *Madness I* 409) to that of Magnan reflected a change, "in accordance with social and scientific needs, from the religious, almost mystical form Morel gave it to the evolutionary, scientific concept present in Magnan's work" and reflects an evolution,

to the argument, necessary for the defenders of 'order,' that the degenerate, as a mentally ill person, could and must be considered a dangerous element contaminating 'clean' bourgeois society and against which it was permissible, with science's support, to implement the most efficient defences. (Huertas, *Madness I* 411)

¹⁵⁸ number of influential *aliénistes* and social thinkers in France: Huertas lists the *aliénistes* Trélat, Foville, Cullerre, Laurent, Marcé, Moreau de Tours as authors of works on degeneration and insanity after the debates, begun in 1860 in the *Société médico-psychologique* and which followed the publication of Morel's two major works of 1857 and 1860 (Huertas, *Madness I* 405).

¹⁵⁹ Valentin Magnan (1835-1916): French *aliéniste* of the Paris asylum of Sainte-Anne. He studied under Jules Baillarger and Jean-Pierre Falret as well as Morel. He was particularly interested in alcoholism and defined a subset of the condition associated with absinthe. A particularly useful study of Magnan is that of Dowbiggin (1996).

to be achieved, “by prevention, cure or, in the most serious cases, isolation and/or incarceration.” After Morel’s death in 1873, Magnan continued to defend degeneration theory into the 1880s, which were the heyday of the theory (Dowbiggin, *Degeneration* 188). He fought to maintain a consensus in the profession by preserving the link between degeneration and heredity (Dowbiggin, *Degeneration* 195) and, with others, contrived to satisfy both the “spiritualist” and “materialist” factions by pointing to a supposedly organic hereditary etiology for madness that both could accept since, “pathological anatomy had failed to supply evidence of cerebral lesions in the large number of mental disorders without dementia [such that the traditional] materialist view was no longer tenable” (Dowbiggin, *Degeneration* 205 ff.). “Morbid heredity,” indebted to Moreau de Tours’ idea that insanity and neurological diseases were linked in the “neuropathic family” (Dowbiggin, *Degeneration* 196-7), provided, “the indispensable somatic element and reference point according to which mental doctors could indulge their fondness for cataloguing any number of physical or psychological causes depending on individual taste.” (Dowbiggin, *Degeneration* 207)

In a review of degeneration in society, the *aliéniste* Paul Jacoby¹⁶⁰ in his *Études sur la sélection dans ses rapports avec l'hérédité chez l'Homme* (1881),¹⁶¹ traces the history of physical, moral and racial degeneration in antiquity (Jacoby 8, 66, 109, 158, 180) and in the lineage of European royal families¹⁶² (Jacoby 320), and

¹⁶⁰ Paul Jacoby (1842-19??): physician and *aliéniste* who worked and published in France.

¹⁶¹ *Études sur la sélection* (1881): Written in response to a competition sponsored by the Real Academia de Medicina de Madrid in 1874. I have been able to find no trace of a Spanish translation.

¹⁶² European royal families: William Ireland in his “The History of the Hereditary Neurosis of the Royal Family of Spain” (1879) was able to find an equally fertile source of material from the Iberian Peninsula.

goes on to observe the same decline in the upper classes in France (Jacoby 431). After the manner of Morel, he includes in the compass of degeneration a wide variety of moral failings and physical diseases including crime, suicide, sexual license, epilepsy, general paralysis of the insane, mental retardation, scrofula and rickets (Jacoby 104). Like Lunier, he observes an increase in the numbers of the insane (Jacoby 141, 142) and attributes this to the degenerative effects of stressful and unhealthy life (*l'influence neuropathique*) in large cities, supporting this contention with statistics of insanity in London compared with those of England as a whole ¹⁶³ (Jacoby 499).

Two *aliénistes* contemporaries of Morel, though not primarily degenerationists, contributed significantly to the hereditarian underpinnings of degeneration theory and were studied closely by Zola and incorporated into the Naturalist aesthetic of his novels. The first was Prosper Lucas ¹⁶⁴ who graduated as a physician in Paris in 1833. Lucas' only work on heredity, the 1500 page two-volume *Traité philosophique et physiologique de l'hérédité naturelle dans les états de santé et de maladie du système nerveux* (1847-1850), "heavily influenced Morel's thought" (Huertas, *Madness I* 398). In his exhaustive study, Lucas analyses patterns of inheritance in plants and animals, as well as those of mental and other diseases in man. He promoted the belief that madness was an organic or physical disease and was much

¹⁶³ England as a whole: that England had its own problems is made abundantly clear from reports from physicians like John Edward Morgan, "The danger of deterioration of Race from too rapid increase of Great Cities" (1866). Morgan highlights the same movement of people from the country to the cities of London, Manchester, Liverpool and Birmingham and contrasts the "primeval vigour" of country folk with those of the cities wasted by, "three causes of city degeneracy" namely, "vitiating air, constitutional syphilis, and the abuse of alcohol, I am disposed to look upon as the most distinctive, and at the same time the most fatal" (Morgan 440-41). The letter by "K. Corbet, M.D." in *The Lancet* in 1861 (see above) lists degeneration of race as a consequence of town life as a "known fact." (Corbet 170)

¹⁶⁴ Prosper Lucas (1808-1885): French physician and *aliéniste* who practiced in the asylums of Bicêtre and Saint-Anne. He influenced not only Morel but also Zola. The latter's *Le docteur Pascal* (1893) portrays Lucas' classification of heredity as devised by the titular character.

opposed to purely psychic explanations and those that attributed lunacy to moral failing or sin (Mellon 58). His classification ¹⁶⁵ falls under four heads: “La première, l’hérédité *directe*; La seconde, l’hérédité *indirecte* ; La troisième, l’hérédité *en retour*; La quatrième, l’hérédité *d’influence*” (Lucas, *Traité II 2*), where the *directe* is inheritance of a characteristic from father or mother to son or daughter, the *indirecte* is transmission from a more distant relative such as an uncle, a cousin or other second or third degree relative, *en retour* (or atavistic), where a condition resembles that of a distant ancestor. The *indirecte* and *en retour* patterns of transmission caused great puzzlement to Lucas and his contemporaries, “since they saw heredity as a flow of something from one generation to the next, and they had difficulty explaining the apparent break in the flow represented by the many years’ absence of mental illness” (Mellon 59). Being well before the age of Mendelian genetics,¹⁶⁶ they had only the external appearances or phenotype ¹⁶⁷ to study with consequent unawareness of the mechanism of the underlying genetic constitution or genotype ¹⁶⁸ that could be transmitted across the generations without being openly manifest. Lucas theorized the problem by proposing two opposing principles of inheritance, that of heredity, [*imitation*], and that of invention, *innéité*, the latter the source of variation (López-Beltran, *Cradle* 62, 64) that would account for the appearance of new characteristics with no obvious familial origin. Lucas’ fourth form of inheritance, *hérédité d’influence*

¹⁶⁵ His classification: Lucas’ classification of heredity is not only quoted verbatim by Zola, (Zola, *Pascal* 35), but is implicit in the entire *Rougon-Macquart* series of novels (see later).

¹⁶⁶ Mendelism: *Biol.* the fundamental principles of inheritance (especially the laws of segregation and independent assortment and the existence of dominant and recessive characters), propounded originally by Mendel and forming the basis for the science of classical genetics. (OED)

¹⁶⁷ Phenotype. *Biol.*: the sum total of the observable characteristics of an individual, regarded as the consequence of the interaction of the individual's genotype with the environment. (OED)

¹⁶⁸ Genotype. *Biol.*: the genetic constitution of an organism, esp. as distinguished from its phenotype. (OED)

or telegony,¹⁶⁹ was held to be the result of a woman retaining seminal material of a previous sexual partner or husband such that children sired by a later consort possessed the features of the earlier partner. Though the authenticity of such a phenomenon was questioned at the time (Alberti 13), it was endorsed by Lucas¹⁷⁰ and was a theme of two of Zola's novels.¹⁷¹ Lucas' work was also influential in establishing patterns of inheritance in plants and animals and, "put beyond reasonable doubt the importance of heredity in the investigation of the human condition" (López-Beltrán, *Cradle* 62). As a contribution to the understanding of the inheritance of mental disease as a physical problem, it was acknowledged not only by Morel and Moreau but also by Darwin¹⁷² and other major European writers.¹⁷³

Lucas not only attempted to establish the patterns of normal inheritance, but also those of *l'hérédité morbide*, the heredity of disease. This proved to be an even more daunting task than documenting the normal, given that many individuals suffered from several diseases at the same time and that the nosological identity of many of them was obscure. A family, whose members were diagnosed with hysteria, epilepsy, madness and idiocy, was apt to be interpreted as one suffering from differing manifestations of the same underlying cause. Lucas expressed this in terms of,

¹⁶⁹ Telegony: *Biol.* the (hypothetical) influence of a previous sire seen in the progeny of a subsequent sire from the same mother. (OED)

¹⁷⁰ endorsed by Lucas: telegony was also endorsed by Darwin (Darwin, *Variation I* 403-4), partly as a result of reading Lucas' *L'hérédité naturelle*, and partly reading other sources that reported its occurrence in the mare, the sow and the dog. Schopenhauer and Herbert Spencer also subscribed to the theory, which appears in the works of Ibsen, Strindberg as well as Zola (Bondeson 159, 166).

¹⁷¹ theme of two of Zola's novels: *Madelaine Férat* (1868) and *Nana* (1880).

¹⁷² Lucas' work [...] Darwin: Darwin comments in relation to, "the number and diversity of inheritable deviations of structure" that, "Dr Proper Lucas's treatise in two large volumes, is the fullest and the best on this subject" (Darwin, *Origin* 51). There are also numerous citations of Lucas' work in Darwin's *The Variation of Animals and Plants under Domestication* (1868).

¹⁷³ Lucas' work [...] other major European writers: Ribot, Tarde, Spencer, de Candolle and Galton (López-Beltrán, *Cradle* 63); Maudsley and Weismann (Mellon 1).

“métamorphose séminale des diathèses et de névropathies” (Lucas, *II* 822), suggesting that just as a single patient might manifest very different conditions (mania, depression, hysteria, for example) at different times, so the forms of the same underlying nervous disease could vary from generation to generation. This is the phenomenon that later writers have referred to as *polymorphous inheritance* (*l'hérédité dissimilaire, herencia polimorfa*). At one point, Lucas considers two possible theories to account for this *protéisme*. The unitary theory states that a single underlying disease is responsible for all ills, “la célèbre doctrine de l'unité d'origine et de nature de tous les maux héréditaires, qui ne leur représentent que des déguisements de la syphilis”¹⁷⁴ (Lucas *II* 819). Lucas rejects this theory, however, in favor of the second alternative, that of degeneration, “la doctrine de la dégénération et de la transformation séminale des diathèses en névropathies” (Lucas *II* 819), believing that that a less well-defined unitary process inherited as a predisposition toward a wide variety of manifestations and diseases offers a better explanation, “cette autre proposition, disons-nous, est bien loin de mériter le dédain qu'on en fait aujourd'hui; elle est, à nos yeux, dans les limites où nous la circonscrivons, des mieux justifiées” (Lucas *II* 819). Lucas thus lends his authority to the metanarrative of degeneration a full seven years before Morel's much better known *Traité* of 1857.

¹⁷⁴ déguisements de la syphilis: the disguises of syphilis. Syphilis is a notoriously protean condition leading to the old aphorism that, “if you know all of syphilis, you know all of medicine.” Given the frequency of syphilitic infection in the nineteenth century and its innumerable manifestations, the theory that Lucas quotes contains a strong element of truth. It would not be until the second decade of the twentieth century that physicians would finally realise just how many *déguisements* they had been previously failing to recognize.

A second contemporary of Morel was Jacques-Joseph Moreau de Tours¹⁷⁵ who, like Morel, had been sent as a trainee *aliéniste* by his mentor Esquirol on foreign travels as companion to a wealthy patient. As a result, he saw much of the Middle East where he experienced the affects of hashish, which he felt gave him insight into the experiences of mentally sick patients. When he returned to France to study its use in the treatment of patients and to write his *Du hachisch et de l'aliénation mentale* (1845), he shared his interest in the substance in the *Club des Hashischins*,¹⁷⁶ founded with Théophile Gautier, with contemporaries including Baudelaire, Daumier, Delacroix, Flaubert and Balzac. From the beginning of his career, Moreau had been interested in establishing the somatic causes of insanity (Dowbiggin, *Inheriting* 58), an approach that had the additional benefit of establishing the credibility of *aliénisme* with a medical profession that was prejudiced in favor of the physical causes of mental disease (Dowbiggin, *Magnan* 389). Moreau's failure to demonstrate an anatomical lesion to correlate with the hallucinations his patients experienced and with many other mental illnesses, however, led him to revert to what was accepted as the incontrovertibly organic nature of heredity as an alternative correlate (Dowbiggin, *Inheriting* 72). His ideas about the role of heredity in mental disease were explained in his *La psychologie morbide dans ses rapports avec la philosophie de l'histoire* (1859) which led to its becoming, "the main diagnostic orientation of French psychiatry" by the 1880s (Dowbiggin, *Inheriting* 75). Moreau's earlier *Du hachisch et de l'aliénation mentale* (1845) was praised by Morel in his *Traité*, published in the same year as Moreau's *psychologie morbide* (Morel, *Traité I* 148). In many ways

¹⁷⁵ Jacques-Joseph Moreau de Tours (1804-1884): French *aliéniste* at the Paris asylums of Bicêtre and Salpêtrière. He was interested in Haschish and the relation between mental states induced by it and madness and was thus a pioneer in the field of psychotropic drugs.

¹⁷⁶ Club des Hashischins: the Club was active between 1844 and 1849 and its monthly séances were held at the *Hôtel Pimodan* on the *Île Saint-Louis*. Baudelaire and Gautier published essays describing their experiences with a variety of drugs at the Club. (Holmstedt ix-x)

Moreau's *Club des Hashischins* was emblematic of the interpenetration of science and medicine with the arts and literature at the time. Such productive synergy would also be embodied in the life and work of Émile Zola and in his formulation of the Naturalist evolution of Realism that would dominate French literature in the 1870s and 1880s.

8) Degeneration Theory in Émile Zola's Naturalism

Zola was born in Paris in 1840, the son of an Italian engineer and a French mother, but grew up in Aix-en-Provence where he developed a strong friendship with a fellow schoolmate, Paul Cezanne. Following the unexpected death of his father and a drastic curtailment of family's fortunes, Émile and his mother were forced to return to Paris where he entered a Lycée in 1858. Upon failing his *baccalauréat*, he had to seek a menial clerk's job though he was already writing a play, some poems and newspaper articles (Grant 20). He found his office job intolerable, however, and when he left it was forced to live in the lowest type of boarding house where he experienced real hardship, which was unrelieved by a bleak affair with a prostitute that cured him of much of his earlier romanticism (Grant 23). In spite of this he continued to write with the result that, with the recommendation of a family friend, he found work between 1862 and 1865 with the publisher Hachette. The proprietor soon recognized his writing ability and entrepreneurial flair and put him in charge of his publicity department. This proved a turning point in the young writer's career, for not only did the work put him in touch with some of the leading authors of his day, Littré, Michelet and Taine among them, but it also allowed him to network with, "scores of publishers, authors and critics outside the firm" (Walker 50), which would be of major help to

him in marketing his own work later. Meanwhile, he continued to read widely and in 1864 penned an essay *L'Ecran* in which he analyses classical, romantic and realistic literary styles and finds himself drawn to Realism, which he would memorably define in 1865, “un oeuvre est un coin de nature vu à travers un tempérament” (Grant 27). In his profound respect for science, Zola was also influenced by the positivist thought of Comte (Alberti 53). He also acknowledged his debt to Balzac in *Notes sur la nature de l'oeuvre* (Mitterand, *langages* 26) and to Flaubert, who so much admired the scientific knowledge of his time that he tended to identify it with civilization (Bonwit 293), and consequently aspired to attain the detachment (*impassibilité, impartialité*) he saw in scientists (Bonwit 271, 283). As Zola's thinking about literary genres continued, he first used the word *naturaliste* in 1866 in a newspaper review of a novel by Taine, calling the author, *le naturaliste du monde moral* (Mitterand, *Zola* 21).

By 1868 Zola had published *Thérèse Raquin* (1867) and *Madelaine Férat* (1868) whose scenes of lust, murder, madness and death provoked howls of outrage and disgust from conservative reviewers leading Zola to revel in a new-found notoriety and the commercial success that came with it. An indication of Zola's background reading at this time is provided by *Madelaine Férat* the plot of which revolves about the theme of impregnation or *l'hérédité d'influence* in which the heroine's daughter resembles not her husband but a lover of several years before. When censors ordered the removal of passages expounding this theory, Zola protested that he had written them on the scientific authority of, “Michelet and Dr. [Prosper] Lucas” (Brown 186). Zola's interest in biological theory is also revealed by the record that he, “waxed apocalyptic on the topic of degeneracy” in common with the Goncourt brothers and Dumas *filis* (Brown 176). It was also at this time that he conceived the

idea of writing a 10-volume novel *L'Histoire d'une famille* that would later grow to the 20 volumes of *Les Rougon-Macquart: l'histoire naturelle et sociale d'une famille sous le Second Empire* that he would compose between 1871 and 1893. This epic work reflects to the full the contemporary fascination with positivist aspirations to determine the laws of nature and, especially, the laws of biological heredity (Huertas García-Alejo, *Herencia* 3) that form the central theme of all of Zola's writing.¹⁷⁷ About this great undertaking he himself commented,

I don't want to portray contemporary society [in contrast with Balzac] but a single family and dramatize the interplay of race and milieu [...] It is especially important that I remain a naturalist, a physiologist [...] It will suffice to be a scientist, to describe what is by searching for what lies underneath.¹⁷⁸ (Brown 188)

In preparation for the scientific basis of this project, he returned in 1868 to the study of Lucas' *Traité philosophique et physiologique de l'hérédité naturelle* (1847-50) and also threw himself into the examination of Claude Bernard's *Leçons de physiologie* (1855), Morel's *Traité de dégénérescences* (1857), Letourneau's *Physiologie des passions* (1868), and Moreau de Tour's *De l'identité de l'état de rêve et de la folie*

¹⁷⁷ central theme of all of Zola's writing: "la herencia biológica constituye, en la obra de Émile Zola, el hilo conductor alrededor del cual hace girar la acción de sus novelas" (Huertas García-Alejo, *Herencia* 4). In his "General notes on the nature of the work" (1868) Zola wrote for himself the following summary of heredity modified by the environment that would characterize the series of novels, "(1) the purely human, physiological element, the scientific study of a family with the inevitable consequences and the fatalities of its lineage; (2) the effect of the modern era on this family, its breakdown through the ravaging passions of the epoch, the social and physical action of the environment" (Grant 45, translation by Elliott Grant).

¹⁷⁸ The text is from Zola's "Différences entre Balzac et moi" (1868). The translation is that of Frederick Brown.

(1855) (Brown 188). He would later emphasize the overriding importance of Prosper Lucas' encyclopedic study of heredity,

No need to indicate here all the works on physiology I consulted, [...] I need cite only Dr. Lucas's *L'Hérédité naturelle* where those who wonder about it can find the physiological system that helped me elaborate the genealogical tree of the Rougon-Macquart. (Brown 188)

All the forms of heredity described by Lucas ¹⁷⁹ appear in *Les Rougon-Macquart* together with the polymorphous inheritance ¹⁸⁰ in which, “la transmisión hereditaria de un proceso morboso disponía igualmente al padecimiento de otras enfermedades hereditarias diferentes” (Huertas García-Alejo, *Herencia* 26). This

¹⁷⁹ All the forms of heredity [...] Lucas: these are listed by Zola in the last of the *Rougon-Macquart* novels (Zola, *Pascal* 35) and appear in the second volume of Lucas' work as inherited characteristics (see above).

¹⁸⁰ polymorphous inheritance: the supposed tendency for an inherited character or predisposition to disease to manifest itself in different specific diseases in succeeding generations. In Morel's words, “Il n'est pas nécessaire [...] que la maladie des parents soit *identiquement reproduite* chez les enfants: *il suffit que ces derniers soient doués d'une prédisposition organique malheureuse qui devienne le point de départ de transformations pathologiques dont l'enchaînement et la dépendance réciproque produisent de nouvelles entités malades, soit de l'ordre physique, soit de l'ordre moral, et parfois des deux ordres réunis*” (Morel, *Traité II* 565, author's italics). On the same page, Morel illustrates this with the model of a nervous disposition (*état névropathique*) of parents giving rise in the children to mania or melancholy and ending up in idiocy or imbecility in the, “last links of the hereditary chain.” The secondary literature not infrequently quotes Morel and Lucas as using the phrases “*herencia polimorfa*” (e.g. Huertas García-Alejo, *Herencia* 26) and *l'hérédité dissimilaire* (e.g. Hochmann 407) without giving page references. I have not been able to locate the phrase *l'hérédité dissimilaire* in the original French texts. In an equivalent sense, however, Lucas does devote much space to a discussion of *métamorphose séminale des diathèses et de névropathies* (Lucas, *II* 822) and clearly supports the concept of inherited diathesis giving rise to different diseases of the nervous system. Charles Darwin also endorses this concept of polymorphous inheritance when he refers to a family history reported by Lucas in which a woman and her younger daughter died of apoplexy and the latter's twelve children all died of tuberculous meningitis. He comments, “I mention the latter case because it illustrates a frequent occurrence, namely, a change in the precise nature of an inherited disease, though affecting the same organ” (Darwin, *Variation* 55). Darwin here also expounds the received wisdom of his time, shared by French and Spanish physicians as well as English, that tuberculosis was an inherited condition. For a supposed relation between parental tuberculosis and childhood mental deficiency, see the preceding note on Langdon Down.

forms a recurring theme in the Naturalist writing not only Zola but also of Galdós. In the presence of commonly ill-defined nosological boundaries and at a time in which many diseases of obscure etiology might coexist in the same patient, links were commonly drawn between diseases that we now know to have unrelated causes, apart from the debilitating predisposing factors of malnutrition and poverty. Rickets and scrofula are examples.

The Naturalism that Zola developed in *Thérèse Raquin* and *Madelaine Ferat*, and which continued throughout the *Rougon-Macquart*, is described by Mitterand as having developed in two phases. The first of these was in Zola's public defense of the paintings of Manet between 1868 and 1870 and the second from 1876 to 1881,¹⁸¹ dating from his employment by the *Bien Public* newspaper, which provided a sounding board for his views on literature in addition to publishing installments of *L'Assommoir* (1877) (Mitterand, *langages* 23, 24). In the course of debates in the press in defense of Naturalism, Zola made himself virtually its only theoretician in France, for according to Mitterand, "n'est pas le discours d'un groupe, d'une école, mais celui d'un seul homme" (Mitterand, *langages* 24). Mitterand continues, "n'est pas à proprement théorie de roman, de la production du texte romanesque, mais plutôt une réflexion, très didactique, sur la relation de l'art et du réel" (Mitterand, *langages* 24), and maintains that Naturalism is, "une littérature d'enquête psychologique et social libérée de la censure des codes et des pouvoirs dominants"¹⁸² (Mitterand, *langages* 25).

¹⁸¹ second [phase] from 1876 to 1881: "If there was an official founding of the Naturalist movement, it doubtless occurred at the dinner offered by Zola's young disciples at the Restaurant Trapp on April 16, 1877." (Grant 100)

¹⁸² codes et des pouvoirs dominants: Zola would not have survived as a novelist had he not thrived on notariety and realized how very bankable it was. Representatives of the government

The principles of the Naturalism that Zola preached, which were not necessarily those that he practised as a novelist himself ¹⁸³ (Furst and Skrine 46), included the following features:

1. A description of recognizable, commonplace reality (a “slice of life”) often without a defined beginning or end that is detailed and affects scientific objectivity, probably influenced by the recent development of photography ¹⁸⁴ (1839), in which the authoral voice does not intrude. “There is an emphasis on content and a concomitant neglect of form and style” (Furst, Skrine 47).
2. An examination of sordid aspects of working class life and language that had previously been excluded from literature. Unlike the previous movement of Romanticism, which was typically centered on the high emotions of exceptional individuals, the principal characters of Naturalism are everyday folk who represent Everyman in their instincts and in their struggles.
3. A sense of hereditary determinism in which the characters are controlled by their *race*, *milieu* and *moment* of Taine, such that they have little control over

attempted to censure parts of *Thérèse Raquin*, while the following ten years saw a running battle between Zola and the critics of the conservative press, who decried his work. The important manifesto in his *préface* to the second edition of *Thérèse Raquin* (1868) (see above) was an answer to those critics.

¹⁸³ not necessarily those that he practised [...] himself: Mitterand highlights this discrepancy when, in the citation of Caudet, he writes of, “una oposición más o menos—varían las interpretaciones---irreconciliable entre *Le Roman experimental* (texto programático-científico) y los *Rougon-Macquart* (texto de praxis literario.simbólico-mítica)” (Caudet, *Zola* 53). Pardo Bazán also noted, “el simbolo es una de las formas usuales de la retórica zolista.” (Pardo Bazán, *cuestión* 260)

¹⁸⁴ photography: Menéndez y Pelayo complains of Galdós’s novels, “la impresión general de estos libros es aflictiva y penosa [...] en algunos la fetidez, el hambre y la miseria [...] están fotografiados con tan terrible y acusadora exactitud, que dañan á la impresión serena del arte y acongojan el ánimo con visiones nada plácidas.” (Menéndez y Pelayo, *Galdós* 119-20). Caudet also comments on the capacity of photography to afford multiple perspectives to the novelist’s vision with its “multiplicidad de enfoques posibles.” (Caudet, *Introduction* 38)

their destinies.¹⁸⁵ The Naturalistic character is, “hopelessly and irretrievably subjected to his or her *natural* condition” (Baguley, *Natural* 26, author’s italics). This is associated with moral and physical degeneration that may be the immediate effect of a bad physical, emotional and moral environment, the result of ills and predispositions inherited from forebears, or an atavistic regression to a supposedly more primitive, animal state. Familial alcoholism is a common example and various forms of madness appear frequently.

4. Strong localization. Unlike the Romantic hero whose generalized surroundings often serve to amplify his emotions, the character of the Naturalistic novel lives in a very specific and recognizable time and location. The characters’ environment, however, does not mirror their suffering and fate.

5. Absence of any metaphysical or spiritual quality in the characters who are *brutes humaines*, determined entirely by their heredity and their environment.

6. The Naturalist novel frequently has the quality of a sociological document (Hazel Gold, *canon* 180) in which the often hidden abuses of society are exposed.¹⁸⁶

After his two Naturalist novels of the 1860s, Zola’s great exposition of Naturalism and degeneration takes place in the 20-volume series of *Rougon-*

¹⁸⁵ little control over their destinies: “the novel submits man (or more frequently, women) to an ironic, humiliating destiny, exposing the fundamental corruptibility and emptiness of human existence as they manifest themselves in daily life and in the baseness of bourgeois manners.” (Baguley, *Nature* 19)

¹⁸⁶ abuses of society [...] are exposed: “the dominant tendency of the naturalist novel to deal with a scientific or sociological topic, frequently the disorders of some aspect of neurotic or hereditary pathology, along with the exposure of the shame of some aspect of the hidden side of contemporary society.” (Baguley, *Nature* 18)

Macquart novels that appeared between 1871 and 1893. The initial setting of the first episode, *La Fortune des Rougon*, is the Provençal town of Plassans, a barely disguised portrait of Aix-en-Provence, and has as its background the period of French history from the *coup d'état* in 1851, which brought Louis Napoleon to power in 1852, lasting until 1873 after the Franco-Prussian War of 1870, the end of the Second Empire and the establishment of the Third Republic. The introductory *La Fortune des Rougon* recounts the genealogy of the family that plays an opportunistic and self-serving role in Plassans in 1851 when it supports the assumption of power by the new Bonaparte. The point of departure for the family saga, however, begins beforehand with the neurotic, hysterical woman, Adélaïde Fouque, who suffers from cataleptic seizures. Her life spans the entire series since she will die with advanced dementia in an asylum at the very end. In 1786, Adélaïde marries a robust gardener by the name of Rougon who, before he dies, gives her a son, Pierre. Adélaïde then set up house with, though never marries, the alcoholic smuggler Maquart by whom she has two children, Antoine and Ursule, thus beginning two parallel family lines of the legitimate Rougon and the illegitimate Macquart. The following generation is more numerous, but hereditary determinism dogs both families, most spectacularly the Macquart where Antoine proves to be an alcoholic like his father, has an alcoholic daughter, Gervaise. She, in turn, bears a nymphomaniac daughter, Nana, a son, Jacques (Lantier),¹⁸⁷ who is a homicidal criminal and a second son, Claude (Lantier), who is a disturbed genius of a painter. While both Nana and Jacques have no surviving issue, the gifted Claude cannot escape the family's inherited destiny since his son, Jacques-Louis (Lantier),

¹⁸⁷ Jacques (Lantier): Jacques is, in fact, the *alter ego* of another son Etienne (Lantier), who reads Darwin and becomes a strike leader in *Germinal* (1885), and who is a more admirable character. Zola has the Etienne-character disappear with *Germinal* to be replaced by Jacques who resembles him and appears in the following novels. The substitution is well explained, with a useful genealogical tree, by Huertas (Huertas García-Alejo, *Herencia* 14-18).

has hydrocephalus and mental retardation while Claude, himself, later commits suicide.

The legitimate Rougons, meanwhile, ascend to power and fortune by means that are marginally less pathological. Pierre cheats his mother and half brother and sister out of their inheritance in order to buy his way into a respectable bourgeois family. With inside knowledge of a coming Bonapartist *coup d'état* he positions himself in local politics to take advantage of it. As a result, he is rewarded for his apparent service to the city of Plassans by being made tax collector, which enables him to acquire wealth and respectability, aided by his avaricious and socially ambitious wife, Félicité. The youngest son of this couple Aristide Rougon (Saccard) becomes a property speculator in Paris and amasses a colossal fortune at the time of Baron Haussmann's reconstruction of the capital. He, in turn, has a vicious, effeminate son, Maxime, who has an affair with his step-mother. Rather than being scandalized by this, Aristide turns this to his own account by blackmailing his second wife to keep the affair secret. After many following volumes full of implicit criticism of the corruption and complacency of bourgeois society and the governing classes in the Paris of the Second Empire, the series ends with the love affair of Pierre's idealistic doctor son, Pascal, with his niece, Aristide's daughter, the honorable Clotilde. Both Pascal and Clotilde appear to have escaped the evil hereditary traits of the Rougon clan and pursue an idyllic, rural passion¹⁸⁸ in a house near Plassans, where Pascal studies the archives of his family and develops a theory of heredity, which is identical to that of

¹⁸⁸ idyllic, rural passion: the affair between the 60-year old Pascal and his 26-year old niece is transparently a portrait of the relationship of Zola, himself, with his young mistress, the semstress, Jeanne Rozerot to whom he privately dedicated the volume (Brown 659). Jeanne bore him two children, who were subsequently legitimized by Zola's widow, Alexandrine, after his death (Grant 157). The gross disproportion in the ages of the couple and the incest of their uncle-niece marriage are elided by Zola.

the *Traité* of Prosper Lucas (*Traité II 2*). Other members of the family are not so fortunate, however, as Maxime's illegitimate son, Charles, is mentally retarded and dies of hemorrhage from an inherited bleeding disorder in front of the barely comprehending eyes of his great-great grandmother, the demented Adélaïde.

The appearance of the seventh *Rougon-Macquart* novel *L'Assommoir* in installments 1876, and as a book in 1877, unleashed a national furor in which Zola was harshly criticized by press, of both the Right and the Left, for its scenes of unvarnished squalor and for the vulgar language of the Paris slums in which its characters conversed. Zola responded vigorously to this criticism and to threats of prosecution enjoying not only its *succès de scandale*, but also the financial return on the book and his increased advances on future *Rougon-Macquart* volumes. The novel's success was undoubtedly due, in part, to Zola's apparent preference for the morbid and the degenerate, "su gran preocupación por la herencia patológica [...] en el sentido inverso de regresión en las constantes alusiones y desarrollos del tema de la degeneración" (Alberti 40) and, "La degeneración es el final a que llegan los protagonistas de Zola" (Alberti 47). While Prosper Lucas writes in his treatise about the inheritance of characteristics both favorable and unfavorable, Zola shows a striking predilection for the latter,¹⁸⁹ mostly involving disorders that are socially disagreeable.¹⁹⁰

¹⁸⁹ predilection for the latter [pathological]: reviewing the literature of the XIX century in 1924, Ortega y Gasset writes, "Esta predilección por lo patológico emana simplemente del pesimismo preconcebido, de la acritud y omnimodo resentamiento que actuaban en los senos del alma europea durante la pasada centuria" (Ortega y Gasset 292). While acknowledging the pessimism and horror of many volumes of the series, however, Grant takes pains to emphasize a counterbalancing optimism in the prospect of life triumphant and of hope (Grant 165).

¹⁹⁰ disorders that are socially disagreeable: "una colección de cuadros morbosos que [...] responden a una nosología un tanto limitada, refiriéndose casi exclusivamente a enfermedades

Over-ridingly important as Prosper Lucas' *Traité* was for Zola, his preparation for the *Rougon-Macquart* went well beyond the study of heredity. His study of the critical writings of Taine ¹⁹¹ is repeatedly emphasized by Brown (113, 134, 156, 285) and his devotion to the master acknowledged, "whose humble disciple he declared himself to be in 1866" (Weinstein 146). Zola, "drew decisive lessons" from Taine's book-length essay on Balzac (Brown 113) where the forces that act on man and society,

are passion and self interest [...] The constant thought of the animal is to nourish and defend itself, and the animal persists in man" governed by "a conflict of egoisms where force guided by ruse triumphs, where the torrent of violent passion breaks through the dikes erected to contain it. (Taine 81)

With such a Darwinian background, Weinstein observes that in his portrayal of the brute struggle of violence and passion, Zola owes much to the literary and intellectual influence of Balzac and Taine,

[here] is already the program French Naturalism will adopt later in the century: the study of man as part of nature, the detached attitude of the author who views his characters the way a medical researcher would deal with an interesting specimen, the determinism of forces that account for man's

de repercusión social o colectiva como el alcoholismo, la enfermedad mental, la epilepsia, la tuberculosis, etc." (Huertas García-Alejo, *Herencia* 27)

¹⁹¹ Hippolyte Adolphe Taine (1828–1893): French literary critic, social positivist and historian. He is especially remembered for his vision of determinism in human affairs under the influence of the triad of *race*, *moment* and *milieu*.

behavior. Balzac is justly considered to be the father of French Naturalism, but without Taine's role as a philosophical critic, Balzac's influence on Zola and the other Naturalist writers might not have had the same effect. (Weinstein 59)

Taine wrote to Zola expressing an interest in his early works and offered advice that may have influenced Zola to present a wider social background and more balanced anti- thetical characters in his *Rougon-Macquart* series (Weinstein 146).

Scarcely less than the influence of Taine on Zola was that of Charles Darwin, whose concept of evolution was associated in the minds of Zola's contemporaries with the possibility of regression and biological degeneration mirroring the decadence they saw in contemporary society (Huertas, *Darwinismo* 118). While heredity and degeneration form the central theme of the novels of *Les Rougon-Macquart* (Huertas, *Darwinismo* 118), there are recurring Darwinian echoes such as when Claude Lantier in *Le Ventre de Paris* (1873) describes the battle for survival of two hostile elements of contemporary society, the Fat and the Thin, as the former thrive at the expense of the latter. Similarly, the great department stores in *La Joie de vivre* (1884) swallow up small family business that cannot compete, and equally ruthless struggles are described in the class warfare of a miners' strike in *Germinal* (1885), whose hero Étienne reads Darwin in an attempt to understand the strife about him. Darwinian overtones are also present in the novel of the Franco-Prussian War, *La Débâcle* (1892).

Evolutionary regression to what was thought of as a more primitive condition, be it moral or a feature of disease, was imagined widely in contemporary society and was regarded as a typical feature of degeneration. Brown observes that the backdrop of Zola's novels, "would be a world illustrating the confusion between high and low or the destructive survival of the primitive in modern man" (Brown 190). Such fears were enhanced by disturbing social changes of Zola's time, for Paris had doubled its population between 1801 and 1846 as a result of migration from the country (Coleman 36) and the advent of the railways added a new dimension to this movement of peoples. Conservative folk, like a character in *Francillon* (1887) by Dumas *filis*, were apt to attribute society's ills to, "the invasion of women from abroad, the glorification of courtesans, the daily trainload of exotic mores that enter the city on every line, hastening local degenerations." (Brown 190)

Much has been made of the influence upon Zola of the experimental, materialist positivism of Claude Bernard's *Introduction à la médecine expérimentale* (1865) (Alberti 33), whose scientific methodology the author was to adopt in his *Le Roman expérimental* (1880).¹⁹² It has, however, been pointed out that Zola probably had not read Bernard's book until 1878 (Grant 48, Walker 138), the year of Bernard's state funeral, when the first seven of the *Rougon-Macquart* novels had already been published. An idea of the Naturalist synthesis behind the novels is probably better

¹⁹² Frederick Brown in his biography of Zola sees in *Le Roman expérimental*, "a malaise born of the conviction that unless he conferred the prestige of science upon his imaginative enterprise it would be subjective, "irrational," unmasculine" (Brown 475 n.15). Zola, himself, suggests this prejudice when, in his review of a work by Taine in 1868, he confesses, "A work of art or literature for me, is a man" (Grant 32). Galdós was not above expressing a related perspective when he praises Pardo Bazán's talent as a writer by claiming that it is more masculine than feminine, "Por el poder de su talento, Emilia Pardo no parece una escritora, pues sus obras tienen un carácter más bien varonil que femenino." (Pérez Galdós, *Conferencias* 205)

found in the preface to the second edition of *Thérèse Requin* (Furst and Skrine 28), when Zola sought to defend his new aesthetic from critics.

Of the mortal affair of Thérèse and Laurent, Zola writes that he is interested in portraying them less as individuals than as types,

j'ai voulu étudier des tempéraments y non des caractères. Là est le livre entier. J'ai choisi des personnages souverainement dominés par leur neufs et leur sang, dépourvus de libre arbitre, entraînés à chaque acte de leur vie par les fatalités de leur chair. (Zola, *Preface* ii)

deterministically dominated by their “nerves” and their “blood” to the exclusion of any exercise of free will, for the concept of a soul is irrelevant, “L'âme est parfaitement absente” (Zola, *Preface* iii). Zola assumes what will be a repeated role in his writing, that of the physician, for whom, “chaque chapitre est l'étude d'un cas curieux de physiologie” (Zola, *Preface* iii), likening his representation of living fictional characters to an autopsy, “j'ai simplement fait sur deux corps vivants le travail analytique que les chirurgiens font sur des cadavres” (Zola, *Preface* iii). Describing himself as a Naturalist writer, “Le groupe d'écrivains naturalistes auquel j'ai l'honneur d'appartenir” (Zola, *Preface* viii-ix), he again identifies with the medical profession in the detachment of his study of human rottenness that parallels that of the physician in an operating room, “cet écrivain est un simple analyste, qui a pu s'oublier dans la pourriture humaine, mais qui s'y est oublié comme un médecin s'oublie dans un amphithéâtre” (Zola, *Preface* iv).

The identification of the Naturalist writer with the supposed analytical detachment of the physician is, I believe, highly significant. As the Naturalist movement in literature spread to other countries, so too would spread the associated identification with the physician. One might speculate that this was not only to dignify the study of the pathological and the horrific in man by adopting the clinical objectivity of a respected profession, but also to attempt to defend the writer from the charge of being merely a muck-raking *voyeur*. Of all the professions that come face to face with disease and the pathological in man, the most detached and least judgemental is likely to be that of the physician.

While it was as an maturing author that Zola came to write his first manifesto on Naturalism in the preface to the second edition of *Thérèse Raquin* (1868), it was as a national celebrity that later he penned *Le Roman expérimental* (1880),¹⁹³ basing the latter on the *Introduction à l'étude de la médecine expérimentale* (1865) of Claude Bernard. In his 1880 work, Zola claimed the authority of Bernard such that, “n’aurai à faire ici qu’un travail d’adaptation [...] Le plus souvent, il me suffira de remplacer le mot ‘médecin’ par le mot ‘romancier,’ pour rendre ma pensée claire et lui apporter la rigueur d’une vérité scientifique” (Zola, *Roman* 9). Zola claims that the change of a word *doctor* for *novelist* in Bernard’s essay will allow him to effect scientific rigor as a medically-oriented *romancier naturaliste* and that all comments in the essay relating

¹⁹³ *Le Roman expérimental* (1880): Emphasizing the relatively late influence of Bernard upon Zola, Virtanen comments, “No specific allusions to Bernard are to be found in Zola’s writings prior to 1878. The assertion of Henry Céard that Zola did not study Bernard until 1879 has been accepted as authoritative. The *Introduction to Experimental Medicine* is no longer regarded as having inspired the Rougon-Macquart cycle from its inception” (Virtanen 121). Virtanen concludes that, “It is evident that Zola’s transliteration of Bernard’s experimental scientist into the “experimental novelist” was something of an afterthought. He had already marked out his path years before in such writings as *Thérèse Raquin* [...] It would seem that he sought in Bernard the authority which attacks on his “physiological” novels made him think he needed.” (Virtanen 120)

to an experimental physician/physiologist will then apply to the novelist. Zola's impulse to identify himself with an experimental physician is clear as he sees himself as the discoverer of new knowledge, "notre vraie besogne est là à nous romanciers expérimentateurs, aller du connu à l'inconnu" (Zola, *Roman* 32). He draws a direct parallel between himself as novelist, "nous sommes les juges d'instruction des hommes et de leurs passions"¹⁹⁴ and Bernard's description of the experimental biologist as, "le juge d'instruction de la nature" (Zola, *Roman* 17). Paying tribute to the deterministic heredity of mankind envisaged by Morel and Taine, Zola observes, "la question d'hérédité a une grande influence dans les manifestations intellectuelles et passionnelles de l'homme" (Zola, *Roman* 25) that, "il y a un déterminisme absolu pour tous les phénomènes humaines" and, "le déterminisme domine tout" (Zola, *Roman* 24). Confident in what he appears to believe is Bernard's endorsement of his literary vision and backed by his reading of Prosper Lucas, Zola summarizes by saying that, "le roman expérimental est une conséquence de l'évolution scientifique du siècle [...] il est en un mot la littérature de notre âge scientifique" (Zola, *Roman* 29).

The very essence of Zola's false analogy is that while the facts of the experimenter are objectively observable and may be reproduced by scientists everywhere, the "facts" of the novelist are entirely imaginary. A scientific experiment conducted under the same conditions will tend to lead to the same results anywhere. The initial data and the results of Zola's literary "experiment," however, are entirely subjective and the product of his unique imagination. While a scientist's experiment may reveal facts that were not known before, the "results" obtained by a novelist's "experiment" cannot exceed what he knew when he first sat down to write. The

¹⁹⁴ juges d'instruction des hommes et de leurs passions: Galdós sees himself very much in this light as will be apparent in the following chapter.

scientist may discover truly new information; the product of the novelist may be artistically novel but is purely one of the imagination, derived from what he or she already knows. Thus the analogy that Zola draws between chemistry, physics and physiology, “si la méthode expérimentale a pu être portée de la chimie et de la physique dans la physiologie et la médecine, elle peut l’être de la physiologie dans le roman naturaliste” (Zola, *Roman* 20) and the *experimental novel* is entirely false.

Claude Bernard has the vision to anticipate this source of confusion when he observes that the work of artistic creation has nothing to do with natural phenomena, “Pour les arts et les lettres, la personnalité domine tout. Il s’agit là d’une création spontanée de l’esprit et cela n’a plus rien de commun avec la constatation de phénomènes naturels, dans lesquels notre esprit ne doit rien créer” (Bernard 75). Zola goes as far as to quote this passage of Bernard but, undermining his thesis as it does, Zola chooses to disagree with it. Ultimately, the arguments of *Le Roman expérimental* are a scientific fantasy in a period in which medical and scientific thought enjoyed high prestige. In the words of Mitterand,

Le Roman expérimental est précisément la construction fantasmatique d’une théorie du récit. C’est un rêve d’époque, qui en dit long sur l’émergence du pouvoir médical dans la seconde moitié du XIX^e siècle: l’écrivain se prend pour un médecin et théorise son faire en langage médical. (Mitterand, *Zola* 33)

The extent to which Zola, “se prend pour un médecin et théorise son faire en langage médical” is underlined in the last of the *Rougon-Macquart* novels, *Le docteur Pascal* (1893), in which the hero of the title, a physician who devotes his life to the study of

heredity, is a thinly disguised portrait of Zola himself. Dr. Pascal's obsession with the theme of heredity parallels Zola's own and infuses the earlier 19 *Rougon-Macquart* novels. Such an identification of the novelist with the physician, which appears throughout Zola's *oeuvre*, is highly significant and appears to be part of the Naturalist aesthetic. As succeeding chapters will show, it is also a feature of the Naturalist novels of Pérez Galdós.

Though the Naturalist movement endured for little more than a decade longer in France after *Le Roman expérimental*, the literary influence of Naturalism, with its embedded degenerationism, was felt as far as the Americas, where it continued to inspire authors well into the 20th century. It was also influential in France's European neighbors as the following chapters on the Naturalist novel in Spain will show.

9) Conclusions

Degeneration theory evolved from being an intellectual tool of social observers and natural philosophers in the eighteenth century and in the first two decades of the nineteenth century, to an all-encompassing theory of social and mental disease from 1830 onwards. This was very largely the achievement of doctors in the emerging fields of *hygiène* and *aliénisme*.¹⁹⁵ Of the four major figures whose work influenced Zola in

¹⁹⁵ emerging fields of *hygiène* and *aliénisme*: there are interesting socioeconomic factors at play in the assumption of biological theory by the medical profession in this period. In France the opportunities available for professional biologists were few (in Spain they barely existed), while a glut of physicians arrived from the ranks of the military at the end of the Napoleonic era looking for work (Cartron 123). The route to biology was through medicine. In the context of Spain, this reality is emphasized by Kaplan, "without research institutes or well-equipped laboratories, Spanish scientists had to have either private financial means or to earn their income in some other way. Many, especially those involved with the natural sciences, found

the development of the poetics of Naturalism listed by Huertas García-Alejo, three were physicians while the fourth, Hipolyte Taine, undertook independent study of medicine, physiology and psychiatry.¹⁹⁶ As a result, Zola inherited the sociological positivism of Taine, the hereditary determinism of Lucas, the physiological science of Bernard and the theory of degeneration from Morel and his followers (Huertas García-Alejo, *novela* 34), all with a powerful medical bias. Much degenerationist thinking of the time can be seen as a reaction on the part of physicians to the disturbing increases in insanity and many social diseases, all related to national political instability.

The genealogical tree of the *Rougon-Macquart* illustrates many examples of trans-generational degeneration, not only among the illegitimate Macquart, but also in the descendants of the Rougon. The novelist committed to representing the more horrific aspects of the human condition, if he were not to be mere pathological *voyeur*, had to acquire the discourse and discipline of a profession accustomed to dealing with such things at first hand. Given the prestige of medicine in Zola's time, it

medicine a profession which allowed them to support themselves and to pursue scientific research [...] since, in Spain, the majority of the leading biologists were physicians, nineteenth century science was intimately connected with medical developments.” (Kaplan 45)

¹⁹⁶ Taine [...] medicine, physiology and psychiatry: “He [...] completed his scientific education through courses at the Faculty of Medicine, the Sorbonne, and the mental hospital of La Salpêtrière in Paris. Until 1857 he continued his study of physiology and natural sciences by attending the lectures of famous professors, including those of Isidore Geoffroy Saint-Hilaire, and by extensive reading” (Weinstein 20). Taine considered these studies, “an invaluable preparation for his historical work” (Pick 69) that influenced the writing of his three-volume study of the French Revolution (1878-1884) such that it, “was imbricated with medico-psychiatric and evolutionary naturalist language. Thus the psychology of the revolutionaries was [...] even likened to degenerates and atavists. The historian was thus a kind of doctor of past pathologies--a Lombroso of the archives” (Pick 68). Taine further volunteered, “It seems to me that madness has played a very great part in this world” and, “my physiological studies are teaching me history” (Pick 69 n.130). Even more vividly, he compares his History with a medical consultation in which France was the patient and the illness comparable to syphilis, “I could compare this evil to an attack of syphilis badly doctored” (Pick 69 n.131). Pick further comments on, “Taine’s overall project to trace the history of the Revolution as a history of degeneration.” (Pick 72)

was all but inevitable that the medical model should have been chosen. The image of the physician is a recurring one in Zola's texts on the poetics of Naturalism, while his identification with the physician is implicit in his writing, as the observation of Mitterand makes clear. These themes will recur in the following chapter on the growth of degenerationist ideas in Spain, transmitted through links with French medicine and the works of Zola.

Chapter 2: Degeneration Theory and Naturalism in Spain

The latter decades of the nineteenth century exhibited the most curious amalgam of art and science, literature and medicine

Rafael Huertas

1) Introduction

In this chapter I shall consider the importation of degeneration theory from France in the nineteenth century and its establishment in Spain in the 1880s, the decade in which Galdós wrote his Naturalist novels. There appear to have been two main routes of transmission of degenerationist thinking into Spain. The first of these was medical, mainly in the context of hygiene, public health and psychiatry, not only through the many French texts translated into Spanish, but also by means of Spanish physicians such as Monlau, Mata and Simarro who studied, sometimes as exiles, in France. This transmission was a gradual process that took place over 40 years, with the result that, at least in professional circles, the middle-class was primed for the arrival of the theme in literature. A second route of transmission was the Naturalist literary movement that burst upon Spain in the later 1870s as a result of the arrival of the novels of Zola. Together with their graphic representation of low-life passions and vices, these presented a deterministic and pessimistic view of the human condition with its portrayal of inherited and environmentally-induced degeneration leading progressively across the generations to sterility and extinction.

After a brief mention of the socioeconomic background of Galdós's Madrid, I shall consider the appearance of degeneration theory in different branches of medicine and public health in the city. The chapter will continue with a discussion of the fields in which the theory was applied by forensic physicians and hygienists to critique individuals and groups within Spanish society who transgressed its bourgeois norms. I shall then show how this bourgeois discourse was turned back upon the middle-class by members of the anarchist movement who were determined to challenge the view that degeneration was limited to the *masa obrera*. Degenerationist ideas would have become familiar to Galdós in the 1870s and 1880s, either through his many medical friends, his involvement with social issues as a journalist, or in his personal experience of the lower levels of Madrid life that he studied in preparation for his novels or for other reasons. While degeneration theory is implicit in the quartet of novels that are the subject of this study, Galdós explicitly endorsed the phenomenon of degeneration in a newspaper report of the trial of Cayetano Galeote in 1886.

2) References to Degeneration Theory in Spain prior to the 1880s

Few translations of French texts ¹⁹⁷ that included degenerationist concepts entered Spain in the nineteenth century after the publication between 1760 and 1805 of Buffon's *Histoire naturelle, générale et particulière* (1749-1778) and Tissot's *L'Onanisme: Dissertation sur les maladies produites par la masturbation* (1760).

¹⁹⁷ Few translations of French texts: the translation of Begue de Presle *El conservador de la salud ó aviso a todas las gentes acerca de los peligros* [...]. (1776) mentions hereditary predisposition to disease of variable time of onset depending on circumstances, which may be modified by the *médico habil*. This could be considered as a forerunner of degeneration theory in Spain.

The latter text encountered much opposition to publication in Spain during the Enlightenment, when masturbation continued to be considered a moral rather than a medical problem (Perdiguero & González 133 ff.). A Spanish translation finally passed the censors in 1807 (Perdiguero & González 131), however, and went on to appear in three further editions in the course of the nineteenth century (Plumed 83). It is highly likely that members of the professions would have been able to read the French originals¹⁹⁸ of works by Morel, Moreau de Tours, Prosper Lucas and Paul Jacoby¹⁹⁹ especially as many of them, like Pedro Felipe Monlau²⁰⁰ (Mercedes Granjel 105) and Pedro Mata²⁰¹ (Guerra 244), either undertook some of their medical training in France or were exiled there as a result of political repression in Spain. One of these temporary exiles was the hygienist Mateo Seoane,²⁰² “sin duda alguna el más ilustre de los médicos exiliados que vuelven en 1834” (López Piñero, *comunicación* 54), who fled Spain after the *trienio liberal* of 1820-23 to escape Fernando VII’s death sentence. Seoane was sufficiently versed in French to translate Anthelme Richerand’s

¹⁹⁸ French originals: A generation earlier most physicians appeared to be able to read French. When Ramón Fernández asked the *Consejo de Castilla* to approve his translation of Tissot into Spanish in 1784, the *Consejo* referred the matter to the *Academia Médica Matritense* for approval. At that time the majority of the *Academia*’s members claimed to be able to read the treatise in the French original and censured translation into Spanish on the grounds that it would be dangerous in spreading the knowledge and vice of masturbation in the non-professional classes (Perdiguero & González 152).

¹⁹⁹ Paul Jacoby (1842- ??): Jacoby’s *Études sur la sélection dans ses rapports avec l’hérédité chez l’homme* (1881) was written in response to a competition sponsored by the Royal Academy of Medicine of Madrid in 1874 (Jacoby v). By the time of its publication in France, he had been elected a corresponding member of the Academy.

²⁰⁰ Pedro Felipe Monlau (1808-1871): Catalán physician, *higienista* and polymath who was variously a professor of literature, history and philosophy as well as a writer of texts on social problems and personal and public hygiene. His prescriptive *Higiene del matrimonio ó libros de los casados* (1853) went through many editions and was current in the 1890s.

²⁰¹ Pedro Mata y Fontanet (1811-1877): Catalán physician, writer, politician and journalist who founded the study of forensic medicine in Spain, occupying the first chair of legal medicine in Madrid. He was author of five editions of *Tratado de medicina y cirugía legal teorica y práctica* (1844-75).

²⁰² Mateo Seoane Sobral (1791-1870): founder of public health and hygiene in Spain. José M. López Piñero has written a biographical and bibliographic memoir about him (López Piñero *Seoane*). His legislative role in the *Trienio liberal* is recorded by Cardona (2005).

Nosographie chirurgicale (2nd ed. 1808) as *Nosografía quirúrgica* in England in 1825 (Guerra 240). Learning from his experience of medicine and public hygiene in England, where he collaborated with the Central Board of Health (Valera Candel 142, 144), he returned after María Cristina's amnesty of liberals ²⁰³ in 1834 to play a leading role in public health legislation in Spain for the next 30 years (Guerra 244).

A bibliometric study of books on psychiatry in Spain in the nineteenth century suggests that 60% were published after 1875 (Rey González, *saber* 11) and that almost 80% of them were written by Spaniards. The dominant influence of French psychiatry, however, is indicated by the fact that 81% of all translated texts on psychiatry in Spain in the nineteenth century were from France (Rey González, *saber* 11). The analysis of the content of the texts is insufficient, however, to indicate how many of them employed degenerationist thinking.

While the evolution of degenerationist discourse in Spain in the early nineteenth century, and the means of its introduction from France, have been little studied (Huertas, personal interview), a very plausible link is represented by the career of the Catalán hygienist Pedro Felipe Monlau, “el más notable higienista español del tercio central del siglo XIX” (Castejón, *Moral* 152), whose *Remedios del pauperismo. Memoria para optar al premio ofrecido por la Sociedad Económica Matritenses el 1 de mayo de 1845* (1846) reveals the fully-fledged association of degenerationist rhetoric with public health. Published eleven years before Morel's

²⁰³ amnesty of liberals: A fellow exile, Mariano Battlés Torres Amat, trained in medicine at the University of Edinburgh and penned the first description of neurosis and disorientation suffered by exiles in his thesis *Dissertatio Medica inauguralis quaedam de mania complesteus [...]*. (1827) (Valera 164).

landmark *Traité*,²⁰⁴ it is strikingly reminiscent of the essay of Bertulus (see above) published at almost the same time.

Monlau considers the plight of the urban poor, “clases desgraciadas” with their lack of healthy food and absence of ventilated, clean lodging and adequate clothing and predicts the lamentable state of the children of parents in poverty. The fate of the impoverished is one of physical and moral degeneration,

su degeneración física; de ahí el transmitir la vida á séres débiles y enfermizos como él; y de ahí la enervación de las generaciones. A la degeneración física acompaña la degradación moral [...] de embriaguez y de libertinaje que se observan en la población indigente. (Monlau, *Remedios* 25)

All the elements of degeneration theory are here, environmental and inherited determinism with the linkage of physical and moral breakdown with alcoholism and sexual promiscuity that Monlau relates to the progress of “la civilización industrial” (Monlau, *Remedios* 26). Monlau adheres to the Rousseauan view of the *noble savage*, “en los países salvajes ó casi salvajes el pauperismo es nulo ó casi nulo” and firmly lays the problem at the door of modern society, “el pauperismo aumenta al compás de la civilización [industrial]” (Monlau, *Remedios* 11). He contrasts the latter with a Utopian “civilización moral” (Monlau, *Remedios* 12) and continues the long tradition

²⁰⁴ eleven years before Morel’s [...] *Traité*: Campos Marín has also made this observation, “En 1845, P.F.Monlau estableció la relación entre pobreza, degeneración física y degradación moral [...] entroncando con las reflexiones de J.J.Rousseau sobre los efectos nocivos de la civilización en la salud humana. Este hecho es muy significativo porque muestra que, antes de que Morel formulase la teoría de la degeneración, existía en la tradición higienista el interés por estos aspectos” (Campos Marín, *medicina social* 336). In other words, degeneration theory preceded Morel, not only in France but also in Spain.

of associating physical with moral degeneration, differing from Morel only in ascribing the besetting sin of mankind not to the Fall of Adam but to poverty, “el pecado original de la sociedad humana, es la maldición fulminada por Dios contra el hombre allá en el Paraíso terrenal” (Monlau, *Remedios* 8). So great is the problem that Monlau sees it as a threat to society itself, “la cuestion del pauperismo se roza con la existencia de la misma sociedad” (Monlau, *Remedios* 26) linking it with doubts about society’s survival.²⁰⁵

Monlau had been exiled to France for two years in 1837 following the suppression of his progressive newspaper and, “su exilio en París le puso en contacto con la medicina europea y con el movimiento sanitario inglés” (Mercedes Granjel 105), though Granjel gives no details of degenerationists whom he might have encountered in the French capital. In 1840, however, Monlau not only published his translation into Spanish of Brierre de Boismont’s work entitled, *Memoria para el establecimiento de un hospital de locos* (1836)²⁰⁶ (Mercedes Granjel 105), but in addition presented his own *Memoria para el establecimiento de un hospital de locos extramuros de Barcelona* at a meeting in Barcelona in 1846, very much influenced by Brierre’s text (Campos Marín, *psiquiatría* 54). This suggests that he might, at very

²⁰⁵ doubts of society’s very survival: this fear of the long-term consequences of the noxious effects of city life was voiced throughout the nineteenth century and was expressed in a French publication 26 years later, “les excès alcooliques, la misère et l’immoralité dans les grandes villes [...] et vous aurez les principaux facteurs de la dégénération de l’espèce en Europe [...] la civilization est certainement une cause de dégénérescence.” (Boeckel 763-4)

²⁰⁶ *Memoria [...] hospital de locos*: Another translation of this paper, from French into English, appeared in the *Transactions of the Medical Society of the State of New York* 3 (1837): 238-298. Brierre (Brière) de Boismont was awarded a prize for the essay by the Sociedad de Ciencias Médicas y Naturales of Brussels in 1834 (Brierre 118). In his essay, he mentions moral treatment, and suicidal and homicidal monomania, but not degeneration.

least, have corresponded with Brierre de Boismont,²⁰⁷ who was an *aliéniste* of Esquirol's circle together with Moreau de Tours (Goldstein, *Console* 266) and who was in the thick of Parisian *aliéniste* debates from the 1820s into the 1870s. Brierre was very familiar with Morel's work and wrote a review of the latter's *Études Cliniques. Traité théorique et pratique des maladies mentales* (1852) in *Annales médico-psychologiques* in the same year (Friedlander 80). At Morel's death in 1873, "he praised his theory of degeneration and Morel's recognition of the pathological impact of heredity on successive generations" (Dowbiggin, *Inheriting* 121). Such findings suggest that Brierre may have been at least one of Monlau's sources for degeneration theory and, hence, one of the routes of its introduction into Spain.

A review of texts published in Spain from 1846 to 1884 reveals a series of works, mostly in French, that include the concept of degeneration. A dictionary of theology by the Abate Nicholas Bergier, translated from French in 1846, refers to, "degeneración notable de la especie humana" in the context of cretinism, reminiscent of views Morel would express in 1851, and repeats an etiological supposition of the time relating it to environmental humidity, "La degeneración de estos cretinos se ha atribuido al efecto de una humedad" (Bergier *IV*). In a medical text of the same year, Anastasio Chinchilla would state that poor care and lack of breast-feeding in families could result in, "Degeneración de la especie humana [...] El no criar las madres á sus hijos, es una de las principales causas de esta degeneración" (Chinchilla, *IV* 147). In 1855, an angry debate over the possible dangers of vaccination was precipitated by a translation of a French polemic, *De la degeneración física y moral de la especie humana, ocasionada por la vacuna* by a "Dr. Verdé-Delisle" to be met by a rebuttal in

²⁰⁷Alexandre-Jacques-François Brière (or Brierre) de Boismont (1797-1881): French *aliéniste* and writer on many aspects of mental disease. He was a colleague of Morel.

the following year by Fernando Weyler y Laviña pointedly entitled, *De la perfección física y moral del hombre ó Defensa de la vacuna contra los principales cargos que le hace en Francia el Dr. Verdé-Delisle considerándola como causa de la supuesta degeneración física y moral del hombre*. In 1863 the medical journal, *El Pabellón Médico*, reported news from France of a paper presented at the June meeting of the Anthropological Society of Paris by “Pablo Broca”²⁰⁸ on the cross-breeding of races, and the marriage of blood relatives, when it was agreed that, “La consanguinidad es una causa de enfermedad ó de degeneración.” (Historia 390). In the same issue of the journal is a review of Morel’s recently published *El bocio y el cretinismo*²⁰⁹ in which the reviewer comments on, “la transmisión por medio de la herencia de una degeneración moral tan profunda como es la que caracteriza el cretinismo” (Croquis 361), with the approving comment, “Creemos exacta la opinión de M. Morel” (Croquis 363). It would appear that, by this time, a degenerationist explanation was unexceptional.

By the following year, the prominent medical journalist, Francisco Méndez Alvaro,²¹⁰ addressed the Real Academia de Medicina de Madrid on the beneficial effect of activity on human health in *De la actividad humana en sus relaciones con la*

²⁰⁸ Paul Broca (1824-1880): French physician, anatomist, and anthropologist who founded the Société d’Anthropologie de Paris in 1859. He is famous in medicine for his discovery of the speech center of the brain in the ventroposterior region of the frontal lobes, now known as Broca’s area. Broca influenced Luís Simarro, during the latter’s sojourn in Paris 1880-85, and was thus indirectly responsible for the introduction of anthropology in Spain (Huertas & Martínez-Pérez 465).

²⁰⁹ This review antedates by a year the publication of Morel’s *Du goût et du crétinisme, étiologie, prophylaxie, traitement, programme médico-administratif. Précédé d’une lettre de Mgr. Billiet, archevêque de Chambéry*. Paris: Asselin, 1864.

²¹⁰ Francisco Méndez Alvaro (1803-1883): hygienist and editor of *El Siglo Médico* the, “principal revista médica española a lo largo de toda la centuria, que se fundó en 1854” (López Piñero, *ciencias* 218). Méndez presided over the Junta Municipal de Beneficencia de Madrid, was secretary of the Consejo de Sanidad del Reino and was president of the Real Academia Nacional de Medicina, among other public appointments. He was one of the driving forces behind the establishment of the Sociedad española de Higiene in 1882 (Rodríguez Ocaña 30).

salud y el gobierno de los pueblos (1864). In the course of his discourse, he took issue with Maximien Rey's *Dégénération de l'espece humaine et sa régénération* (1863) for over-emphasizing the potential of inherited degeneration, "no fijando límites á la herencia de los defectos orgánicos y de las enfermedades que suelen trasmitirse de una generacion á otra" (Méndez, *actividad* 112) and went on to suggest that breeding with healthy people would dilute noxious effect suggesting, as an example, the lightening of negroid skin color over the course of generations,

Mas afortunadamente no sucede así, antes la mezcla de unas gentes con otras anula y extingue esos gérmenes, restituyendo á su tipo la especie; de igual manera que en los mulatos se atenúan, hasta desaparecer por completo, el color y las formas de uno de los padres, cuando en las sucesivas generaciones no vuelven á mezclarse con otro individuo de aquel mismo color ó especie. (Méndez, *actividad* 112)

Returning to the main burden of his talk, however, he ends by repeating his warning of the ill-effects of physical inactivity,

con indisputable daño de los [órganos] que permanecen en inaccion [...] rompiéndose el equilibrio del organismo, sobrevienen irregularidades, deformidades y dolencias, que abrevian la vida y operan una especie de degeneracion. (Méndez, *actividad* 124)

In a single lecture, therefore, Méndez Alvarez was thus able to argue against inherited degenerative disease while describing its fatal acquisition during the lifetime of an inactive person, a striking illustration of the versatility of the concept.

In 1867, a fully-developed statement of degeneration theory appeared in the oration with which Dr. Andrés de Laorden y López ²¹¹ opened the 1867-8 academic year of the University of Valladolid. Entitled, *Del hombre: su estado social y causas de la alteración de su salud con relación a la degeneración de la especie*, Laorden concerned himself with, “la enumeración de aquellas causas que más directamente influyen en la salud de la especie humana” (Laorden 6). He had clearly read Morel’s *Traité*, ²¹² published ten years earlier, for he not only describes Morel’s paradigmatic environmental causes of degeneration, cretinism,

algunas localidades que impiden el desarrollo físico del hombre hasta el punto de presentarse débiles, de mal color [...] y en algunos casos deformes, requíuticos, con escasas facultades intelectuales, siendo la degeneración más notable que se observa, la llamada cretinismo. (Laorden 16)

but also because he goes on to describe theories of the cause of cretinism and quotes Morel as favoring *margas irisadas* ²¹³ as a cause.²¹⁴ In addition, Laorden had read

²¹¹ Andrés de Laorden y López (1813-1902): professor of clinical surgery and dean of the faculty of medicine of the University of Valladolid. A biographical memoir of Laorden was published by García de Padilla (1998).

²¹² Morel’s *Traité*: A copy of Morel’s *Traité de dégénérescences* (1857) was found in Laorden’s library after his death (García de Padilla 53).

²¹³ *margas irisadas*: multicolored, loamy soil

²¹⁴ a cause: Laorden lists as other theories for the cause of cretinism excess of magnesium in the soil, and also cites a “Mr Chatin” (Gaspard Adolphe Chatin, Paris physician, pharmacist and botanist 1813-1901), who thought that iodine deficiency might be responsible.

Morel's open correspondence on the subject with the Archbishop of Chambéry,²¹⁵ who also believed that some deficiency of the soil was responsible. The inaugural address continues with a consideration of environments that predispose to, "las fiebres intermitentes, en otras la fiebre amarilla" which give rise to, "verdaderas degeneraciones de la especie" (Laorden 18), which can also be produced by, "los diferentes establecimientos industriales que [...] producen alteraciones en la salud del hombre (Laorden 20). On the same theme he instances, "envenenamientos lentos como los producidos por la alteración del grano de centeno conocido con el nombre de ergotismo,²¹⁶ así como el maíz, cuyos granos se hallan alterados por una sustancia o criptograma verdet,²¹⁷ produce [...] la Pelagra ²¹⁸ o mal de rosas de Asturias" (Laorden 21). Morel's environmental toxicological model of degeneration, under the

²¹⁵ Archbishop of Chambéry, Alexis Billiet (1783-1883): the archbishop conducted an open correspondence with Morel in 1854 in the *Annales médico-psychologiques* (Friedlander 95, 115) having studied cretinism because the Alpine High Savoy, where there were many afflicted with cretinism, was in his diocese. Billiet was convinced that something about the soil was responsible and suggested that dietary iodine be given (Friedlander 102). Morel rejected this simplistic explanation, however, with a long letter propounding degeneration as a cause due to a combination of geological, racial and hygienic factors (Friedlander 104). The correspondence was published by Morel under Billiet's name in *Influence de la constitution géologique du sol sur la production du crétinisme* (1855). The causal relationship between cretinism and iodine deficiency was finally proved beyond all doubt as a result of large-scale trials by Marine and Kimbell in Akron, Ohio in 1916-1920 (Hetzl 14).

²¹⁶ Ergot: A poisonous transformation of the seed of rye and other grasses, hence, Ergotism: Poisoning by a toxic substance contained in the sclerotia of the fungus *Claviceps purpurea*, growing on rye grass; characterized by necrosis of the extremities (gangrene) (*Steadman's Medical Dictionary* 2000).

²¹⁷ Criptograma verdet: a fungus of maize (American corn). Maize became an important survival foodstuff for the poor in Southern Europe in the XVIII century but because Europeans did not cook it with lye as did the natives of the Americas, important amino acids were not released with the result that Europeans developed vitamin B3 (niacin) deficiency or pellagra. The cause of pellagra was long debated and, by analogy with the fungal infestation of rye responsible for ergotism, a popular theory was that the maize fungus *Criptograma verdet* was the cause & Álvarez Antuña 201).

²¹⁸ Pelagra (Pellagra): This vitamin-deficiency disease was first described in Asturias by Gaspar Casál y Julián in 1735 and published posthumously in *Mal de la rosa* (1762), named after the rose-colored skin rash typical of the condition. It was later described in Italy (Pellagra 1780), where it was also very common, hence the widely accepted Italian name. The dietary nature of the disease was demonstrated in Jackson, Mississippi by Joseph Goldberger in the 1910s and the specific role of niacin (vitamin B3) shown by Elvehjem in 1937 (Bollet 1992).

influence of Claude Bernard's work, is clearly in evidence. Laorden goes on to discuss the more widely recognized problem of intoxication with alcohol (Laorden 24).

Laorden reserves his gravest warnings about the degeneration of the human race, however, in connection with what he sees as sexual abuse, "el abuso de los placeres que proporcionan los actos, necesarios a la propagación de la especie" (Laorden 40).

Taking after Morel, he warns of the hazards of hereditary transmission of a wide range of conditions that threaten the future of mankind,

constituciones pobres y enfermizas, de esas deformidades, de las escrófulas, de los tuberculos tal vez, de las epilepsias, de alteraciones mentales, y [...] la mayor parte de las lesiones orgánicas que diezman la humanidad [...] transmitidas de generación en generación, amengan la robustez de las familias y llegan a desaparecer estas [...] incapacitados para las cargas sociales o inútiles hasta para ellos mismos. (Laorden 41)

With no remedy apart from the recommendation of a simple and abstemious life, the discourse ends with the reflection that civilization directed by religion, morals and science is the basis for the prosperity of nations and the only route of true happiness for the individual (Laorden 45).

Laorden must have studied Morel's *Traité* closely, for many of the principal features of that work, degeneration acquired from the environment or by heredity, degeneration affecting not only the individual but the human race at large, and degeneration as a result of sexual transgression are all listed. His references to mental disease are limited, but this may be the consequence of his professional

interests being other than those of psychiatry. Among the few solutions for the problem of degeneration suggested are abstinence and religious piety, both of which being very much in accord with Morel's cast of mind. Laorden's address in 1867 unequivocally confirms the transmission of Morel's complete degeneration theory to Spain from France only ten years after its publication. Furthermore, his inaugural discourse appears to have been well-received since he was made vice-rector of the University later in 1867 and rector in 1869 (García de Padilla 33), later dying in Valladolid, laden with honors, and memorialized by a street in the city named after him.

Another endorsement of Morel's concept of degeneration in mental disease issued from the pen of the leading English pioneer in psychiatry, Henry Maudsley,²¹⁹ whose essay in translation, "Los medios de preservarse de la locura" appeared in the *Revista Europa* in 1875. Maudsley sees as incontestable the hereditary transmission of mental disease as a process of degeneration, "Está probado que se verifica, a través de las generaciones, una evolución patológica del espíritu; ó mejor dicho, una degeneración patológica" (Maudsley 411) and immediately goes on to describe a Morelian progression, "si esta rápida decadencia no ha sido combatida, en la tercera generación se presentarán las propensiones instintivas de una mala naturaleza" (Maudsley 411). In his list of the causes of madness, Maudsley repeats Morel's insistence on the importance of heredity, "el campo de la etiología se limita, casi por completo, á la predisposición hereditaria, á la intemperancia, á las ansiedades y á las inquietudes del ánimo" (Maudsley 412). Echoing Morel's toxicological view of alcohol

²¹⁹ Henry Maudsley (1835-1918): pioneer English psychiatrist and author. The Maudsley Hospital, founded in 1915 partly as a result of his donation of funds, continues to be a leading psychiatric center in London.

abuse, “debe ocupar el segundo rango en la lista des las causas [de locura]” (Maudsley 412), he stresses the importance of avoiding intemperance in order to prevent damage to future generations, “para la generación siguiente una causa fecunda de degeneración física y mental.” Maudsley’s Victorian approach to avoiding degeneration is one of Smilesian ²²⁰ self-help, “deseo y resolución sinceras para poner los pensamientos y los sentimientos en armonía con la naturaleza, y desarrollar al máximun (sic) de fuerzas del espíritu” (Maudsley 414). He considered that the number of the insane could probably be reduced in a generation or two, “si los hombres cesaran de engañarse á sí mismos,²²¹ y se aplicaran á fortificar su carácter [...] aprendiendo á ser sinceros con su conciencia” (Maudsley 415). The high moral tone, the Lamarckian transmission of acquired characteristics, and a vaunted ability to alter the natural history of mental disease despite the implicit absence of specific medications are all features of Morel’s degeneration theory.

An endorsement of Morel from outside France, which appeared in Spain in 1881, was that of the distinguished Belgian *aliéniste*, Joseph Guislain, ²²² in his *Lecciones orales sobre las frenopátias ó tratado teórico y practico de las enfermedades mentales*. In this posthumously published edition, Guislain refers to Morel’s concept of heritable, progressive degeneration in the descendants of

²²⁰ Samuel Smiles (1812-1904): Scottish physician, author and reformer who came to exemplify the Victorian values of the self-made man, hard work and perseverance. His name has passed into the English language, “Smilesian: Of, pertaining to, or characteristic of Samuel Smiles [...] author of *Self-Help* (1859) and other works for those who wish to ‘improve’ themselves by personal effort and initiative.” (OED)

²²¹ engañarse á sí mismos: Maudsley seems to be referring here to the detachment from reality that so plagues many of Galdós’s characters, as discussed in the study of Dorothy E.S. Rundorff (1950).

²²² Joseph Guislain (1797-1860): Belgian *aliéniste*, reformer and government inspector of asylums in Belgium. Author of *Traité de Phrénopathies* (1833), he met and influenced Morel (Postel and Quételet 643).

alcoholics (Guislain 278). The edition is also valuable in that it contains an introductory essay on the contemporary duels between the legal establishment and forensic psychiatrists, *Conflictos entre la frenopatía y el código. Carta dirigida al Dr Esquerdo*, by Ángel Pulido Fernández,²²³ and a transcript of the autopsy report of the serial murderer Garayo, performed in 1881.

A wide-ranging, socio-historical application of degeneration theory, applied to figures of Roman history as well as the Royal houses of Europe, appeared in Paul Jacoby's *Études sur la sélection dans ses rapports avec l'hérédité chez l'Homme*, but was not published until 1881 in Paris (2nd edition 1904). In view of the fact that it was entered in a competition sponsored by the Real Academia de Medicina de Madrid in 1874, however, its statement of degeneration theory is likely to have been known in the 1870s, at least in the Academy, where Jacoby was elected a corresponding member in time for the affiliation to appear on the title page of his treatise in 1881.

To complete this series documenting the expression and diffusion of degeneration theory in Spain, I will cite the medical doctoral thesis of Ramón Gómez Ferrer (1862-1925).²²⁴ His thesis, *La herencia orgánica considerada principalmente bajo el punto de vista de la higiene*,²²⁵ was awarded a doctorate by the medical school

²²³ Ángel Pulido Fernández (1852-1832): medical polymath, author and editor of *El Siglo Médico*, politician and legislator.

²²⁴ Ramón Gómez Ferrer (1862-1925): the first professor of pediatrics at the University of Valencia, a position he held from 1888 until his death. He wrote over a hundred papers on pediatrics and was particularly interested in poliomyelitis. He was much loved for his humanity and his learning. There is a biographical note about him by José M. López Piñero (2003).

²²⁵ The hand-written thesis, which I examined on 18th June 2009, is now in the Medical Library of the Universidad Complutense in Madrid catalogue no. Ca 2538 (819). It was subsequently published in installements in *Crónica médica (Valencia)* in 1884-5, which I cite with the volume numbers in italics and the pages in Roman type.

of the Universidad Central de Madrid ²²⁶ and though it was awarded in 1884, in the middle of Galdós's Naturalist period, it is reasonable to assume that it reflects accepted opinion in the early 1880s, and most probably, before.

The dissertation begins with a review of the major authorities in nineteenth century biology and their opinions for or against the fixity of species (Gómez 174, 173). In the same paragraph Gómez goes on to endorse the inheritance of acquired characters,

las razas y aun los individuos de una misma especie, ofrecen en general caracteres distintivos, los que, dependientes casi siempre de la adaptación de un ser a las condiciones del medio ambiente o los hábitos contraídos, se transmiten por generación con tanta mayor seguridad, cuanto más antiguas en el individuo, en la familia o en la raza, son las modificaciones adquiridas.

(Gómez 173, 173)

adhering to the Lamarckian vision of inheritance of acquired characteristics, as was near universal at the time. He goes on to repeat the ill-influence of a bad environment upon the descendants of the individual and the community,

La humanidad, pues, se ha perfeccionado por la herencia sucesiva de la riqueza primitiva y de la adquirida [...] Las degeneraciones colectivas son

²²⁶ The *Universidad Central de Madrid* was named in 1851 following the closure of the University of Alcalá and the transfer of its functions to the capital in 1836. Between 1836 and 1851, the institution had been known as the *Universidad Literaria*. Later, during the *franquismo*, its name was changed to *Universidad Complutense de Madrid* and in 1968 it became the *Universidad Autónoma de Madrid*.

debidas a las malas condiciones del medio externo, o a los abusos y excesos de todo orden en las costumbres: son las mismas que provocan las degeneraciones individuales, pero obrando en sentido más general y transmitiéndose también de una a otras generaciones por un hecho de verdadera *herencia colectiva*. Y si se da al médico la carga de regular las condiciones de la vida individual, ¿es posible negarle el derecho de intervenir en la dirección de las colectividades, cuya vida tanto se refleja y tanto influye en la del individuo? (Gómez 182, 430, author's italics)

This sentiment reflects the perceived overlap of private and public degeneration and asserts the right of the physician to direct “the conditions of life” in both contexts for the good of all. Gómez is thus writing very much in the French hygienist tradition, repeating the views of Morel and Maudsley that they had an ethical right to prescribe the way in which society lives.

Gómez discusses ideas about the types of inheritance of disease, reflecting Prosper Lucas' classification and his endorsement of telegony (Gómez 174, 175; 177, 274) and repeats Haeckel's theory of the mechanism of inheritance (Gómez 176, 239-40) with his neologism of the *ley de homocronia*.²²⁷ He also refers to the debate in

²²⁷ *ley de homocronia*: the general tendency for inherited conditions to manifest themselves at the same time of life that they appear in their parents. A physiological example would be puberty, while a pathological example would be Huntington's chorea. The term *homocronia* is a coinage of Haeckel's, but the phenomenon is repeatedly emphasized by Darwin who calls it, more ponderously, “inheritance at corresponding periods of life” (Darwin, *Variation II* 51). Darwin attributes the observation not only to Prosper Lucas, “Dr Prosper Lucas [...] asserts that affections of all kinds [...] tend to reappear in the offspring at whatever period in life they first appeared in the progenitor,” but also refers to Esquirol who reported instances of suicide and insanity manifesting themselves at the same age in succeeding generations (Darwin, *Variation II* 54, 55). The same idea was expressed by Lereboullet in 1834 (López-Beltrán, *Heredity* 17).

which inheritance of disease is contrasted with the hereditary transmission of a morbid predisposition (Gómez 178, 305) and quotes the French physician, Auguste Voisin,²²⁸ as an authority for the inheritance of madness, pulmonary tuberculosis, scrofula, meningo-encephalitis and acute rheumatism, not only by passing on a predisposition but also the disease itself.²²⁹ Epilepsy, hysteria and neuroses, “en general se transmiten frecuentemente por herencia” (Gómez 178, 305), among many other diseases. Gómez quotes the current idea that a transmitted, “perturbación del sistema nervioso” might produce a variety of diseases related to the nervous system, idiocy in one, encephalitis in another and deformities of the skull in yet another and goes on to cite received wisdom that syphilis in a parent might be manifest as scrofula in the child and that diabetes in the parent might produce tuberculosis in the child (Gómez 179, 341).²³⁰

Clearly an optimist, Gómez acknowledges a current view that, in comparison with the peoples of past ages, “la raza humana ha degenerado, las costumbres están corrompidas, caminamos a pasos gigantes hacia la destrucción total de la humanidad”

²²⁸ Auguste Voisin (1829-1898): French physician and *aliéniste* at the Bicêtre and Salpêtrière hospitals in Paris, a colleague of Charcot and Morel, and nephew of the *aliéniste* phrenologist Felix Voisin (1794-1872).

²²⁹ inheritance of [...] a predisposition [...] the disease itself: Gómez Ferrer is quoting Voisin’s 42-page entry, *Hérédité*, in vol XVII of Jaccoud’s *Nouveau Dictionnaire de médecine et de chirurgie pratiques* (1873). Voisin had previously presented a review of many families with epilepsy before the *Société medico-psychologique* on 30 March 1868, coming to the conclusion that of 95 patients with epilepsy, in addition to a marked family history of epilepsy itself, 12 had antecedents with tuberculosis and/or scrofula and another 12 were the children of parents with severe alcoholism (Voisin 116).

²³⁰ diabetes in the parent might produce tuberculosis in the child: Such a view is symptomatic of the widespread uncertainty about the identity and relation of different diseases. In a similar vein one might quote the speculation of Langdon Down (1866) that the congenital, mental retardation syndrome in a child (named after him) was related to tuberculosis in the child’s parents. The Morelian concept of variable expression of an inherited predisposition, *l’hérédité dissimilaire*, stated in Gómez’ thesis did nothing to remedy nosological confusion over diseases, like the syphilis, diabetes and scrofula that he cites, and that we now know to be causally unrelated. Contributing to this confusion, of course, was the fact that these diseases were so common and that many patients suffered from multiple diseases.

but chooses to reject it on the grounds that, “a ser demostrable, nos obligaría a rasgar, como falaz, la indiscutible ley del progreso humano” (Gómez 182, 430), that degeneration of the human species would be incompatible with the unchallengeable law of human progress. While Gómez Ferrer’s dissertation does not appear to report newly created data, it is a highly revealing summary of the state of medical knowledge of its time and the extent to which French medicine and biology were influential in Spain. Though Gómez declines to endorse degeneration theory as it applies to the human species as a whole, his text is full of degenerationist explanations for the genesis and transmission of disease and the relation of disease to poor moral and physical environments, whose effects are seen to be heritable. Like Morel and French hygienists as a group, he asserts his right as a physician to resolve the ills of mankind through his special knowledge of the life that is healthy for the individual, and hence, for society. It would appear from López Piñero’s biographical note (López Piñero *clásicos*) that he spent the rest of his life attempting to implement this ideal.

Though the sequence of citations of one or more elements of degeneration theory presented here gives no indication of the breadth of acceptance of the concept in nineteenth century Spanish society as a whole, its recurring appearance suggests that it was familiar and accepted in at least some sectors of the medical and hygienist establishment, and that it was available for all who cared to read the medical journals of the day. In addition, degeneration theory is expounded, or referred to, in many contemporary reference texts,²³¹ the majority translated from the French. Laorden y López’ inaugural university address in Valladolid in 1867 was a step in a distinguished

²³¹ contemporary reference texts: medical encyclopedias that I reviewed in the Biblioteca Nacional in May-June 2009 included:- Bouchut (1878), Tardieu (1882-85), Álvarez Chamorro (1851-55), Eulenburg (1889-91) (from the German), Fabre (1859-71) and the 100-volume *Déchambre* (1864-1889). Another is the 40-volume work edited by Jaccoud (1864-86).

academic career, while Gómez Ferrer's award of his doctorate in 1884 for its summary of degenerationist thinking indicates that its ideas were acceptable to the medical faculty of the *Universidad Central*. These impressions are confirmed amply by an examination of medical and hygienist texts written in Madrid after Benito Pérez Galdós began his career as a novelist in 1870.

3) Galdós's Arrival in Madrid and Early Writing Career

Pérez Galdós arrived in Madrid from his home in Las Palmas in September of 1862 and enrolled at the *Universidad Central* to read law in the, “jaula de grillos que era la *Facultad de Derechos de Madrid*—principal semillero nacional de políticos y de periodistas” (Ortiz-Armengol 131). He first installed himself in a student boarding house at 3, Calle de las Fuentes ²³² just the other side of the *Calle Mayor* from the *Plaza Mayor* and the *Cava de San Miguel*, where he would locate *Juanito's* fateful, first encounter with Fortunata in *Fortunata y Jacinta*. Galdós very quickly discovered his lack of interest in legal studies and after 1864 simply failed to attend his classes (Berkowitz 47). By the following year he was writing articles for the newspaper, *La Nación* and after that publication closed in 1868, for many other magazines and newspapers ²³³ both under his own name and anonymously.²³⁴ Galdós witnessed

²³² Calle de las Fuentes: “virtually the only one of Galdós's many Madrid dwellings to have survived” (Jacobs 13). A commemorative metal plaque, still present in 2009, was installed on the wall of the building in 1991 (Ortiz-Armengol 140) and records its association with Galdós.

²³³ many other magazines and newspapers: The selection listed by Ortiz-Armengol includes *La España Moderna*, *La Alhambra* and *El Ómnibus* (Ortiz-Armengol 154). The *Revista del Movimiento Intelectual Europeo* was another.

²³⁴ Galdós's journalistic labors between 1862 and 1874 are studied in detail by Roger Utt (1984), who published some of the findings of his PhD thesis (UC Santa Barbara 1979). More or less simultaneous publication of the same article, sometimes with modification, has been traced by scholars in newspapers as far away as Havana (Utt 82), occasionally enabling identification of anonymous pieces by comparison with items published elsewhere. Galdós's

turbulent times in the 1860s. He was present in the capacities of student and reporter at the student riot of the eve of St. Daniel, 10th April 1865, which followed Isabel II's arbitrary dismissal of *progresista* professors from the *Universidad Central* (Pérez Vidal 94), and, "received several [flat of the] saber blows on his shoulders and back" (Berkowitz 76) for his pains. He records the "descomunal batalla" in *La Nación* on 23rd April 1865 (Ortiz-Armengol 179). He watched liberal disaffection surface again in June of 1866 with the mutiny of the sergeants of the San Gill artillery barracks, a much more bloody affair with 200 dead, which Galdós watched from the *Calle del Olivo* and later recorded as "un infierno" (Pérez Galdós, *Memorias* 36). "Even more terrifying" on the following morning was the spectacle of the sergeants being paraded in pairs in public coaches up the *Calle de Alcalá* on their way to the old *Plaza de Toros* to be shot (Berkowitz 78). Only two years later, in the *Revolución Gloriosa*, Galdós again witnessed history when he saw the triumphal entry of Serrano into the *Puerta del Sol* on 3rd October 1868, after the battle of Alcolea, followed after four days by the arrival of General Prim. All of these events would be later recorded in the historical cavalcade of his *Episodios Nacionales*.

Galdós effected a transition from journalism to additional novel writing in the 1870s. He had served an extensive apprenticeship in journalism with contributions to papers of a liberal, *progresista* leaning. From a first signed article in *La Nación* in 1865, he proceeded to write 131 further pieces in the course of the next four years

articles for the *Crónica de Madrid* (1865-66) have been collected in Benito Pérez Galdós *Memorias de un desmemoriado seguido de Crónica de Madrid*. prólogo Juan Van-Halen (2004). Galdós's articles in *La Nación* (1865-68) have been collected and edited by William Shoemaker (1972), while those that appeared in *La Revista de España* (1871-1872) have been collected by Brian Dendle and Joseph Schraibman (1982). Articles written by Galdós for *La Revista del Movimiento Intelectual de Europa* (1865-1867) have been compiled by Leo Hoar (1968).

(Pattison, *Galdós* 32) and later wrote for *El Debate* of which he was briefly editor, satirizing in one article the demonstration of mantillas with which aristocratic *madrileñas* protested the reign of Amadeo (Berkowitz 69). It was in *El Debate* that Galdós's first attempt at the novelistic format, *La sombra* written in 1867-8, was serialized in 1871. Significantly, in view of Galdós's later novels, the story has a strongly psychiatric bias and deals with the hallucinations of its principal character as a result of an overactive imagination that detaches him from reality. Similarly significant is the fact that the hero inherits his diseased imagination from his father, since inherited insanity would become one of Galdós's recurring themes.

Galdós's second novel (but published first in 1870) is *La Fontana de Oro* set in the *trienio liberal* (1821-1823) of the reign of the absolutist Fernando VII. The protagonist is an idealistic liberal who comes to Madrid to help oppose conservative political forces but, having been taken advantage of, he abandons the capital for his native country with his betrothed. Galdós undertook a great deal of historical research for this story in the *Ateneo* (Berkowitz 81) in order to give it authenticity, and pursued the theme partly because of perceived parallels in national politics with the time in which he was writing. The novel was a critical and commercial success (Berkowitz 85-6). A third novel *El Audaz* (1871) appears largely derived from the formula of *La Fontana de Oro*, with the exception that the idealistic liberal hero is set in 1804 and that the novel contains much *costumbrista* detail. Following the appearance of this third novel, the founder of the *El Debate*, José Luís Albareda, founded the more up-scale *Revista de España* and, after serializing *El Audaz* in 1871, made Galdós its general editor in the following year.

Galdós harnessed his enthusiasm for recent Spanish history with a belief in slow but inevitable historical progress, the importance of the common man, rather than “great” historical figures and in the potential of the emerging middle class to blend the rough strength of the common people with the sophistication of the decadent nobility (Pattison, *Galdós* 46). These beliefs form the background to the first series of ten *Episodios Nacionales* that began with *Trafalgar* in 1873 and ended with *La batalla de los Arapiles* in 1875. The *Episodios* were hugely successful ²³⁵ and, for the first time, not only enabled Galdós to live on the earnings of his writing, but also permitted him to relinquish his editorship at the *Revista de España* and to reduce his journalistic writing (Pattison, *Galdós* 34). Encouraged by this, he immediately embarked on a second series of ten *Episodios* that was published between 1875 and 1879, vowing at the end of the last volume that his writing of historical novels was at an end.

In this period of remarkable productivity, Galdós also wrote a series of four novels set in contemporary Spain, which were much influenced by the events of the Bourbon Restoration and the intolerance that resurfaced as conservatives reversed freedoms that had been proclaimed in the revolution of 1868. Catholicism was re-established as the national religion, freedom of conscience was abolished and the Catholic Church regained control of national education. The three novels which followed, the so-called *thesis novels*, explore the relation between liberal hopes and beliefs and the opposition of entrenched, Catholic conservatism. In *Doña Perfecta*

²³⁵ *Episodios* were hugely successful: “their huge success did much to convert readers into members of a national ‘imagined community’” (Labanyi, *Spanish* 65). In contrast with other metanarratives of Spanish nationhood, Labanyi argues that, “it is only from the late 19th century that one can really talk of Spain as a nation-state in the full modern sense of the term: that is, as a national collective whose members feel a sense of shared values.” (Labanyi, *Spanish* 27)

(1876), Galdós portrayed the conflict of these polar opposites in the figures of the liberal young engineer Pepe Rey and the ultraconservative doña Perfecta. His suit to marry Perfecta's daughter, Rosario, is blocked, he is murdered at Perfecta's behest and Rosario goes mad, leaving Perfecta free to continue with her religious devotions. A similarly impassioned novelistic plea against religious intolerance is the topic of *Gloria* (1876-77), in which the Jewish hero Daniel Morton falls in love with the Catholic Gloria by whom he has a son, only to have their subsequent marriage frustrated by the opposition not only of Gloria's relatives but also of Daniel's rigidly Jewish mother. Gloria dies and Daniel goes mad in an attempt to synthesize a new religion that will reconcile the opposing beliefs that have destroyed his life. The third of the thesis novels is *La familia de León Roch* (1878-79), in which León marries the beautiful but intensely religious María de Tellería in the mistaken belief that he can mold her to adopt his own scientific and philosophical outlook which is colored by Krausism.²³⁶ This project fails completely and León is drawn irresistably to his true soul mate, *Pepa Fúcar*, since married to a scoundrel. After María's death, León rejects Pepa's suggestion that they elope to another country on the grounds that his Krausist conscience demands that he respects the laws of the current social order.

²³⁶ Krausism: the idealist philosophy of a minor German thinker, Karl Christian Krause (1781-1832), which became important in Spain following its introduction by Julián Sanz del Río (1814-1869), who taught at Madrid University between 1854-67. It is characterized by a belief in rational harmony in the universe which reconciles concepts of divinity with progressive, liberal ideas (Ward). Carr observes of Krausism, "This eccentric choice reflected Sanz del Río's concern for the moral regeneration of his country as well as his intellectual limitations. He found in Krausism an intellectualized version of the Protestant ethic of self-improvement; a mystical belief in a God-given natural harmony, connecting right thinking with good living. It was this strenuous tone which gives Krausism its force and allowed an outdated and, in many ways, preposterous system of thought to exercise great influence on a whole generation of Spanish intellectuals" (Carr, *Spain* 302). The influence of Krausism in Galdós's writing is studied by Denah Lida (1967).

These three novels criticized religious intolerance so profoundly that Galdós quickly acquired the reputation of being an anti-clerical writer (Berkowitz 139 ff., Pattison, *Galdós* 57) and earned the censure of no less a person than the ultra-Catholic scholar Marcelino Menéndez Pelayo who wrote, “Hoy en la novela el heterodoxo por excelencia, el enemigo frío e implacable del catolicismo [...] es [Galdós]” (Menéndez Pelayo, *heterodoxos III* 812 ff.). Written between *Gloria* and *León Roch* is the “lyrical interlude” of *Marienela* (1877), a sentimental tale without the religious agenda of the thesis novels but with an underlying philosophical debt to Comte (Casalduero 212), who had recently been the subject of debates in the *Ateneo* (Pattison, *Creative* 115-6). Pattison also traces a debt to Goethe’s *Wilhelm Meister* (Pattison, *Creative* 118 ff.). In the story, the ugly waif, Marienela, acts as guide to the handsome, blind Pablo Penáguilas, with whom she falls in love, representing the Comtian theological approach to reality. When Pablo’s congenital cataracts are removed by the surgeon, Teodoro Golfín, Pablo discovers that Marienela lacks the physical attractiveness, which her kindness had suggested to him when he was blind, and falls in love with his beautiful cousin, Florentina. His imagined or metaphysical approach to reality is thus corrected by the positivist, Golfín, who enables him to see reality as it really is. Distraught at her abandonment by Pablo, Marienela dies. *Marienela* enjoyed great success and, with the widespread critical approval of his *novelas de tesis* and the great popularity of his *Episodios Nacionales*, Galdós had become esteemed, by the end of the decade, as one of the most successful Spanish novelists of his day,²³⁷ “he was fast becoming Spain’s man of the nineteenth century” (Berkowitz 150).

²³⁷ Galdós [...] most successful Spanish novelists of his day: Clarín wrote in 1881, “Después de la revolución de 1868 han aparecido en España algunas figuras de excepcional valor: Echegaray, Pérez Galdós” (Alas, *desheredada* 85). Valera in 1887, lamenting the difficulties of

It was at this time, influenced by his reading of Zola's novels and aware of a new current in the writing of fiction, that Galdós effected a change of direction in his writing that will be described in a following chapter. The new mode, Naturalism, required an unvarnished representation of personal and social problems that had hitherto received only indirect reference. This representation involved a new way of articulating the portrayal of human dilemmas, which owed much to the current ideas in medicine and biology many of which were derived from the theory of degeneration.

4) Galdós's Madrid

Madrid in the decade before and after the *Gloriosa* of 1868 was a city of extremes. On the one hand there was spectacular economic growth in the 1860s with major foreign investment, much of it French, especially in banking and in railways (Carr 265, 271). On the other hand, there was terrible urban poverty,

a mass of suffering at the base of urban life: the new immigrants into the city before their absorption, the beggars and street pedlars, were its expression in Spain [...] The new poor lived in their *chozas* [shacks]²³⁸ that had begun to grow up at the edge of the great cities. Unlike the old urban poor these slum-dwellers largely escaped the influence of ecclesiastical charity. They also

earning a living by writing, conceded that, "tal vez el más popular autor de novelas, Pérez Galdós, cuente con un público de veinte mil lectores en todo el mundo español." (Valera xiv-xv)

²³⁸ *chozas* (shacks) : Huertas studies the *vivienda insalubre* that the poor endured in Madrid in his "Vivir y morir en Madrid : la vivienda como factor determinante del estado de salud de la población madrileña (1874-1923)" (Huertas 2002).

escaped municipal sanitation and were the victims of the high urban death rates from typhoid. (Carr 438-9)

With poverty and unemployment, inevitably, came crime. In his sensational *Los malhechores de Madrid* (1889),²³⁹ Gil Maestre describes, “un flujo constante de toda clase de malhechores” (Gil Maestre 5) to Madrid from the cities and small towns of Spain. He lists the locations in the capital where criminal activity is particularly prominent and occupies the bulk of his book describing the activities of the sub-specialties within the criminal world. He particularly condemns the way in which criminals become lionized in fiction,

futuros personajes de las novelas y producciones dramáticas que el mal gusto literario, impregnado de las impurezas del *realismo*, lance á la voracidad de un público ignorante ó estragado, de ese público que prefiere las obscenidades de Zola á las agudezas y nobles pensamientos de Cervantes. (Gil Maestre xv)

His puritanical protest seems undermined by the lurid details of criminal life which occupy much of the book and which are likely to have constituted its principal appeal.

The extent of emigration to Madrid can be gathered from the fact that it doubled its population from 200,000 to 400,000 between 1845 and 1870. This was in spite of a diminution of the capital’s native population by its very high mortality partly due to typhus, which was endemic in the southern *barrios populares*, and to

²³⁹ *Los malhechores de Madrid*: A comparable, though more detailed and constructive, exposé of the Paris criminal classes was published by Honoré Antoine Frégier, *Des classes dangereuses de la population dans les grandes villes, et des moyens de les rendre meilleures* (1840).

intermittent epidemics such as cholera (Bahamonde 42, 44). Largely responsible for urban poverty was the fact that industrialization in Madrid was insufficiently developed to absorb all the surplus labor from the provinces (Bahamonde 43). The resulting large, poor underclass was seen by the well-to-do and the bourgeois as a threat to social stability and fear of it was expressed in the press,

la prensa de la época refleja el temor de las capas burguesas madrileñas ante la masa de parados y subempleados existentes en Madrid. En los periódicos cada vez son más frecuentes los editoriales y noticias sobre la *cuestión social* y las soluciones que deben aplicarse como remedio. La burguesía teme la radicalización de los antagonismos de clase, fruto del proceso de proletarianización de la sociedad madrileña. (Bahamonde 44)

As a working journalist, Galdós witnessed the urban poverty that formed the basis of the *cuestión social* at first hand, writing an article with this title for the *Cronicón* in 1885. In the middle of a national economic downturn and noting the construction of 1600 new houses without any prospect of renting them and the imminence of sudden lay-offs of thousands of construction workers, he observes, “Las industrias fabriles, que en Madrid no tienen tanta importancia como la construcción, también se resienten de falta de ocupación, y de aquí el estado aflictivo de las clases populares” (Pérez Galdós, *cuestión* 147-8). Further noting the inability of inadequate public works to provide sufficient employment, linked with the absence of private investment, Galdós mourns the sight of so many robust workers lining up at charitable soup kitchens. He notes the rise and fall of competing manufacturing workshops and the consequence for day-workers that, “produce desastres económicos

que van a refluir siempre sobre los infelices asalariados. En estas catástrofes, el capital suele salvarse alguna vez, el obrero sucumbe casi siempre” (Pérez Galdós, *cuestión* 147-8). After describing the apparent resignation of the Spaniard *obrero* in the midst of such adversity, Galdós implies that the situation may change to resemble the *cuestión social* in France where, “las últimas reuniones de braceros pidiendo pan y trabajo, han sido tumultuosas, subversivas, amenizadas con recuerdos poco gratos de la *Commune*” (Pérez Galdós, *cuestión* 150, author’s italics). The association of social inequality with civil disorder is plain.

Galdós was well aware that the living conditions of the Madrid working class had been grim for years. Berkowitz describes him being shown around the wretched buildings and tenements by a rent-collector, “the scenes that he saw and the angry remonstrances and wrathful sighs of the ragged tenants saddened him to the point of grief” (Berkowitz 61). Worse conditions still were described in an anonymous article in *La Voz de la Caridad* in 1875 entitled, “Las guardillas y las casas de vecindad” in which terrible overcrowding of men, women and children in the spaces immediately beneath roofs resulted in poorly ventilated areas that were bitterly cold in winter and like ovens in summer. The consequences for children were, it was believed, moral and physical degeneration,

la mayor parte de las guardillas de Madrid constituyen un verdadero foco de infección y que, á consecuencia de la atmósfera mefítica²⁴⁰ que en ellas se

²⁴⁰ atmósfera mefítica: foul-smelling air. It should be remembered that, at this time, it was widely believed and would continue to be believed for years to come, that bad smells, in themselves, were responsible for causing and transmitting disease. This was so in spite of the fact that the bacillus of anthrax had been shown to be responsible for the disease in sheep in

respira, es frecuente el ver esas caras macilentas y pálidas, entecos y escrofulosas, verdadera degeneración de la especie humana, plantel de enfermedades crónicas y de vicios diastéticos [...] estos seres desgraciados mueren de hambre, estando al parecer bien alimentados; es que les falta aire [...] que dé vida á sus delicados miembros. (Las guardillas 282)

In the following paragraph the anonymous journalist goes on to underline the consequences of such squalor, especially, when existing side by side with ostentatious wealth, “el pobre sufre mejor su miseria aislado en modesta vivienda, que respirando una atmósfera de lujo y ostentación” and understates his case by observing that, “Es inconveniente para la moral y la tranquilidad pública que el pobre y el rico vivan dentro de unos mismos umbrales” (Las guardillas 283). Put more bluntly, the coexistence of poverty, its resulting degeneration and gross inequality is explosive and thoughtful observers, even before the 1880s, had cause for concern.

Galdós, himself, expressed similar preoccupations in newspaper and magazine articles of which items for *El Crónicon*²⁴¹ in the 1880s provide an illustration. Mutiny and street barricades erupted at times when unemployment was highest and there was a rise in the price of bread, at which time bourgeois concern for *orden público* overcame loyalty to free-market economics with the result that the *Ayuntamiento* provided subsidies for bread and some employment for day laborers (Bahamonde 44). The safety nets for the poor, traditionally provided by the Crown and the Church,

1850 by Casimir Davaine (1812-1882) and that Robert Koch demonstrated the significance of the spores of anthrax in spreading the disease in 1886. See the note on *miasma* above.
²⁴¹ items for *El Crónicon*: These include “Epidemias y crisis” 4 Jul. 1885, “El cólera y la política” 14 Aug. 1885 and “La cuestión social” 17 Feb. 1885 published in *El Crónicon*, collected in Benito Pérez Galdós *Obras Inéditas: Crónicon (1883-1886)*. vol. IV, prólog. Alberto Ghirardo, (1924).

became the responsibility of the middle-class following the passage of the *Leyes de Beneficencia* of 1821 and 1849, though the inadequacies of the system elicited protest from *higienista* editors like Méndez Alvaro, who objected not only the failure of the system but also the linked dangers of civil rebellion. Faced with unemployment, lack of food, sanitation and education, he asks rhetorically, “¿Cómo las clases menesterosas han de dejar de sublevarse contra un estado social que las niega los principios beneficios?” (Méndez Alvaro, *beneficencia* 211). Probably with the European events of 1848 in mind, he spells out the urgent social and political need for a social safety-net for the poor if the threats of communism and socialism are to be averted,

es preciso fundar sin demora una beneficencia pública de que apenas hay entre nosotros idea, o no podrá evitarse, no se evitará de seguro, la revolución social que amenaza e inquieta a la gentes honradas y sensatas. Es indudable, y conviene tenerlo muy presente: contra el socialismo y el comunismo, el más eficaz recurso que queda es una beneficencia pública, amplia, ordenada y fecunda, a la cual sirva la religión de base. (Méndez Alvaro, *beneficencia* 210)

The welfare of madrileños continued to vary more according to economic cycles than to intervention by municipal *beneficencia*, however. In Galdós’s early years in the capital, new urban construction and the building of the railways absorbed all available labor between 1859 and 1864. The economic crisis of 1865-6, however, resulted in more hunger, misery and resentment of the lower classes, despite municipal bread subsidies, which persisted until the restoration of 1874 (Bahamonde 55). The middle-class was traumatized by the continuing *cuestión social* during the revolutionary

sexenio and the return of the Bourbon monarchy did nothing to slow the pace of increasing social conflict (Bahamonde 155). Chronic underemployment continued in the 1870s, while Galdós was writing his early novels, with marginally effective attempts to control proletarian discontent and organization by the Church, by education, with its implicit ideological control (Bahamonde 156)²⁴² and by the paliative efforts of private bourgeois charity that were needed to augment the ever-inadequate *Beneficencia* (Bahamonde 157).

5) Degeneration in Galdós's Madrid

It was in the changing, and often threatening, context of Galdós's Madrid that physicians and hygienists employed degenerationist ideas in an attempt to understand, and preferably to limit, these potentially destabilizing tensions. The following sections will describe the main professional communities who employed degeneration discourse to come to terms with the social problems of the day. As the great majority of those who thought in terms of degeneration theory were of the educated middle-class, it was inevitable that the theory should be employed primarily to define and control the Other, the marginalized and the lower classes, and that the

²⁴² implicit ideological control: Bahamonde quotes the *ministro de Fomento*, the conde de Toreno, who in the preamble to a royal decree establishing a school for arts and trades in 1876 commented, "Que no solamente se atienda a la cultura e instrucción de los alumnos, sino también a su educación moral, para que los artesanos e industriales españoles sean buenos hijos, esposos honrados, modelos de padres de familia y amantes de una patria que no omite sacrificio de ninguna clase en obsequio a su dicha y bienestar" (Bahamonde 158), a clear link between education and the promotion of ostensibly bourgeois values.

latters' problems and moral failings should be perceived as the root of the *cuestión social*.

a) Public Health

Among *degeneracionistas*, the *higienistas* of Social Medicine ²⁴³ were better placed than most to know the problems that afflicted the poor (Campos, *medicina social* 335), to, “moralizar sus costumbres y estilos de vida,” and to employ their discipline of Hygiene which was best calculated to defuse social tensions, “la más indicada para auxiliar al gobierno de los pueblos y desactivar el conflicto social” (Campos Marín & Huertas, *teoría* 238). In their view, rather than being focused on individual degeneration, they focused on larger scale issues, “principal preocupación eran las consecuencias de la degeneración sobre la especie” (Campos Marín & Huertas, *teoría* 239). Accordingly, the alarm of public health physicians over the birth of so many feeble and rachitic children and their predisposition to disease was interpreted in terms of inherited degeneration of the Spanish people (Campos Marín & Huertas, *teoría* 239). This threat to racial health ²⁴⁴ was perceived as being particularly great when associated with alcohol abuse, to which the lower orders of society appeared to be especially prone. As a result, the anti-alcoholism literature is particularly heavily weighted with degenerationist discourse, “los textos antialcohólicos donde encontramos mejor expuesta la teoría de la degeneración en

²⁴³ *higienistas* of Social Medicine: Campos Marín sees the public health community as being fundamental to the introduction of degenerationism from France, “Fueron los médicos sociales y los higienistas los que, por motivos profesionales y prácticos, se interesaron en mayor medida por los aspectos sociales y colectivos de la degeneración y los que jugaron un papel relevante en su introducción en España.” (Campos Marín, *medicina social* 335)

²⁴⁴ threat to racial health: the perceived ill-effect on racial health of the degenerating influence of life in large cities has already been noted in French essays such as that of Boeckel (1872).

España” (Campos Marín and Huertas, *teoría* 241). Another problem was that of pulmonary tuberculosis where, despite the discovery of the tubercle bacillus by Koch in 1882, many Spanish physicians, even as late as 1912, continued to consider the disease the result of inherited predisposition (Campos Marín, Martínez Pérez & Huertas García-Alejo 169), an essentially degenerationist concept. Fernández Caro expresses this clearly in 1886 when he proclaimed, “No basta buscar el microbio de la tisis o de la scrófula para combatir el contagio, es necesario impedir esas uniones monstruosas que trasmiten de generación en generación el germen de la diátesis” (Fernández Caro 11), seeking a eugenic answer to what he sees as an inherited health problem.

One of the most detailed degenerationist overviews of Spain’s public health at this time, published as Galdós was writing his Naturalist novels, is *El siglo XIX considerado bajo el punto de vista médico-social* (1884) by Phillip²⁴⁵ Hauser.²⁴⁶ Hauser was a cosmopolitan physician and, “uno de los más importantes higienistas del siglo XIX español” (Campos Marín & Huertas, *teoría* 239) and paints an alarming picture of the nation’s health in which the rhetoric of degeneration was much more extensive than in that of his predecessor Monlau. He refers to alcoholism as a degenerative disease, “enfermedad [...] degenerativa de la raza humana” (Hauser, *siglo* 209), which he associates with crime and madness, and sees a terrifying increase

²⁴⁵ Phillip: Hauser’s first name is rendered variously in the literature as Felipe, Ph., and Philip.

²⁴⁶ Philip Hauser (1832-1925): of Jewish-Hungarian extraction, he studied medicine in Vienna, worked under Claude Bernard in Paris and was very much influenced by the telluric theory of disease of the German hygienist Max de Pettenkofer (1818-1901). That theory attributed epidemic diseases to a noxious, miasmatic influence arising from soil rather than to bacteria in water (Hauser, *suelo* 238; Hauser, *memorias* 61), temporarily delaying acceptance of the fact that cholera is, in reality, a waterborne, bacterial infection (Halliday 913).

in syphilis ²⁴⁷ that he describes in similar terms as, “una enfermedad social propia de nuestro siglo, constituyendo uno de los agentes debilitantes y degenerativos de la raza humana” (Hauser, *siglo* 214). Quoting Parent Duchatelet, ²⁴⁸ French author of the major mid-century French text on prostitution, he adds, “de todas las enfermedades que pueden afectar á la especie humana por vía de contagio y que traen perjuicios á la sociedad, no hay ninguna más grave, más peligrosa ni más temible que la sífilis” (Hauser, *siglo* 215). It should be added that Hauser’s figures, fearsome as they are, are underestimates as it was not then realized that the common conditions of *tabes dorsalis*, and general paresis of the insane ²⁴⁹ (the latter accounting for 20-25% of patients in asylums in, “todos los países de Europa y aún más en América (Hauser, *siglo* 206)), were also syphilitic in origin. Continuing his catalogue of horrors is tuberculosis, “la más terrible de todas aquellas á que está sujeta la raza humana, que es “la *Tisis pulmonar*” (Hauser, *siglo* 218, author’s italics), which he sees as a “plaga social” weeding out the weakly, “los individuos degenerados son eliminados del seno de la colectividad viviente” (Hauser, *siglo* 219). Such *plagas sociales degenerativas* could not but be of the greatest interest to Galdós, with his consuming interest in

²⁴⁷ increase in syphilis: according to Herrera, at the beginning of the XX century, syphilis was estimated to affect about 15% of the European population while syphilis of the spinal cord (*tabes dorsalis*) was one of the most common and important of neurological diseases (Herrera 2007a 507). There is reason to believe that Galdós, himself, may have suffered from *tabes dorsalis*, not only from his inability to stand unaided once he became blind but also because, immediately after his death, a relative questioned about the cause of death replied that he had suffered from *reblandecimiento medular* (softening of the spinal cord) (Herrera 2007b 105).

²⁴⁸ Alexandre-Jean-Baptiste Parent-Duchatelet (1790-1836). Leading Paris hygienist of his day and author of the authoritative *De la prostitution dans la ville de Paris considérée sous le rapport de l'hygiène publique, de la morale et de l'administration* (1836). For an assessment of his work see La Berge (1977).

²⁴⁹ general paresis of the insane (GPI): quoted rates vary widely. The detailed study of Villasante gives rates between 8-25% depending in part on the sex of the patients, GPI being much more frequently recognized in male patients than female (Villasante, *concepto* 61). The ebullient José María Esquerdo in his polemical *Prólogo* of Garrido’s *La cárcel ó el manicomio* (1888) cites “más de una tercera parte” of the patients in asylums in Europe and America (Esquerdo, *Prólogo Garrido* xxx), but does not give sources for this estimate.

Spanish society and its problems, and in view of a profound interest in medicine that led him to write to a close pediatrician friend, Manuel Tolosa Latour, of his “*continua flirtation con la Medicina*” (Pérez Galdós, *Niñerías* viii). Galdós had many other medical friends ²⁵⁰ upon whose knowledge he could draw, some of them with national reputations, and he did not shrink from portraying Hauser’s three great *plagas sociales*, and other forms of degeneration, in his Naturalist novels. From my survey of medical texts in the *Biblioteca Nacional* in Madrid it appears that physicians employed degenerationist thinking in relation to many different conditions, since I have encountered it in writings on diseases as diverse as syphilis, tuberculosis, scrofula, pellagra and rickets.

Hauser was not alone in linking social conditions with degeneration. The anarchist physician José García Viñas ²⁵¹ describes the association in his doctoral dissertation *Apuntes para el estudio médico-higiénico de la miseria* (1876) quoting Morel in his description of the social evils of alcoholism (Girón, *Metáforas* 251 n. 15). In addition, Ángel Fernández Caro ²⁵² in his address to the *Sociedad Española de Higiene* entitled “Los deberes de la sociedad ante los intereses de la Higiene” (1886),

²⁵⁰ medical friends: In addition to the prominent *alienista*, José María Esquerdo, Marañón lists Enrique Diego Madrazo, surgeon; Manuel Tolosa Latour, pediatrician and Alejandro San Martín, surgeon (Marañón, *Elogio* 172). The *alienista*, psychologist and politician, Luís Simarro, asked Galdós to write a prologue to his *El proceso Ferrer* (1910) when the latter referred to him as “amigo Simarro” (Vidal Parellada 159). In addition, Bly refers to “José María Escuder, one of the important founders of modern Spanish psychiatry and a close friend of Galdós” (Bly, *Eccentric* 9). I have not found this statement elsewhere but, if true, it is a particularly significant connection as Escuder was a committed degenerationist, author and disciple of Esquerdo whose views are illustrated in his testimony in the Galeote trial (see later) and his long essay “Locos lúcidos” (1883) His books included *Quemas y crímenes* (1881) and *Locos y anómalos* (1895).

²⁵¹ José García Viñas (1848-1931): physician, editor, writer and militant anarchist whose work was based in Barcelona until a disagreement at the International of 1881 led him to return to medicine in Melilla where he worked for the Beneficencia Municipal and the Cruz Roja.

²⁵² Ángel Fernández Caro y Nouvilas (1845-1928): naval physician and supporter of international scientific cooperation through the *Unión Médica Hispano-Americana*.

laments the, “degradación física y moral” produced by poverty (Fernández Caro 8-9) and urges that it be remedied in order to forestall the sickly children produced by unhealthy parents subject to, “una tendencia hereditaria al vicio y una predisposición innata a la enfermedad” (Fernández Caro 33), again stressing, as Monlau had years before, the relationship between poverty and physical and moral degradation.

b) Alcoholism

Of the causes of degeneration listed by Monlau and Hauser, alcoholism was regarded as one of the most widespread and intractable, paralleling the experience in France, where Villermé ²⁵³ includes a chapter on “L’ivognerie des ouvriers” in his *Etat physique et moral des ouvriers* (1840) (Campos Marín, *Alcoholismo* 31). Morel saw in alcohol abuse, “l’influence fatale des dégénérescences que produisent les excès de boissons” (Morel, *Traité* 109) with, “influences héréditaires soient aussi fatalment caractéristiques [...] l’imbécillité congénitale, l’idiotie sont les termes extrêmes de la dégradation chez les descendants d’individus alcoolisés” (Morel, *Traité* 109), seeing it as a source of hereditary idiocy. Morel’s disciple, Valentin Magnan,²⁵⁴ emphasized alcoholism as his paradigm for degeneration (Huertas García-Alejo, *Magnan* 361) in contrast with his mentor’s choice of cretinism as point of departure. Though medical problems caused by enebriation had been described by Trotter in 1804, both Morel and Magnan were more influenced by the recent description of the syndrome of

²⁵³ Louis René Villermé (1782-1863): hygiéniste and, with Parent-Duchatelet, the father of French public health (Ackerknecht, *Paris* 134).

²⁵⁴ Valentin Magnan: Magnan would go on to publish, “Considerations generales sobre la locura (de los hereditarios ó degenerados)” in *El Siglo Médico* in 1887 (Magnan, *locura* 105), an essay expounding the degenerationist basis of madness and quoting the thesis of his colleague Paul Maurice Legrain (1860-1939)

chronic alcoholism ²⁵⁵ in *Alcoholismus Chronicus* (1849) by the Swede, Magnus Huss,²⁵⁶ the significance of which was immediately recognized throughout Europe and, especially, in France (Campos Marín, *Alcoholismo* 32). The condition was recognized as being associated with tuberculosis, venereal disease, crime, prostitution and malnutrition and came to be seen as a medical disease rather than a social problem, though with continuing moral overtones (Campos Marín, *Alcoholismo* 34, 38). The association of physical with moral degeneration continued to be made, much as it had by Monlau in 1845, as a means of stigmatizing the working poor (Campos Marín, *Alcoholismo* 41), who were often held by the middle-class to be to blame for their poverty. A common tendency was to attribute alcoholism to the moral failings of the worker, rather than to relate it to his circumstances (Campos Marín, *Alcoholismo* 100). Some physicians stressed an association with various forms of madness, such as those listed by Giné y Partagas in his *Tratado teórico-práctico de freno-patología* of 1876 (467 ff.) and with Pritchard's ²⁵⁷ crime-predisposing *moral insanity* (Pritchard 1835).

While concerned physicians issued frantic warnings about the potential for degeneration of the individual, the family, society and the nation, a lobby of special interests saw to it that no effective regulation was introduced. This situation remained in the face of widespread belief that drunken parents engendered epileptics, idiots, and progeny with all manner of criminal and social maladjustments and that their

²⁵⁵ chronic alcoholism: the related acute syndrome of delirium tremens had been described earlier by Thomas Sutton in his *Tracts on Delirium Tremens* (1813).

²⁵⁶ Magnus Huss (1807-1890): Swedish physician to Charles XIV and Oscar I, he appears to have been the first to describe the syndrome following chronic alcohol abuse. His work is repeatedly quoted in Morel's *Traité* of 1857.

²⁵⁷ James Cowles Pritchard (1785-1848): English psychiatrist, pioneer anthropologist and ethologist, who identified the existence of moral insanity in his *A Treatise on Insanity and Other Disorders affecting the Mind* (1835).

line would be extinguished in a later generation (Campos Marín, *Alcoholismo* 126). The anti-alcoholism campaign in Spain produced, “una enorme declaración de buenas intenciones” but, “de hecho, las sociedades de temperancia, los asilos para bebedores o las legislaciones antialcohólicas no tuvieron el éxito o la profusión que se observa en otros países” (Campos Marín, *Alcoholismo* 127). Effectively, nothing was done and despite the efforts of *higienistas* to have alcoholics separated from the mad in special recovery *asilos*, their attempts foundered on the opposition of the liquor industry, the more pressing demands of other social degenerative conditions, above all tuberculosis, and ingrained social customs of alcohol consumption (Campos Marín, *Alcoholismo* 128). Others adopted a laissez-faire attitude based on the belief, derived from Morel, that the problem was auto-regulating and self-limiting in that families of degenerate alcoholics could be expected to become extinct by the fourth generation (Campos Marín, *Alcoholismo* 65). There was agreement among experts in both France and Spain, that while consumption of traditional wines and beers was, on the whole, healthful, the arrival of cheap spirits as a result of the growth of industrial scale distillation was an unmitigated disaster and was closely related to the increase of public inebriation seen in cities.

c) Prostitution and Venereal Disease

The links between alcohol, sex and sexual transgression are as old as history and it has been said that, “no realm of human experience is as closely tied to the concept of degeneration as that of sexuality” (Sander Gilman, *Difference* 191). From the oft-published text of Tissot on onanism (Perdiguero and González 143 ff.), to Morel’s condemnations of *l’immoralité* and *l’ivrognerie* (Morel, *Traité* 57-8, 311, 376-

7) to Monlau and Hauser's evaluations of Spanish society, degeneration was inextricably interwoven with the themes of sexual transgression and venereal disease. Dire warnings about the prospects of survival of the family line, on the one hand, and the future of society and the species, on the other, were the result of the medicalization of sexuality that followed the Enlightenment that Foucault refers to as, "the new technologies of sex" (Foucault, *Sexuality*, 117-9). He comments that,

the analysis of heredity was placing sex (sexual relations, venereal diseases, matrimonial alliances, perversions) in a position of "biological responsibility" with regard to the species: not only could sex be affected by its own diseases, it could also, if it was not controlled, transmit diseases or create others that would afflict future generations. (Foucault, *Sexuality* 118)

From the 1880s onwards, syphilis and its hereditary consequences became a national health problem in many countries where the discoveries of venereologists like Alfred Fourier ²⁵⁸ unleashed a wave of syphilophobia and panic because of fears of degeneration of the race and national depopulation (Viñeta-Bellasierra 39). Fourier, himself, saw syphilis and alcoholism as the two great social scourges of his time, with their dangers for the individual, for future generations and for society as a whole (Fernández, *Mujer* 93). Society, with the middle-class family at its heart, saw itself threatened, "para la moral burguesa, en que la familia y el mundo doméstico ocupaban un lugar fundamental, las enfermedades venéreas se convertían en un ataque a la institución" (Castejón, *médicos* 79). The Other, those who survived by

²⁵⁸ Alfred-Jean Fourier (1832-1914): disciple of the great venereologist Ricord and foremost syphilologist in France in the last 30 years of the nineteenth century. He established that syphilis is the cause of spinal locomotor ataxia (*tabes dorsalis*) and of general paralysis of the insane (G.P.I.) (Waugh 232-4).

prostitution, were regarded as the root cause and focus of venereal disease, “la principal fuente de propagación de la sífilis” (Viñeta-Bellasierra 52) and little attention was paid to the male clientele who made up the other half of the equation, as they were impossible to regulate, “no se puede suprimir el consumidor” (Viñeta-Bellasierra 54). Dozens of supposedly educational works from the pen of Amancio Peratoner such as *Los peligros del amor y del libertinaje* (1874) and *El mal de Venus: Estudio médico-popular sobre las enfermedades venéreas y sífilíticas* (1881) did nothing to assuage public anxiety. The mood of the time was captured by Gelabert who claimed in 1886 that, “la sífilis causaba por sí sola más estragos que todas las enfermedades contagiosa juntas” (Gelabert 26), and by Viñeta-Bellasierra (1886) who emphasized the theme of responsibility to society and the dangers of syphilis-induced degeneration of the race.

A national debate raged in medical and political circles about the best means of combating the plague. Some favored the *Reglamento*, established in 1847 in Madrid, which regulated prostitution and subjected it to licencing and medical inspection with the intention of controlling what was seen as *el mal inevitable* (Fernández, *mujer* 150; Castejón, *regulación* 227). While some, like Prudencio Sereñana y Partagás,²⁵⁹ ardently supported the regulation of prostitution as did José Viñeta-Bellasierra (Viñeta-Bellasierra 52), they were opposed by the *Abolicionistas*, of whom the Englishwoman Josephine Butler ²⁶⁰ was a recognized by Spaniards as a

²⁵⁹ Prudencio Sereñana y Partagas (1842-1902): Catalan hygienist, editor, translator and forensic psychiatrist, author of *La prostitución en la ciudad de Barcelona estudiada como enfermedad social* (1882). He was a cousin of the leading *alienista* Giné y Partagas.

²⁶⁰ Josephine Elizabeth Butler (1828-1906): feminist and activist for higher education for women and for the welfare and rehabilitation of prostitutes. She lobbied for the repeal of the Contagious Diseases Acts of the 1860s, which had regulated, and therefore recognized, prostitution. The Acts were repealed in 1886.

leader. The abolitionists claimed that regulated prostitution was a form of legal slavery and human trafficking (Vázquez, *Sifilofobia* 88) and was therefore intolerable. Pedro Monlau, as a morally inclined hygienist, had no time for the *Reglamento* and protested, “La organización y reglamentación de la prostitución es una cosa inmoral, y por consiguiente, antihigiénica, injusta, ilícita” (Castejón, *médicos* 75). In contrast with many physicians who saw the epidemic of venereal disease in predominantly medical terms, hygienists of the older generation like Monlau remained convinced that it was attributable to immoral and unhygienic practices, and that it could be abolished with the practice of good hygiene, “si fuese posible conseguir que nadie abusarse del coito, y que todo el mundo celebrarse este acto atendiendo siempre á los debidos cuidados de limpieza, desaparecería el mal venereo” (Monlau, *pública I* 286). The provisions of the *Reglamento* continued in Madrid throughout Galdós’s writing career, the legislation only being finally abolished during the Second Republic in 1935 (Nicolás Lazo 632).

d) Forensic Psychiatry

A link between alcoholism and crime was widely accepted as both were seen as the result of hereditary and environmentally induced degeneration (Hauser, *siglo* 211). Degeneration, insanity and crime had been linked in France by Felix Voisin as early as 1826 (Ackerknecht, *short* 57). A striking feature of degenerationist interpretations was that they could be held by thinkers with radically different interpretations of the causes of criminal behavior, be they evolutionary, anthropological, hereditarian, environmental or social. The lack of empirical verification of the supposed degenerative process was one of the reasons for its great

flexibility and explanatory power; there was something in it for everyone. Implicit in its discourse was great faith in the plasticity of the human personality that was considered moldable by appropriate modifications of the moral and physical environments. The inherent premise was that, given sufficient means for social and environmental control, the social physician could solve many of society's most threatening problems.²⁶¹ By promising more than they would ever have an opportunity to deliver, *alienistas* used the power-knowledge association to strive for enhanced professional status and greater power in society. The somaticist approach to mental disease characteristic of positivism, being the conviction that a structural lesion was always responsible, can also be seen as having a self-promotional agenda in that it directly challenged the Church, whose tradition taught that madness was a disorder of the soul to be remedied by spiritual means. Though the forensic medical authority, Pedro Mata,²⁶² was unsympathetic to Morel's theory of degeneration, preferring the monomania nosology of Esquirol, the positivist physician saw to it that the interests of his profession were advanced, "porque es médico, defiende los intereses de los médicos y por tanto la medicalización de la sociedad que sólo es posible mediante su patologización" (Alvarez-Uría 186). As in France, the hygienists' desire to exercise social control for the common good implied an ability to distinguish normal from the pathological, linking public hygiene with other behavior-controlling

²⁶¹ social physician could solve many of society's most threatening problems: José María Escuder expressed such an ambition in 1881, "El código del porvenir tendrán que hacerlo los médicos, únicos que conocen la naturaleza humana, únicos que pueden curarla de sus dolencias criminales, únicos que pueden torcer una organización cuando aparece en ella la fiera, cuando nos acomete la enfermedad de asesinar, cuando cabalgaba sobre nuestro cerebro el tigre o el león" (Escuder, *Quemas* 34). Spanish hygienists and alienistas' ambitions in the field of social control appear to have been no less than those of the French.

²⁶² Pedro Mata Fontanet (1811-1877): Catalán pioneer in legal medicine exiled to France in the 1830s, for political reasons, where he worked with the celebrated exiled Spanish toxicologist Mateo Orfila (1787-1853). Later professor of legal medicine in Madrid, Rector of the *Universidad Central*, governor of Madrid, mayor of Barcelona, senator and editor of medical and political publications (Peraza de Ayala 90) Mata, "Dejó una huella indelible en nuestra Medicina" (Guerra 245). He was also a poet.

sciences and, in turn, with the government in its quest to maintain social stability. As Huertas summarizes it, “la historia de las ciencias del comportamiento (psiquiatría, psicología, criminología, etc.) pasa a formar parte también de la historia de los poderes públicos” (Huertas García-Alejo, *Laboratorios* 13); psychiatry joined criminology as a facet of Public Order.

Forensic psychiatry assumed increasing importance in the assessment of criminal responsibility in the law courts when it was appreciated that merely social concepts of madness were inadequate and that not all mad criminals were delirious. This innovation was attributable to Pinel’s work in defining *manie sans délire* (1809) and the coining of the term *moral insanity* by the English psychiatrist, James Cowles Prichard, in 1835. This medicalization of insanity resulted in a dissociation of the behavior of an individual from his or her normality, effectively substituting a medical definition for a social one. The natural consequence was that insanity, above all moral and criminal insanity, became something that only the medical specialist was competent to recognize (Alvárez González 259). The conflicts of interest in clinical psychiatry, where deterministic degenerationist labels could be expected to discourage fee-paying patients by undermining any therapeutic optimism, were not present in forensic psychiatry. There, degenerationist ideas could be freely expressed by expert witnesses like Escuder, Esquerdo, Vera and Simarro in order to make a humane plea for defendants suffering from diminished responsibility. An equally important role of this expert defence was that it also served as a high profile, public forum in which the new generation of Spanish *alienistas* could promote the prestige of its profession in much the same way as Morel’s contemporaries had in France. A further goal was the reform of an antiquated legal establishment that still followed

traditional Church-based legal precedents in assigning complete, personal, moral responsibility to every criminal who was not actually raving.

A tradition of legal medicine had been established in Spain by Pedro Mata, “la primera autoridad española en Medicina legal” (Peraza de Ayala 89). Mata became *catedrático* of Legal Medicine in Madrid in 1843 (Guerra 245) and published his *Tratado de medicina y cirugía legal teórica y práctica* (1844-75) which saw five editions in his lifetime. Mata was a proponent of Esquirol’s monomania²⁶³ nosology and he was reluctant to accept the concept of *locura parcial* and Morel’s new vision of degeneration (Alvarez-Uría 185). Very reminiscent of Morel’s degenerationist conceptions, however, was his certainty of the heredity nature of insanity, “la historia de la familia es de muchísimo interés; porque la locura es una de las enfermedades hereditarias” (Mata, *II* 186). Similarly, Mata saw the origins of madness in, “los vicios y excesos” and, “el abuso de Venus”²⁶⁴ and warned of the dangers of, “el entregarse apasionadamente al amor” (Mata, *II* 157). While committing himself to collaborate with the judicial system, Alvarez-Uría notes that he also took care to promote the interests of his own profession, “porque es médico, defiende los intereses de los médicos y por tanto la medicalización de la sociedad que sólo es posible mediante su patologización” (Alvarez-Uría 186). As Foucault observes, specialized knowledge was not only used to bolster the status of the medical profession but also to medicalize society with a view to controlling it.

²⁶³ Monomania: a form of madness supposedly limited to one dysfunction (kleptomania, nymphomania, pyromania and dipsomania remain in current usage), which was diversified by Esquirol from 1820 onwards into many subtypes (Goldstein, *Console* ch. 5; Martínez Pérez *problema* 491 ff.; Saussure (1946)).

²⁶⁴ origins of madness in [...] *el abuso de Venus*: “Todos sabemos que el abuso de la Venus puede producir pérdidas seminales, y éstas un estado de locura [...] Todos sabemos que el mal venéreo ha vuelto locos á muchos.” (Mata *II* 157)

On Mata's decline, the mantle of leadership in legal medicine was assumed by his devoted disciple, the charismatic José María Esquerdo (Alvarez-Uría 200; Rey González, *Esquerdo* 103), who took full advantage of opportunities to offer expert evidence in the courts that would yield publicity and prestige ²⁶⁵ for his specialty (Campos Marín, Martínez Pérez & Huertas García-Alejo 85). Three high profile murder trials between 1880 and 1886, which captured the attention of the nation, provided exactly the forum for Esquerdo and his disciples to air their knowledge and to challenge the conservative judiciary and their allies, the more traditionally-minded members of the medical profession.

The first of these trials occurred in February 1880 in the defense of Francisco Otero González who had attempted to assassinate Alfonso XII on 30th December 1879 (Conseglieri and Villasante 218). Esquerdo used as evidence Otero's poor physical condition and unusual facies, his limited intelligence, poor emotional development and his poor heredity to argue for diminished responsibility by reason of insanity. His evidence was over-ruled, however, and Otero was executed in the April of that year, despite a plea for pardon from the king (Conseglieri and Villasante 220-1). Esquerdo registered his protest in two conferences at the medical school in March and May 1880 entitled *Locos que no lo parecen*,²⁶⁶ the second of which was reported by his pupil, Jaime Vera, in *El Liberal* and later published in full by Esquerdo himself (Esquerdo, *Locos* 229-241). In Vera's account, Esquerdo compares madness with

²⁶⁵ publicity and prestige: judging by the adulatory articles published by his *alienista* disciples, Jaime Vera and José María Escuder in the press, Esquerdo was adept at recruiting the media as well as his followers to further his cause.

²⁶⁶ *Locos que no lo parecen*: good publicist that he was, Esquerdo saw to it that this catchy phrase was repeated frequently both by himself and by his supporting team.

physical diseases, “locura á las enfermedades constitucionales ó diastéticas, transmisible por herencia y de manifestaciones múltiples, variadas y proteiformes”²⁶⁷ (Vera, *Locos* 3), insanity being due to inherited predisposition and subject to variable manifestations. So without actually mentioning Morel or degeneration, he appears to have used key concepts of predisposition, hereditary transmission and variable manifestation (*l'hérédité dissimilaire*) that were very much features of the determinism that Morel owed to Lucas. A similar absence of the word *degeneración* is a feature of Esquerdo’s written conclusions of the Otero trial though, again, as Campos Marín observes, he comes very close to the concept, “estaba cercano al degeneracionismo aunque no menciona la palabra” (Campos Marín, *profesionalización* 191). The report also provides a good example of *la compleja mezcolanza conceptual* in psychiatry of the time (Campos Marín, *Criminalidad* 117), since it is, at the same time, scattered with references to Esquirolian *monomanía*.²⁶⁸

A second opportunity for the legal defense by virtue of insanity presented itself later in 1880 in the trial of the notorious serial murderer Garayo, *El Sacamantecas*, when Esquerdo again advanced the concept, resisted in legal circles, of *locura sin delirio*.²⁶⁹ Against an opposing opinion of ten other legal experts who claimed that Garayo was legally responsible for his actions, Esquerdo and another colleague

²⁶⁷ manifestaciones múltiples, variadas y proteiformes: this is almost a direct quote of Prosper Lucas (see above).

²⁶⁸ Esquirolian *monomanía*: a good example of the Esquirol (monomanía)-Morel (hereditary degeneration) conflation perpetuated by Esquerdo is his statement, “la gran predisposición que tienen los imbéciles a las monomanías.” (Esquerdo, *Locos* 239)

²⁶⁹ *Locura sin delirio*: until this time the only form of insanity absolving the criminal from responsibility recognized in Spanish courts had been that in which the defendant was clearly raving mad. The concept of partial madness or moral insanity was contrary to Catholic teaching and viewed with great suspicion by the legal establishment, as was any thinking that challenged the doctrines of, “la libertad moral y el libre albedrío.” (Martínez Pérez, *Problemas* 513)

claimed otherwise (Alvarez-Uría 201). When Garayo was taken to the *garrote*, Esquerdo proceeded to campaign once more for the recognition of impaired responsibility by reason of insanity in his second, fuller address, somewhat confusingly titled *Locos que no lo parecen. Garayo el Sacamantecas* (1881), which was delivered twice in Madrid (Alvarez-Uría 202) and subsequently published (Esquerdo, *Garayo* 5-31). The second report was, “más rico y detallado que el de Otero” (Conseglieri and Villasante 223). In this version, he not only indicates his belief in the underlying physical basis of insanity based upon the stigmata found at physical examination, “bajo el punto de vista somático, presenta una cabeza contrahecha, deforme” (Esquerdo, *Garayo* 14) echoing observations recorded by Morel, but he also proceeds to commit himself fully to Morelian degeneration in the context of Garayo’s family history of alcoholism,

¿No veis, señores, que los diferentes miembros de esta familia llevan en su sangre el gérman de una *neurose*, [...] en todos ellos séres degenerados, de vida mental enfermiza, enteca, llamada á extinguirse en la imbecilidad ó en la demencia? ¿No veis aquí una raza que [...] está felizmente llamada á desaparecer?” (Esquerdo, *Garayo* 22-23)

with its theme of inherited degeneration, progressive, variable, mental disability and ultimate extinction. He propounds a two-way link between madness and criminality, “los padres locos suelen engendrar hijos criminales, y que la criminalidad es con frecuencia el vestíbulo de la locura” (Esquerdo, *Garayo* 23). In the following pages he pays tribute to Morel’s theory of inherited and progressive degeneration as a result of alcoholism,

El insigne alienista Morel, afirma que su experiencia está de acuerdo con [...] quienes han observado que los descendientes de padres entregados al alcoholismo crónico [...] ofrecen á menudo los caracteres de una degeneración progresiva. (Esquerdo, *Garayo* 23)

The *Locos que no lo parecen* campaign continued after Garayo's execution with a vivid article in *La Vanguardia* reporting the autopsy study of Garayo's brain written by José María Escuder, another of Esquerdo's protégés. Escuder repeats the Morelian concept of hereditary criminality related to alcoholism and neurological disturbances of many types (*l'hérédité dissimilaire*) leading to extinction, again throwing in Esquirolian manomanias for good measure,

Estas razas de criminales, destinados á extinguirse [...] hereden gérmenes de enfermedades que, fecundados por el alcohol, germinan, produciendo en unos neurósis, epilepsias en otros, en las mujeres histerismo, parálisis en lujuriosos, cánceres en no pocos, reblandecimientos del cerebro en muchísimos, monomanías en casi todos, y el crimen en la mayoría, por donde hace explosión su tenso sistema nervioso. (Escuder, *Autopsia* 4)

Escuder continues with a précis of the Garayo family history tracing the, “primera degeneración del padre de Garayo” to manifestations of epilepsy, drunkenness, robbery and murder in his children, and then goes on to recount the findings at autopsy performed before a gathering of 40. He lists deformities of the skull, asymmetry of the brain and a small, flattened cerebellum, as a result of which he announces that,

contrary to the opinion of specialists who doubted Garayo's insanity, that the matter is proven and that, "La anatomía patológica ha dado la razón al doctor Esquerdo" (Escuder, *Autopsia* 5). The positivist premises, that structural lesions must underlie insanity, are held to have been vindicated.

Esquerdo's much greater emphasis on physical stigmata in his report on Garayo than in that of Otero suggests that, "le interesaba resaltar las malformaciones craneales como dato objetivo de una posible patología mental" (Conseguieri and Villasante 223). One might speculate that the influence of Lombroso's *L'uomo delinquente* (1876 was already beginning to be felt in Madrid), though it had not yet appeared in Spanish translation, and that it may have been responsible for Esquerdo's greater attention to anatomical detail at autopsy than previously. A mere two years later (1883), for instance, Ángel Pulido was able to comment in an address at the *Ateneo* that the work of Lombroso ²⁷⁰ was well known,

bastante conocida empieza a ser entre nosotros la obra, aún no traducida, de Lombroso, *L'uomo delinquente*, y en ella habrá podido ver [...] todo lo que la craneoscopia es susceptible de ayudar a las grandes tareas de la frenopatía y la criminalidad. (Pulido, *Estado* 20)

Lombroso is not mentioned by name, however, in Esquerdo's *Locos que no lo parecen* essays.

²⁷⁰ Cesare Lombroso (1835-1909): father of Italian criminal anthropology, much influenced by Morel, in which physical stigmata were identified and measurements used to recognize the "born criminal" and others with inherited criminal traits that were regarded as atavistic throwbacks to more primitive evolutionary forms.

The third, equally notorious murder trial that gave degenerationist *alienistas* an opportunity advertise their case was that of the disaffected priest Cayetano Galeote in April 1866 after his arrest for the assassination of the recently appointed Bishop of Madrid, Narciso Martínez Izquierdo. On this occasion, the expert witnesses for the defence were three of Esquerdo's degenerationist protégés who were already well versed in forensic psychiatry, Luís Simarro,²⁷¹ Jaime Vera ²⁷² and José María Escuder.²⁷³ The three physicians emphasized different aspects of Galeote's constitution in their testimony. An anthropological approach was emphasized by the brilliant young Valencian, Simarro, who testified that Galeote was suffering from “una enfermedad mental degenerativa” as a result of “la locura hereditaria” which meant that people like him, “heredan degeneraciones físicas y morales por la enfermedad mental de sus ascendientes, y estos individuos forman una escala de degeneración” in which Galeote would be categorized as, “el caso tercero, o sea la debilidad degenerativa” (Varela and Alvarez-Uría 100). Simarro reports that Galeote is microcephalic, with a cranial volume such as is seen in imbeciles and idiots. Furthermore his well-developed wisdom teeth, which, “tend to disappear in better constituted persons,” are in Galeote, “a sign of degeneration” (Varela and Alvarez-Uría 101). To complete his anatomically-based testimony, Simarro claimed that he could distinguish any patient who was feigning insanity, “porque la locura va acompañada de síntomas somáticas

²⁷¹ Luís Simarro y Lacabra (1851-1921): Valencian *alienista*, forensic psychiatrist, experimental psychologist, author and politician. A degenerationist protégé of Esquerdo, he was briefly medical superintendent of the asylum of Leganés before visiting Paris (1880-85) where he studied psychiatry under Charcot and Magnan, and anthropology under Broca, later returning to Madrid (Campos Marín, *Criminalidad* 127) in time to testify in the Galeote trial in 1886.

²⁷² Jaime Vera (1859-1918): Spanish *alienista* and disciple of José María Esquerdo (Conseglieri and Villasante 216). He wrote a monograph on General Paralysis of the Insane (1880) prefaced by a prologue by Esquerdo. A committed socialist, he authored with Pablo Iglesias and García Quejido *La clase obrera española a finales del siglo XIX* (1883, 1973).

²⁷³ José María Escuder (1853-19??). An Esquerdo protégé *alienista* also from Valencia, politician, writer and committed degenerationist. His two main books are *Quemas y crímenes* (1881) and *Locos y anómalos* (1895) (Campos Marín, *profesionalización* 193 n.23). According to Bly, he was a close friend of Galdós (Bly, *Eccentric* 9).

que no se pueden fingir” (Varela and Alvarez-Uría 103), that is, there are physical stigmata linked to insanity that cannot be feigned.

Simarro’s evidence was complemented by that of José María Escuder who returned from Galeote’s town of Vélez-Málaga with a minutely documented genealogy²⁷⁴ of four generations of his family. Escuder found evidence of *diátesis neuropáticas* and *herencia nerviosa* attributable to inbreeding because, according to *la ley de la afinidad patológica*, his antecedents affected by the diathesis were attracted to each other (Varela and Alvarez-Uría 106). His concluding diagnosis of Galeote included, “degeneración psíquica constitucional, que irá agravándose lenta y progresivamente, según las leyes permanentes permanentes de la herencia” (Varela and Alvarez-Uría 107). The third expert witness for the defense, Jaime Vera, offered a more purely psychiatric assessment concluding that, “Galeote ofrece un caso típico del delirio de grandezas en incubación, y un caso perfecto, acabado, del delirio de persecución” (Varela and Alvarez-Uría 107).

The outcome of the trial was full of irony. The sceptical judges sided with the evidence of non-psychiatric medical experts to the effect that Galeote was responsible for his actions and condemned him to capital punishment. An appeal to the *Tribunal Supremo* ratified their judgement. While awaiting his execution in gaol, however, Galeote became so profoundly disturbed that a repeat examination by a *comisión de médicos forenses* was ordered, when they came to the conclusion that he was suffering from a *monomanía de persecución*, that he was dangerous and should be

²⁷⁴ minutely documented genealogy: this amazing compilation, which includes details of 66 living and 97 deceased members of the Galeote y Cotilla dynasty, fills two pages of Campos Marín’s account of the trial (Campos Marín, *Criminalidad* 134-5).

confined and accordingly transferred to the asylum of Leganés. Galeote was thus saved from the *garrote*, therefore, not as a result of the specialist evidence of the most up-to-date experts on criminal lunacy in the apparently sane, but by the application of long-outdated Esquirolian nosology by a conservative Establishment which was unable to ignore a severe deterioration in Galeote's madness.

Galdós, as observer and working journalist, was very well aware of the trials which captured public imagination at the time since, "he attended assiduously all the leading murder trials" (Berkowitz 107). He would later include in *La desheredada*, a portrayal of a retarded, disgruntled epileptic, Mariano Rufete, who is encouraged by acquaintances in a *taverna* to assassinate Alfonso XII, and who is very closely modeled on the history of Otero (Gordon, *medical* 70-75; Casteglieri 221). When it came to the Galeote trial, Galdós's interest in madness and the pathological led him not only to interview Galeote in prison, but also his housekeeper, doña Tránsito (Berkowitz 107). That he was very well aware of the degenerationist arguments presented at the priest's trial is confirmed by his article, written for *La Prensa* of Buenos Aires dated 9th October 1886, in which the account includes the continuing monomania-degeneration nosological confusion, "Esta monomanía de sacrificar a su honra la vida de un superior [...] indica un cerebro enfermo, una perturbación mental grave y una degeneración total indudable" (Pérez Galdós, *crimen* 86). In a following paragraph, however, where he praises the testimony of the expert witnesses, Galdós's acceptance of the degenerationist explanation of Galeote's insanity is clear,

El informe de los médicos ha sido brillante. No queda duda, después de oír a los doctores Simarro y Vera,²⁷⁵ de que Galeote es un ser degenerado. Su demencia es hereditaria, y muchos individuos de esta familia han padecido locura manifiesta o bien otras enfermedades que tienen relación con los desórdenes encefálicos. (Pérez Galdós, *crimen* 87)

since this description contains the classic description of Lucas and Morel of hereditary degeneration associated with variability of manifestations (*l'hérédité dissimialire*).

e) Clinical Psychiatry

In a century plagued by political and economic instability and a very fragmented and inadequate system for psychiatric care, no coherent psychiatric nosology emerged during the nineteenth century in Spain. Following the work in France of Philippe Pinel, his *non-restraint*²⁷⁶ and *moral treatment*²⁷⁷ were practiced in more enlightened asylums, to be followed after 1820 by the gradual adoption of the

²⁷⁵ Simarro y Vera: this appears to represent a lapse on Galdós's part since the *transcripción literal* of the trial published in the *Gazeta de Juzgados y Tribunales* (1886) and re-published by Varela and Alvarez-Uría (1979) indicates that while Luís Simarro and José María Escuder testified on the degenerative nature of Galeote's madness, Jaime Vera did not use the term, a fact also noted by Campos Marín, *criminalidad* 139). Galdós's article includes no mention of Escuder.

²⁷⁶ non-restraint: a more humane manner of managing the insane, without chains and shackles, that was pioneered in England by Robert Gardiner Hill (1811-1878) and John Conolly (1794-1866). Pinel later adopted non-restraint in France, after which it became the ostensible standard of care of the insane on the Continent.

²⁷⁷ moral treatment: It should be noted that the word "moral" in the nineteenth century in this context signified more what we would now term psychological or functional rather than simply ethical. Goldstein defined it as, "the use for the cure for insanity of methods that engaged or operated directly upon the intellect and emotions, as opposed to the traditional methods of bleedings and purgings applied directly to the lunatic's body." (Goldstein, *console* 65)

monomania nosology of Esquirol, particularly in the forensic context of *monomanía homicida*. The champion of this specific monomania in Spain was the forensic psychiatrist Pedro Mata who, in turn, bequeathed the concept to his disciple José María Esquerdo who used it in his *Locos que no lo parecen* (1880) and *Locos que no lo parecen. Garayo* (1881). The interpretation of the later and distinct doctrine of degenerationism in Spanish clinical psychiatry was, in general, confused (Campos Marín, Pérez Martínez & Huertas García-Alejo 17) and it coexisted with competing, earlier nosologies.²⁷⁸ Some psychiatrists did not mention it, others like Esquerdo clearly knew about degeneration, as his forensic essays show, but were reluctant to use the word in his clinical work.

As with observers in France (Morel, *Traité* vii; Lunier, *Augmentation* 20-33), Spanish physicians perceived a striking increase in the numbers of the insane (Bona, 597; Galcerán Granés 297-299; Monlau, *Estudios* 19) and attributed the change, as many like Guislain did in Belgium (Guislain 374), to the stresses of civilization²⁷⁹ following, “el exceso de trabajo intelectual” (Galcerán Granés 297-299, Giné y Partagás 192, 218). Boeckel²⁸⁰ in France had no doubt on the matter, “Au point de vue de l’alienation mentale, la civilization est certainement une cause de dégénérescence” (Boeckel 764). Social problems were much less likely to be linked

²⁷⁸ competing nosologies: Campos Marín refers to, “conceptos como monomanía, neurosis, degeneración etc, se suceden en cascada, lo que podría ser una muestra de la compleja mezcla conceptual que convivía todavía en la psiquiatría española.” (Campos Marín, *Criminalidad* 117)

²⁷⁹ insanity...stresses of civilization: this issue appears in the pages of *El Liberal* in 1880. After noting that Humboldt had found, “locura, desconocida [...] entre los salvajes de Asia y de África,” the editorial comments, “La vida moderna que exalta nuestras facultades intelectuales, desarrolla nuestras pasiones, multiplica nuestras necesidades y nuestras goces, excita en nuestro cerebro una actividad febril que se traduce en casos de locura cada día más frecuentes. De todos los malos que pueden afligir á la pobre humanidad, este es el único que se agrava con el progreso” (“Los Manicomios”). Some of Galdós’s characters fit this profile closely.

²⁸⁰ Eugène Boeckel (1831-1900): Surgeon born in Alsace who was on the faculty of medicine of the University of Strasbourg.

with degeneration in clinical psychiatry than in the law courts, however, and enthusiasm for the theory was much less pronounced in Spain than among French *aliénistes* (Campos Marín, *profesionalización* 197). Degeneration theory was also adduced by Morel to account for mental deficiency in infancy (Morel, *Maladies* 585),²⁸¹ and in the children of alcoholics. In the case of Down syndrome (trisomy 21), the typical “mongoloid” facies of affected children led to an interpretation employing racial theory and a classification by “ethnic standards” (Down 89). Langdon Down has, “no doubt that these ethnic features are the result of degeneration” and notes of his patients’ parents that their, “tendency is to the tuberculosis, which I believe to be the hereditary cause of the degeneration” (Down 90).

Care for the insane in Spain operated on a two-tier system (Campos Marín, Martínez Pérez & Huertas García-Alejo 14). On the one hand, the poor were incarcerated in asylums mandated by the *Ley de Beneficencia* of 1849 (Campos Marín, *profesionalización* 196), exemplified by Santa Isabel de Leganés so memorably portrayed in the opening chapter of *La desheredada*, where physicians were permitted to supervise only the physical care²⁸² of patients, while administration and

²⁸¹ mental deficiency in infancy: the history of the medicalization of mental deficiency and its classification by Morel is reviewed by Huertas García-Alejo (1998).

²⁸² physical care only: Villasante records, in the context of the diagnosis of General Paralysis of the Insane, that, “Tanto este retraso en la asimilación del concepto en la literatura médico-psiquiátrica, como la escasez de datos sobre la frecuencia de la P.G.P. [Parálisis General Progresiva] en los nosocomios decimonónicos, traducen un evidente grado de desinformación de la mayoría de los médicos-generalmente no alientistas-encargados de los enfermos mentales” (Villasante, *concepto* 72). A visiting Scottish psychiatrist wrote in 1879, in the context of the Spanish asylums that he saw, of, “that curse of Spain, clerical supremacy.” (Fraser 358)

mental care were the responsibility of clerical authorities,²⁸³ who reserved the right to discharge any physician who opposed them (Espinosa Iborra 100; Escuder, *Anómalos* 307). For the Church, madness was a spiritual malaise,²⁸⁴ free will and moral liberty intrinsic articles of orthodox doctrine, and any questioning of these doctrines by a discussion of monomania (Martínez-Pérez 512-3), for example, or degeneration theory was entirely unacceptable. The tensions of the time²⁸⁵ were illustrated by the fate of the new medical director at Leganés in 1879, Luís Simarro, who was obliged by the authorities to leave when he tried to practice autopsies in order to look for structural abnormalities that might have caused the patients' insanity (Villasante, *Leganés* 14). For well-to-do patients, on the other hand, the few private asylums, mostly in Catalonia (Campos Marín, *profesionalización* 197), but exemplified in Madrid by Esquerdo's institution in Carabanchel Alto, were committed to providing an optimistic outlook, "la promesa de la curación y el *non-restraint* [...] ante una clientela potencial, suficientemente pudiente como para exigir un 'trato adecuado' y unas posibilidades de éxito terapéutico" (Huertas, *Organizar* 52). Clearly, for

²⁸³ responsibility of clerical authorities: "en España, los manicomios públicos no llegaron a estar nunca medicalizados" (Huertas, Campos & Álvarez 53), and served instead as, "anticuadas explotaciones agrícolas, con enfermos crónicos cada vez más envejecidos y en donde el custodialismo y la marginación fue el elemento fundamental." (Comelles)

²⁸⁴ spiritual malaise: traditional Catholic doctrine regarded insanity as a disease of the soul, and consequently within the purview of spiritual management, in contrast to *alienista* contention that it was a disease of the mind, and therefore organic (physical in origin), and the concern of the physician. Álvarez González quotes *El Código de Derecho canónico* (art. II 984.3^a), "la epilepsia, la amencia o la posesión diabólica se consideran aquí como enfermedades del espíritu" (Álvarez González 258 n. 3). In his "Locos lúcidos" (1883) José María Escuder notes that in Spain, "El loco hasta hace poco era considerado como un ser de gradado, cuya falta de razón le colocaba al nivel de las bestias feroces; un aborto del pecado, un vil engendro de la caída" (Escuder, *lúcidos* 11). The conflict between Church and medicine over the responsibility for care of the insane parallels that which took place earlier in France (see Chapter I).

²⁸⁵ tensions of the time: Kaplan observes that, "while the Spanish biologists tried to learn and to teach science, the religious authorities presented obstacles to their work [...] Pope Leo XIII's encyclical *Aeterni Patria* (sic) of 1879 had tried to conciliate scientists with Catholic doctrine by advocating Thomism. The encyclical helped to stifle Spanish experimental scientists and to reinforce the already repressive laws against scientific inquiry." (Kaplan 46)

marketing and economic reasons among others,²⁸⁶ the pessimism of degenerationism was not in their interests (Campos Marín, *profesionalización* 197). An *alienista* like Esquerdo was manifestly aware of degeneration theory, being a somaticist who sought the organic origins of mental disease (Campos Marín, *profesionalización* 197). In a clinical setting, however, only when Esquerdo was talking about a patient who had died did he feel that he could let down his guard sufficiently to describe as degenerate the family of one of his more tragic patients, “todos ellos eran deformes, entecos, esmirriadosos, llevaban en su fisionomía común marcado el sello de la degeneración vesánica” (Esquerdo, *histórica* 339). Huertas assesses Esquerdo’s comment and the politics behind it,

no resultaba fácil recurrir a la degeneración y al pesimismo terapéutico que llevaba implícito; claro que la mujer había muerto antes de la publicación de su “caso clínico,” por lo que la alusión al degeneracionismo tal vez podía justificar el fracaso y la impotencia del gran alienista ante los imponderables de la naturaleza humana.” (Huertas, *Esquerdo* 107)

Implied in this admission of therapeutic failure was one of the fringe benefits of degenerationism for the medical profession, namely that it provided a theoretical alibi when therapy proved to be of no avail, since the label of *degeneration* implicitly made cure of a condition improbable. Campos Marín concurs that this double standard in

²⁸⁶ marketing and other reasons: after quoting a floridly over-optimistic account of the potential for cure within a good asylum written by Giné y Partagás in 1876, Campos cautions against the dangers of, “interpretar los textos teóricos de los psiquiatras como si éstos correspondiesen con la práctica cotidiana de la profesión” (Campos Marín, *psiquiatría* 56-7). It would appear that an element of promotional salesmanship intruded into some psychiatric texts. In the floridly fullsome encomium of Esquerdo’s private asylums at Carabanchel and Villajoyosa written in 7 installments for *El Siglo Médico* in 1882 by Ángel Pulido and Manuel Tolosa Latour, “De Carabanchel al Paraíso,” the word *degeneration* does not appear.

the application of degeneration theory had more to do with professional issues within psychiatry than with the illnesses of patients.²⁸⁷

f) Anarchism

An additional ideological field in which degeneration theory came to occupy an important role was that of anarchism.²⁸⁸ Though it developed momentum mostly after Galdós had written the Naturalist novels, its early roots are indicated by speakers at the congress of the *Federación de Trabajadores de la Región Española* in Barcelona in 1881, who ask if, “las condiciones morales y materiales en que viven los obreros” might not lead to, “la degeneración física, intelectual y moral de la raza humana” (Girón, *Metáforas* 252-3). The blame for the workers’ bad living conditions is placed squarely upon the bourgeois employers and the inadequate wages that the workers receive. As long before as 1872 at a Zaragoza congress of the *Federación de la Región Española* the appropriateness of womens’ employment in non-domestic work is seen as a, “potential fuente de inmoralidad que llevara a la degeneración de la especie” (Girón, *Metáforas* 251). A related sentiment is expressed in 1876 by the anarchist-physician José García Viñas, who sees poverty and prostitution as the, “fuente inagotable de enfermedades y de la degradación de la especie” (García Viñas 153). Apparently weary of being made the scapegoat for degeneration in Spanish society, anarchists launched a counter-offensive on the bourgeois whose corrupt and

²⁸⁷ double standard: “Esta actitud doble frente a la teoría de la degeneración respondía [...] a las estrategias de profesionalización e institucionalización de la psiquiatría en sus diferentes campos de acción.” (Campos Marín, *profesionalización* 188)

²⁸⁸ degeneration theory [...] anarchism: the use of degenerationist discourse in anarchist rhetoric has been studied in depth by Álvaro Girón Sierra in his dissertation *Evolucionismo y anarquismo: La incorporación del vocabulario y los conceptos de evolucionismo biológico en el anarquismo español (1882-1914)* (1996).

exploitive ways they considered the true source of degeneration, “La familia de los *privilegiados* no es sólo el lugar donde se reproduce la *inmoralidad* sino que es un *medio* que produce degenerados” (Girón, *Darwin* 221, author’s italics). In 1885, the bourgeois establishment was being attacked for its hypocrisy, *vicio* and degeneration in the anarchist press, “vosotros sois ya la enervada raza, la degenerada especie, envilecida por la molicie, corrompida y gangrenada por vuestro estúpido egoísmo” (*La Lucha*). As the anarchists would do later more prominently, illustrated by the biological theory of group solidarity of Pyotr Kropotkin,²⁸⁹ they aggressively turned biological theory back upon its bourgeois proponents.

Having reviewed the fields in Spanish medicine where degeneration theory was most prominent, I will now turn to the second stream of degenerationist influence imported from France, that of Naturalism. This movement broke powerfully upon the literary consciousness of Madrid in the late 1870s, some 30 years after Monlau’s degenerationist analysis of poverty in Spain in 1846. In the interim, the grim realities of Madrid’s impoverished underclasses had done nothing but get worse and the explanatory metanarrative of degeneratist thought had become equally imperative. It would take the influence of Zola and his peers, however, to initiate in Spain the transition from Realism to Naturalism that would enable the serious portrayal of the pressing social realities of the day by novelists like Galdós.

6) The arrival of Naturalism in Spain

²⁸⁹ Prince Pyotr Alexeyevich Kropotkin (1842-1921): Russian zoologist, evolutionary theorist, geographer and foremost anarcho-communist. In *Mutual Aid* (1902) he concludes, in contrast with the individualistic emphasis of Social Darwinism of the period, that cooperation and mutual aid are the most important factors in the evolution of the species and its ability to survive.

Though relatively brief, the introduction to the Naturalist novel in Spain was no overnight event.²⁹⁰ The work of Zola was first reported in the Spanish press in 1876 by the Paris correspondent, Charles Bigot, who, though he did not use the word *Naturalism*, observed that Zola emphasized the *fisiológico* in the writing.²⁹¹ He confesses himself uncomfortable with, “la fisiología de los literados” and advises delicate women to avoid reading such novels (Bigot, *correspondencia* 239), which, “pretende explicar por el temperamento, la sangre, los nervios, el juego de los órganos físicos, todo lo que hasta hoy se había explicado por los movimientos del alma y la acción de los sentimientos” (Bigot, *correspondencia* 238). Very strikingly, Bigot pursues the parallel of the novelist with the surgeon even more graphically when he likens a novel of the *Rougon Macquart*, “á una vasta clínica de hospital, en que la novelista, pareciéndose á un profesor, disecciona los cadáveres con el escalpeo²⁹² en la mano, y hace ver, por medio de la autopsia, las lesiones orgánicas que han ocasionado la muerte de cada enfermo” (Bigot, *correspondencia* 239). It appears that, from their earliest introduction to the Naturalist novel, Spanish readers were being warned to expect a new, clinical, medical approach to the representation of fictional characters. In spite of this, there was considerable confusion among critics in France between the terms *realism* and *naturalism*, which were often considered by many to be more or less equivalent. The word *Naturalism* first appears in the Spanish press as a literary term in April 1877 in a letter from Paris of Ángel Vellejo Miranda that includes the

²⁹⁰ no overnight event: 130 references to Naturalism in the Spanish press from 1876 until the publication of Pardo Bazán’s *La cuestión palpitante* (1882) have been reviewed by Gifford Davis (1954).

²⁹¹ *fisiológico* in the writing: “Mr. Zola es el último y el más completo representante de esa escuela que podemos llamar fisiológica” (Bigot, *correspondencia* 238)

²⁹² *disecciona los cadáveres con el escalpeo*: Bigot seems to be quoting Zola’s preface to *Thérèse Raquin* here, “j’ai simplement fait sur deux corps vivants le travail analytique que les chirurgiens font sur des cadavres” (Zola, *Preface* iii).

phrase, “Les escritores que se apellidan a sí propios *naturalistas*, y cuyas flamantes producciones [...] se complacen en la fotografía de todas las podredumbres carnales” (Pattison, *naturalismo* 13). Both the word *naturalismo* and the name of Zola continued to be little known in Spain, however, until the *éxito escandaloso* of *L’Assommoir* in 1877 (Pattison, *naturalismo* 11). In February of that year, Bigot again reports from Paris with a review in which he complains that the characters of *L’Assommoir* are, “tan uniformement degradada y pervertida” with, “Ni una figura simpática, ni un rayo de sol, ni siquiera de luz durante las 600 páginas” (Bigot, *Resumen* 409), with scenes which haunt him, “las escenas queden como sumergidas en el cerebro, os persiguen días enteros, sin dejaros durante las noches” (Bigot, *Resumen* 408). It would appear that such a description made the book irresistible in some quarters since copies of the novel in French were soon circulating in Spain. Despite this, however, Pattison concludes from his study of the contemporary press that, “los españoles, con excepción de algunos críticos,²⁹³ ignoraron el naturalismo literario hasta 1879 o 1880” (Pattison, *naturalismo* 19) and that, “el naturalismo no ganó mucho terreno en España [...] antes de 1880” (Pattison, *naturalismo* 18). It is probably significant that 1880 was the year in which Spanish translations of both *L’Assommoir* (1877) and *Nana* (1880) first appeared (Etreros 67).

7) Conclusions

This chapter has shown the increasing use of the concept of degeneration in Spain from 1846 onwards, fomented by medical texts from France and by the return

²⁹³ excepción de algunos críticos: F.R. Navarro appears to have been one of these, for in his review of Narciso Oller’s *Croquis del naturel* (1879), he comments that, “los poetas [...] se han ido viendo dominados por las corrientes realistas, ó si se quiere naturalistas que hoy están en boga.” (Navarro 571)

to Spain of *alienistas* and *higienistas* who had been exposed to French ideas. The unplanned growth of Madrid paralleled that of the more industrialized Paris and London producing nightmarish epidemics ²⁹⁴ of medical and social problems whose root causes were overcrowding, poverty and unemployment. Any socially-aware, Realist writer in Madrid had no choice but to confront the disease, alcoholism, madness, crime and prostitution that surrounded him or her. The explicit incorporation of these threatening social vices into Realist fiction was what gave birth to Naturalism. Experiencing and describing these horrors made some degree of detachment in the writer essential if he were to remain in control of his art. For this purpose, the most appropriate model of sympathetic detachment available to the Naturalist writer was that of the physician, a figure in France and Restoration Spain who was largely identified with liberal and progressive beliefs and with understanding of the latest theories, which included degeneration. Zola identified with the medical profession, and was so seen by some of his readers. The Naturalist vision that entered Spain in the late 1870s was thus inextricably intertwined with medicine and its degenerationist interpretation of threatening contemporary, social problems.

By the early 1880s, when Galdós began writing his Naturalist novels, the professional middle-class had developed an increasing belief that degeneration theory provided insight into Madrid's deteriorating urban poverty, the *cuestión social*. In Pick's words, "The potential degeneration of European society was thus not discussed

²⁹⁴ nightmarish epidemics: "las tasas de mortalidad general e infantil durante las últimas décadas del siglo XIX superaron con creces las de otras capitales europeas, no solo debido a las epidemias que cíclicamente atacaban a la población madrileña, sino también a las endemias y, en general, al pésimo nivel de salud de la población madrileña en situaciones no epidémicas [...] a partir de 1880 y hasta 1902, son mayoría los años en los que las tasas de mortalidad superan con creces las de natalidad" (Huertas, *Vivir* 254). Not for nothing did later writers refer to Madrid of that time as, "la ciudad de la muerte."

as though it constituted primarily a religious, philosophical or ethical problem, but as an empirically demonstrable medical, biological or physical anthropological fact” (Pick 20). Though not, perhaps, as grand as, “a felt crisis of history” (Pick 54), observers like Galdós must have been acutely aware of a felt crisis in Spanish urban society. Its seriousness is even more evident in the light of later events when degenerationist rhetoric reached its peak of intensity in Europe in the 1890s, with the perception of a cultural, historical and biological crisis (Campos Marín, *profesionalización* 199). Accompanied by widespread fear of national decline in Spain, this came to a head after the disaster of 1898. Max Nordau’s hysterical *Degeneración* (1892), translated into Spanish in 1902, and the full flood of Lombrosian criminal anthropology in 1895 (Maristany, *nuevas* 362) added to the gloom. The countervailing national movement of *Regeneracionismo* had roots in the 1880s (Viñeta-Bellasierra 57 ff., Salmerón y García) and gathered momentum in the 1890s and the first decade of the twentieth century led by Joaquín Costa among others. The 1870s and 1880s saw the spread of a degenerationist socio-medical analysis that Galdós incorporated, consciously or unconsciously, into his Naturalist novels. The following chapters will show how he did this.

Chapter 3: La desheredada

Homo sum; humani nil a me alienum puto ²⁹⁵

Terence, 2nd century B.C.E.

*Todo lo humano, normal o morboso, va a ser estudiado
con el mayor escrúpulo, con honda piedad.*

José E. Montesinos

1) Introduction

This chapter will summarize *La desheredada*, the first of Galdós's Naturalist novels of 1881, clearly written under the influence of Zola's theory and of the degeneration metanarrative that was part of it. The summary of the novel will be followed by a detailed consideration of the first chapter that serves as a thematic frame for the entire novel. Galdós's portrayal of his obsessed heroine, Isidora, will be studied in the light of degeneration theory, which she clearly exemplifies. Two of the very few articles on degeneration theory in *La desheredada*, both repeatedly cited in the critical literature, will be examined for their contributions and for the errors of fact and opinion that have been exposed, in part, by more recent scholarship. The chapter will end with a summary of conclusions that have been reached.

²⁹⁵ *Homo [...] puto*: I am a man, nothing human is foreign to me. This tag from a classical Roman comedy might well be a motto for the Naturalist novelist, who is committed to portray sympathetically the most terrible of human tribulations. It is also associated with the kindred profession of the physician whose job it also is to deal with those tribulations at first-hand. The motto was adopted by, among others, the London Hospital (now the Royal London Hospital), which was founded in 1742.

Following the publication of *La familia de León Roch* (1878), the last of his *novelas de tesis* later-denominated as belonging to his *primera época*, and the completion of the second series of the *Episodios Nacionales* in 1879, Galdós published nothing new in 1880. In comparison with his prior productivity, as Pattison suggests, this could indicate either exhaustion or preparation for a change of direction. There is evidence that the latter is correct since Galdós later penned his now-famous letter to Francisco Giner de los Ríos in 1882, in which he thanked Giner for his favorable opinion of the novel and then revealed that *La desheredada* was the beginning of a new phase in his writing, that of his *segunda manera*,

Bien sabe usted el altísimo concepto que tengo de su manera de juzgar en literatura [...] es mi satisfacción tan grande al saber el aprecio que hace de La Desheredada [...] efectivamente, yo he querido en esta obra entrar por nuevo camino o inaugurar mi segunda o tercera manera, como se dice de los pintores. (Pérez Galdós, *Giner* 62, italics those of the edition)

So it appears that in 1880, while family obligations and an unrealized romantic attachment may have distracted the author in part, the real business in hand was a change in direction in his writing as a result of his study of Zola's methods and techniques (Pattison, *Galdós* 63). Consistent with this is the fact that Galdós had no fewer than nine copies of Zola's novels, in French, in his library together with several of Zola's essays in Spanish translation, many of them annotated by Galdós (Ortiz Armengol, *Galdós* 354), suggesting that, in Ortiz Armengol's words, "no ofrece duda que Galdós fue un adepto."

2) An Introduction to *La desheredada*

When *La desheredada* appeared in 1881, it was met with silence in the critical press ²⁹⁶ that Leopold Alas, *Clarín*, upraised in a spirited defence of Galdós's new genre of novel writing (Ortiz-Armengol 353). Alas recognized the originality of Galdós's new writing,²⁹⁷ as well as its debt to Zola's Naturalism,

considero que debe ser bendito y alabado el cambio que ha sufrido Galdós en su última novela *La Desheredada*, cuya primera parte acabo de leer, y me ha hecho ver bien claro que muchas de las doctrinas del naturalismo las ha tenido por buenas el autor y ha escrito según los ejemplos de los naturalistas. (Alas, *desheredada* 87)

and condemned the conservative literary establishment of Madrid for not recognizing its stature, “es estancamiento y ruina y podredumbre el prurito del tradicionalismo irreflexivo, [...] se obstina en cerrar el espíritu nacional a toda influencia de las nuevas corrientes y de los países más adelantados” (Alas, *desheredada* 87). Galdós's debt to Zola is also recognized by Luís Alfonso in *La Época*, “el insigne novelista se aprovecha de Zola” but who also noted approvingly Galdós's avoidance of the more disagreeable of Zola's, “hediodondaces del *Assommoir* ni á las obscendidades de *Nana*” as he portrays, “las manías de la grandezas” of the principal character. He resorts to the

²⁹⁶ silence in the critical press: Galdós wrote to Giner de los Ríos 14 April 1882 of the reception of *La desheredada*, “Pero como nadie me había dicho nada, y, por el contrario, he encontrado cierta frialdad en el público y en la crítica, casi me sentía inclinado a variar de rumbo.” (Pérez Galdós, *Giner* 62)

²⁹⁷ originality of Galdós's new writing: another source of praise from the minority of perceptive observers was that Giner de los Ríos, who wrote of *La desheredada*, “la mejor que en nuestro tiempo se ha escrito en España.” (Montesinos ix)

Naturalist medical metaphor to express the surgical accuracy with which Galdós dissects the body and soul of his characters, “Nunca con más esplendor ha desplegado el novelista esas galas [...] si cuadra este nombre á la autopsia ²⁹⁸ sábia y exactísima de almas y cuerpos, de cosas y personas” (Alfonso 3). The frankness of its description of the descent of its main character into prostitution, which placed it in what would become an increasingly popular genre, the *novela lupanaria* (Pura Fernández, *Mujer* 110 ff.), was evidently too much for critics unaccustomed to seeing such matters in polite literature.²⁹⁹ The Naturalistic character of the novel is thus evident, containing as it does features of hereditary determinism, the nervous degeneration of pathological obsession in a heroine from a family of madmen and the termination of the family line in abnormal offspring. Galdós’s most recent biographer summarizes the heroine’s obsessive self-destruction,

La ley fundamental del *naturalismo* literario, según la cual las leyes de la herencia pesan de un modo definitivo sobre las conductas de los individuos, están presentes, al máximo, en *La desheredada*, que es la autodestrucción---mediante quimeras---de una mujer en cuya familia existen varios casos de locura, y que concibe un hijo anormal. (Ortiz-Armengol 354)

The novel revolves about a story of pure Morelian degeneration and illustrates how closely it is linked with Galdós’s reading of the aesthetics of Naturalism.

²⁹⁸ la autopsia: again the recurring medical metaphor of dispassionate, clinical analysis aspired to by the Naturalist author.

²⁹⁹ critics unaccustomed to seeing such matters in polite literature: Baguley perceptively writes that the work of Naturalist authors, “was attacked by their contemporaries, not because it was sordid and corrupt, but because it undermined the myths that disguised the sordid and corrupt.” (Baguley, *Entropic* 218)

3) Brief Summary of *La desheredada*

La desheredada is the story of incorrigible detachment from reality of the heroine, Isidora, an attractive twenty-year old who comes to Madrid from the Manchegan town of Tomelloso. She has grown up in the house of an eccentric *canónigo* uncle who fosters in her the firm conviction that she is the illegitimate granddaughter and heir of the *marquesa* de Aransis. As a result, she believes herself destined for the better things in life that are due to her by right, rather than as the reward for personal effort. Her experience of living on modest means, the death of a mad father in an asylum and the crimes of an epileptic, delinquent brother do nothing to shake that conviction. She spurns the suit of the sterling medical student, Augusto Miquis, who she feels is beneath her socially, and continues her extravagant spending at the cost of giving herself to a feckless and predatory widower of a *marquesa*, Joaquín Pez, by whom she has a deformed child. She later passes to a series of increasingly unsavory and brutal lovers. Her suit to the *marquesa* of Aransis fails when it becomes clear that her documents are forgeries, and she is imprisoned for fraud. Her pretensions to nobility shattered, she transforms to a new, vulgar identity and departs for employment on the streets as the novel ends.

4) The Crucial First Chapter

The novel begins with the theme which will recur in the four Naturalist novels of this study, that of madness. Far from being an instance of individual insanity, however, Galdós crafts a portrayal with a resonance that extends throughout many levels in the novel. Madness is shown as a progressive degeneration spanning four

generations of the Rufete family with expressions varying from eccentricity, to detachment from reality, to epilepsy and mental retardation to frank delusional mania. References to La Mancha evoke associations with *Don Quijote* and its world of literary-inspired delusion and misreading of everyday reality. Galdós emphasizes contemporary relevance as he shows that the hallucinations of Tomás Rufete are based on the real world of government. He represents the detachment from reality of Isidora, obsessive to the point of self-destructive madness, as being symbolic of the world of a shallow, ostentatious Madrid society, representing Spain ³⁰⁰ that rejects the earnest intentions of the innovative, well-intentioned monarch, Amadeus, in favor of the compromises of a restored Bourbon dynasty. Galdós shows us examples of physical and moral degeneration at many levels of society.

The point of entry into the world of *La desheredada* is the asylum of Santa Isabel de Leganés.³⁰¹ Galdós's representation of insanity, misery, cruelty and of kindness is a microcosm of the Madrid ³⁰² he is about to portray and and nothing less

³⁰⁰ representing Spain: Isidora as a symbol and myth of Spain has been noted and related to other Realist/Naturalist novelists, "First Flaubert [...] creates a potential myth of France as a doomed and self-indulgent woman; then Zola realizes he has done the same thing in different terms; and finally Galdós [...] sets out intentionally to fabricate his own version of the same myth or antimyth for Spain" (Stephen Gilman 104). Similarly, "The portrayal of the virtues and vices of individuals is [...] an important element in the portrayal of society as a whole. A study of the psychology of an individual may help to explain collective as well as individual behaviour." (Glendinning 41)

³⁰¹ Santa Isabel de Leganés: the history of the asylum has been the subject of several studies, most recently those of Moro and Villasante (2001), Villasante (2003). Galdós visited the asylum with his friend the journalist José Ortega Munilla in preparatory research for the novel (Schnepf 1998). The conditions in public asylums were nightmarish. "El escorbuto, la pelagra, la avitaminosis, el hambre, la miseria y la muerte reinaban en los manicomios en donde las epidemias hacían verdaderos estragos. En Leganés, que no debía ser de los peores manicomios, la media de vida de los que no recibían el alta rondaba los tres años." (Alvarez-Uría 210)

³⁰² microcosm of the Madrid: the idea of Madrid and Spain being, themselves, an asylum was not restricted to imaginative novelists. An alienista friend of Galdós wrote at this time, "llega uno á dudar, si España será un manicomio suelto, en el cual, el medro esté vinculado en los

than a framing device for the novel.³⁰³ Moral and physical degeneration are found in both and mirror each other. It is necessary, therefore, to consider the first chapter of the novel in detail for the light that it throws on the narrative that follows.

The title of the chapter, *Final de otra novela* (Pérez Galdós, *desheredada* 67),³⁰⁴ is significant not only in that it emphasizes that Galdós's story begins *in medias res*, which though not unique to it, is one of the features of the Naturalist novel, (Etreros 80, MacDonald 84). This technique not only emphasizes that the events of the text are a "slice of life" in the continuum of the human story but also that the imaginary narrative prior to *La desheredada* contains events that cast a long, determining shadow over its characters. The chapter begins with the patient, Tomás Rufete, in a state of delusional mania, frantically worrying about a meeting of ministers of the *país de las monas*, a country not only of those of less than human wisdom (*mona*, a female monkey), but also, according to a common expression, the country of those who are bankrupt. Galdós has Rufete coin the epithet *Envidiópolis* for Madrid, capital of the land of envy and avarice for possessions and position (*desheredada* 67 n. 1). Rufete is obsessed by fabulous sums of money whose fluidity and rapid movement he likens to a drop of mercury that cannot be retained in the hand but has to be placed in a drawer in his brain, only to escape moments later. Money, it would appear, is highly mobile and is difficult to trap. Galdós as narrator expresses difficulty in how to assess Rufete's demeanor, "¿exaltado ingenio o

que nacen con un grano de locura en la mollera y el sabio se le reserve sólo el heroísmo en la sombra, donde se agote gratis en el vacío." (Escuder, *lúcidos* 11)

³⁰³ framing device for the novel: Hazel Gold suggests a Cervantine origin of Galdós's use of framing devices, "that would allow him to to delimit, and then interpret what he perceived to be the distinctive and frequently disheartening historical experience of bourgeois liberalism in nineteenth-century Spain." (Gold, *Reframing* 2)

³⁰⁴ all page references to the text of *La desheredada* are those of the Cátedra edition (2003) edited by Germán Gullón. For brevity, all further citations will refer simply to "*desheredada*."

deconsoladora imbecilidad?”(*desheredada* 68), is this man inspired or completely mad? The physician, “señor serio y bondadoso,” who attends him appears to have no difficulty in making an assessment and prescribes a double dose of sedative. We follow the physician on his ward round among hallucinating patients and meet a mad priest who writes daily letters to the Pope ³⁰⁵ but has yet to receive a reply.

We return to Rufete who is about to be assigned to less comfortable quarters for lack of the necessary monthly fees and who may need to be confined under lock and key. The physician tells him that if only he would relinquish his obsession with political power for a few months he might be cured. Fixed obsession appears to be a feature of Rufete’s madness, however, as he continues to fret about the safety of his imaginary millions whose scale is only matched by the avarice and envy of those he fantasizes are about him. A little later, Rufete is relegated from the quarters of the *pensionistas* to those of the *pobres* and finds himself in a confined space that the narrator describes as being so awful that it would produce dementia or monomania, even in the sane. This entirely unreformed area, for which the *Beneficencia* ³⁰⁶ is responsible, combines the features of hospital and prison paralleling the functions of Christian charity and the defense of social order.³⁰⁷ The ironic outrage of this passage

³⁰⁵ Obsessive writing of letters or documents (graphomania) recurs in Galdós. Rufete wrote many fictitious documents when he was going mad (*desheredada* 84), Virginia de Aransis is seized by a compulsion to write letters as she loses hold on reality (*desheredada* 204) while Alejandro Miquis’ fellow lodger, Jesús Delgado, in *El doctor Centeno* (297) not only writes letters constantly to himself but also replies to them.

³⁰⁶ *Beneficencia*: the *Ley de Beneficencia* was originally legislated in 1821 during the *trienio liberal* and was reformulated in 1849 as the liberal state took over services traditionally provided by the Church. It was underfunded and inadequate to deal with the needs of the increasingly numerous poor of the cities. “En la práctica,” as Esteban de Vega observes, “el nuevo régimen alcanzaría unos resultados asistenciales verdaderamente raquíños.” (Esteban de Vega 138)

³⁰⁷ Christian charity and the defense of social order: despite the passage of the *Ley de Beneficencia* of 1849, the continuing need to protect the middle-class from socialism and communism was being emphasized in 1856, “es preciso fundar sin demora una beneficencia

suggests that the implied narrator is reliable and that the actual author shares his horror. The narrator goes on to argue that the behavior of those interned in Leganés is but an exaggeration of our own moral and intellectual peculiarities and that we are all capable of follies that, were circumstances different, could cause us to be committed to the care of the *alienistas*,

Las ideas de estos desgraciados son nuestras ideas, pero desengarzadas, sueltas, sacadas de la misteriosa hebra que gallardamente las enfila. Estos pobres orates somos nosotros mismos que dormimos anoche nuestro pensamiento en la variedad esplendente de todas las ideas posibles, y hoy por la mañana lo despertamos en la aridez de una sola. ¡Oh Leganés, si quisieran representarte en una ciudad teórica, a semejanza de las que antaño trazaban filósofos, santos ³⁰⁸ y estampistas, para expresar un plan moral o religioso, no, no habría arquitectos ni fisiólogos que se atrevieran a marcar con segura mano tus hospitalarias paredes. “Hay muchos cuerdos que son locos razonables.”(*desheredada* 72)

Our narrator proclaims the manifesto of what will follow throughout the novel: not only are the mad human like us but we share their thoughts and obsessions. The free play of the multiple ideas of our imagination is akin to madness and we are the poorer in waking with only a single idea. The boundary between sanity and madness is a porous and arbitrary one that the great minds of history have hesitated to define and,

pública de que apenas hay entre nosotros idea, o [...] no se evitará de seguro, la revolución social que amenaza e inquieta a las gentes honradas y sensatas [...] contra el socialismo y el comunismo, el más eficaz recurso que queda es una beneficencia pública, amplia, ordenada y fecunda, a la cual sirva la religión de base.” (Méndez Alvaro, *beneficencia* 210)

³⁰⁸ una ciudad teórica [...] que antaño trazaban filósofos, santos: perhaps a reference to Saint Augustine’s *City of God*.

as if to emphasize this further, the narrator quotes wisdom from the madman Rufete on the “sane” who are “reasonable madmen” (*desheredada* 72). Sane advice from madmen is one of the recurring themes in *La desheredada*,³⁰⁹ as is madness in the apparently sane. Imagination and madness ³¹⁰ overlap and become dangerous and destructive when divorced from everyday reality. There is evidence that Galdós was very aware of this danger;³¹¹ it is the theme of this novel.

The narrator goes on to describe the dreadful conditions in the *humildad del asilado* where the occupants, “se miran sin verse. Cada cual está bastante ocupado consigo mismo para cuidarse de los demás. El egoísmo ha llegado aquí a su grado máximo” (*desheredada* 73). This *egoísmo sin cuidarse* will be seen amply in the course of the novel outside the walls of Leganés. The narrator continues with a description of the asylum strongmen, the *loqueros*, who enforce control with a detached brutality that leads the narrator to exclaim, “El día en que la ley haga desaparecer al verdugo, será un día grande si al mismo tiempo la caridad hace desaparecer al loquero” (*desheredada* 73). His expression betrays not only common humanity but also an awareness of the parallel roles of executioner and asylum

³⁰⁹ sane advice from madmen: in addition to Rufete’s apophthegm above, one might cite advice to Isidora from Canencia (*desheredada* 87) and the testamentary recommendations of the *canónigo* (*desheredada* 285).

³¹⁰ imagination and madness: according to Huertas, it was Moreau de Tours (1859) who established the concept of *génie-névrose*, the connection between imaginative brilliance and madness (Huertas, *Madness IV* 305).

³¹¹ aware of this danger: Pattison writes, “Galdós speaks disdainfully of the imagination, ‘la loca de la casa.’ While it is true that Don Benito had a powerful imagination which he could never completely dominate, it is equally true that at this period of his life [the late 1870s] he was striving mightily to control it” (Pattison, *Creative* 116). Galdós himself, when accused by the imaginary muse of his memory that in creating one set of fictional characters after another in his novels, “Vives en un mundo imaginario,” replies, “Es que lo imaginario me deleita más que lo real” (Pérez Galdós, *Memorias* 37). Describing his European travels, he admits that, “las personas y cosas imaginarios me seducían más que los reales. Siempre fué el arte más bello que la historia” (Pérez Galdós, *Memorias* 98), elsewhere describing a return from imagination to the disappointment of a *desabrida realidad*. (Pérez Galdós, *Memorias* 48)

warder in the maintenance of social control; the perils of non-conformity are grave. Rufete crosses the line when he is found withdrawn and silent one morning, quite different from his usual garrulous, manic self. A physician orders a cold shower,³¹² a treatment popular in France at the beginning of the century and still used in asylums into the early twentieth century (*“Hydrotherapy in Insanity”*). The *loquero* strongmen force the struggling Rufete into the powerful, freezing jets of water after which he sleeps deeply.

Galdós next introduces us to Tomás Rufete’s daughter Isidora, an anxious 20-year old woman, who has come to see him. We learn more of this central figure of the novel, as she introduces herself to the director of the asylum and to the clerk, Canencia, who is compiling records in the room where she waits to see her father. She and Canencia exchange confidences as he pronounces a stream of uncomfortable pieties about the need for resignation in the face of suffering. The sympathy of the old man captures the confidence of the weeping Isidora and she recounts the story of her father who, “nunca se contentaba con su suerte, sino que aspiraba más, a más [...] sus posibles no le daban para portarse como caballero” (*desheredada* 82-3). Pretensions and social ambition were obviously important to him for he was remembered as saying, “Yo tengo que llegar a donde debo llegar, o me volveré loco” (*desheredada* 83), and Isidora describes him as, “no tenía más idea que aparentar, aparentar, y ser notable” (*desheredada* 86). Highly significantly, Isidora goes on to say, “Su padre, mi

³¹² cold shower: Espinos Iborra refers to the, “duchas o chorros fríos usados como medio de represión” and quotes Giné y Partagas’ observation (1876) that, “frecuentemente basta hacer presenciar el chorro para lograr estos resultados [de intimidación], y aún a veces es suficiente la simple amenaza.” (Espinos Iborra 141)

abuelo, había sido también de oficina. El pobre murió de mala manera. ¿Le conoció usted?”³¹³ (*desheredada* 83)

Isidora describes the developing lunacy of Rufete with his obsession with writing documents that, “eran ya locura manifiesta” (*desheredada* 85) with an early preoccupation with envy and avarice in his *Urbanización de Envidiópolis*. When Rufete was admitted to Leganés after her mother died, Isidora went to live with an uncle “*canónigo*” in Tomelloso in La Mancha, “el mejor de los hombres; pero tiene unas rarezas” (*desheredada* 85), clearly a man of eccentricities. The rapport between Isidora and Canencia increases to the point where the latter is able to divine her belief that she belongs by birth to a class higher than that of her supposed father, Rufete. Prophetically he goes on to deliver a homily on the dangers of ambition and envy,

enfermedades del alma que más individuos trae a estas casas es la ambición,³¹⁴ el afán de agrandecimiento, la envidia que los bajos tienen de los altos, y eso de querer subir atropellando a los que están arriba, no por la escalera del mérito y del trabajo, sino por la escala suelta de la intriga, o de la violencia, como si dijéramos, empujando, empujando.” (*desheredada* 87)

³¹³ ¿Le conoció usted?: I find this question highly significant. Why, one must ask, should Isidora ask of a supposed employee of an asylum if he knew her grandfather, if that grandfather, who died *de mala manera*, had not also been a patient there? The narrator is hinting that madness has been present in Isidora’s family not in one earlier generation but two, as Frank Durand also suggests (Durand 198). Galdós may be suggesting that the determining family history of degenerative madness is more deeply rooted than is at first apparent.

³¹⁴ ambición: the correspondence with the assessment of the degenerationist hygienist Philip Hauser is striking, “la acumulación de fortunas colosales por una parte, y la fuerza moral de su supremacía del talento por otra, han engendrado un sin fin de pasiones [...] como el amor excesivo al poder y á la reputación, el deseo inmoderado de distinciones y dignidades, la sed insaciable de riquezas y el amor al lujo y al placer; en una palabra, la ambición.” (Hauser, *Siglo* 339)

Canencia would have us realize that the majority of the inmates of Leganés are casualties of the struggle for social and material advancement in the city of envy and avarice. In the course of the novel, we shall learn that Isidora will be another of the casualties of *Envidiópolis*.

Following an unexpected fit of pique in Canencia, we learn from the director that the old man is, himself, a 32-year inmate of the asylum and that his history of hallucinations (*desheredada* 89) and his custom of giving advice are well-known. We see that sound wisdom can come from a mad, old man ³¹⁵ just as later we will see much madness on the part of the supposedly sane. Meanwhile we learn that Rufete has died with the words, “Mis hijos..., la marquesa” on his lips. The sad news is broken to Isidora, in part, by an old acquaintance from Toboso, a medical student Augusto Miquis, whose father also knew the *canónigo*. He escorts Isidora away from Leganés in the light of a bright April day.

Everything that happens in the novel has been outlined in this first chapter. Among the many themes adumbrated is that of the arrival in Madrid of a country girl who has grown up in La Mancha, with its Quixotic associations of idealized detachment from everyday reality. We learn of the vicious struggle for social advancement in Madrid based on avarice and envy and the readiness to cut down those of higher rank, if it will bring advantage. We learn of the political merry-go-round where *cesantes* like Rufete lose their jobs and suffer as a result of changes in government. We also learn of hereditary madness, which many of Galdós’s generation

³¹⁵ wisdom can come from a mad, old man: Canencia is but one of Galdós’s “mad fools” analyzed by Peter Bly (2004).

saw as a degenerative predisposition that was protean,³¹⁶ meaning that it could be manifest as frank hallucinating mania, as in Rufete, or in oddities of behavior such as those of the *canónigo*. In the first chapter, Galdós has Isidora tell us that she is not who she seems, but one of a higher status. Given the similar pretensions of her mad father, we must suspect that the delusional nature of the family's degenerative madness has been bequeathed to her generation.

5) The Course of Isidora's Obsession

We learn in the course of the novel that not only does the heroine arrive from the fabled land of literary illusion with vivid illusions of her own, but also that she adheres to them in a formidably obsessive way. For Isidora, superficial appearances are everything and are an infallible sign of underlying worth. Groomed by her uncle to believe herself noble in birth and saturated by the conventions of *folletín* romances, which she uncritically takes for real life, she comes to Madrid ill-equipped to deal with its harsh realities, preferring instead to live in a highly imaginative make-believe world of wishful thinking. Associated with these grave handicaps is an utterly incorrigible refusal to learn from experience; she goes on making the same errors of judgement time and time again. To cap it all, Galdós portrays her as one incapable of applying herself to productive labor, using her supposed noble origin as an excuse to

³¹⁶ protean degenerative predisposition: this important aspect of Morel's degeneration theory is attributed to the studies of heredity of Proper Lucas, to whom Huertas attributes the phrase *hérédité dissimilaire* (*herencia polimorfa*) to describe variation in the manifestations of inherited degeneration (Huertas, *Madness I* 398). As detailed in chapter 1, Morel gave an example of this in 1857, "un simple état névropatique des parents peut créer chez les enfants une disposition organique qui se résume dans la manie et la mélancholie [...] à leur tour, peuvent faire naître des états dégénératifs plus graves, et se résumer dans l'idiotie ou l'imbécillité" (Morel, *Traite* 565). As emphasized above, the concept was clearly stated in Lucas' *Traité de l'hérédité naturelle* in 1850.

avoid such mundane activity. With all this is a formidable, neurotic rigidity. Galdós has her insist on her noble nature in the face of the evidence of a court of law and of her imprisonment such that only after she has been physically abused by a brute of a man, does her psychic inflexibility finally snap when she abandons her former identity entirely.

There is much discussion in the critical literature of Isidora's moral choices and of the free will³¹⁷ that she is able to exercise at each point in her descent into moral self- destruction. My interpretation is at variance with some of these accounts for I believe that Galdós has created a heroine in the grip of a pathological obsession, what might have been identified as a form of monomania, where everyday moral prescriptions are of limited usefulness. Just as it would be inappropriate to berate Isidora's father Tomás Rufete, or the similarly-fated grandfather, for not making conventional, everyday moral choices, it would be equally unjust to apply those standards to Isidora for the same reason, namely, that they are all mad.³¹⁸ The

³¹⁷ moral choices and the free will: Rogers (1987) emphasizes Krausist harmony in Galdós's portrait of Isidora and Mariano with its insistence on moral choice rather than Naturalist determinism. Dendle (1988) asserts the *opción moral* of Galdós's characters, questions the Naturalism of *La desheredada* and denies hereditary madness in the Rufete family. Russell (1976) finds the, "imputation of free will" in Isidora an important feature of, "naturalism *a la española*," as distinct from Zola's original. Elizalde (1988) also denies any hereditary determinism and emphasizes the potential for moral sense in Isidora and Pecado. Durand (1974), however, by underlying the importance and strength of her imagination and illusion in the novel supports my contention that Isidora's moral choices are less than free. It is a matter of profound philosophical and ethical debate whether different "normal" people are able to make moral choices with equal ease and whether "free will" is as free for one person as the next. It may be a religious and legal fiction that we are all equal in this respect. Given Galdós's intellectual environment, in which the moral responsibility of the mad was the subject of intense debate (see above discussion of Esquerdo's crusade), Isidora's freedom of moral choice may have been as debatable then as it is now. A more tragic determinism is also perceived by Brenan who sees in the representation of the characters in Galdós's novels, "a man's fate [...] is the result of the working out of his character, and the slow and inevitable ruin of the hero, and his vain struggles to escape from it." (Brenan, *Introduction* 10)

³¹⁸ they are all mad: Durand concurs when he observes that, "Canencia's words and actions appear rational, as do Isidora's, yet both share a degree of insanity." (Durand 108)

understanding of madness in Galdós's day was that it was frequently hereditary and, in the view of some, the result of degenerative predisposition. It was believed that this predisposition could be acquired by antecedents exposed to harmful physical and moral influences, and that they would then pass it on to future generations.

Associated with this interpretation of mental disease was the concept of *herencia polimorfa* in which the manifestations of an inherited trait of mental disturbance could vary from generation to generation. Dowbiggin explains how a wide variety of mental conditions were lumped together in France between the 1840s and 1890 under the umbrella term of the "neuropathic family" (Dowbiggin, *Degeneration* 197). Viewed from this perspective, the lunacy of Rufete and his father, the *rarezas* of the *canónigo*, the deluded detachment from reality of Isidora, the mental and emotional retardation of her brother, Mariano,³¹⁹ and the deformity of Riquín, Isidora's child by Joaquín Pez, are all part of a determined, hereditary degeneration very much as it was portrayed in the novels of Émile Zola. The reality of such a downward progression was widely accepted in France in the 1880s, and to a lesser extent, in Spain (Campos Marín & Huertas, *teoría* 233). Oppressed by such a determined, degenerative legacy, Isidora's freedom to make moral choices is arguably not the same as that of more balanced folk. A review of Isidora's story told mimetically and diegetically by the narrator and focalized through some of the men in Isidora's life, Miquis, Saldeoro and Muñoz y Nones, and some of the women, the Sanguijuelera and Laura Relimpio, will illustrate this.

³¹⁹ mental and emotional retardation of [...] Mariano: I assert this in the face of Rogers' comment that, "neither this nor any other aspect of his development has a clear connection with heredity" (Rogers, *Naturalism* 288). My theme is that, in the medical climate of opinion in which Galdós wrote, Mariano's tragic state has everything to do with degenerate heredity.

The shrewd Sanguijuelera, who has known the Rufetes as long as anyone, is not impressed by Isidora's pretensions to nobility and issues the profoundly hereditarian assessment, "venís de Tomás Rufete, y ya sé que de mala cepa no pude venir buen sarmiento" (*desheredada* 109). The equally no-nonsense and shrewd judge of character (with the exception of her son, Mechor), Laura Relimpio, foresees Isidora's eventual end long before her Quixotic *Sardanápolo* husband when she tells him, "Eres bobo, Relimpio. Esa chica tendrá mal fin." (*desheredada* 187)

Isidora has an opportunity to hear "el célebre Miquis" air the ideas that Galdós gives him on, "el transformismo en las ciencias naturales" (*desheredada* 121), the change of one species to form another, which was steadfastly opposed by the Catholic Church in Spain and consequently adopted whole-heartedly by liberals especially those in the medical profession (Glick, *Spain* 307 ff.).³²⁰ Miquis continues with his degenerationist exposition with its baneful prognostication for the future of the race, "las enfermedades diatéticas, ³²¹ determinan la depauperación general, la propagación de los vicios herpético y tuberculoso, que son [...] la carcoma de la raza humana, la polilla por donde parece marchar a su ruina" (*desheredada* 121). The ideas of inherited predisposition to disease associated with poverty, and deterioration of the human race, were degenerationist preoccupations that were current among hygienists

³²⁰ transformismo, liberales: "El uso ideológico de la teoría darwinista dentro de la órbita liberal fue constante en el último tercio del siglo XIX." (Núñez, *Darwinismo* 50)

³²¹ *enfermedades diatéticas*: in his footnote in the Cátedra edition of *La desheredada* p. 121, Germán Gullón explains diathesis as a poor-hygiene induced predisposition, citing tuberculosis as an example. Texts of Galdós's time, however, such as Pidoux' *Estudios generales y prácticos sobre la tisis* (1873) cited a hereditary, "diátesis tuberculosa, transmitida inmediatamente por los padres" as did Bouchut's *Diccionario de medicina y de terapéutica médica y quirúrgica* (1878), which lists rheumatism, gout, syphilis, hemophilia, and cancer as example of diatheses as well as scrofula and tuberculosis. While degeneration theory recognized environmental predisposition to disease, heredity was considered at least as important in the 1880s, almost exclusively so in the case of tuberculosis.

like Monlau in the 1870s and public health physicians like Hauser in the 1880s. Galdós represents the bright medical student Miquis as being very up-to-date in these *teorías novísimas*.

Another feature of Isidora's detachment from reality is her captivation by the sight of the opulent carriages of the *Castellana* that to her are like a dreamed vision, "como ven los místicos el cielo antes de morirse" of, "gente fina, decente, rica" (*desheredada* 134-5) and it takes the down-to-earth comments that Galdós gives Miquis for us to realize that the cavalcade is more realistically to be considered as a public exhibition of collective folly, "trampas, fanaticismo, ignorancia, presunción" as a result of the fatal creed of *quiero y no puedo*, "I want but I am not prepared to do anything to achieve it." Overawed by the sight of King Amadeus, Isidora misses completely the significance of the *mantillas blancas* that the *madrileñas* are wearing as a protest against his reign.³²² A further source of Isidora's flights of imagination is revealed when she meets the charming *marqués-viudo* Saldeoro, Joaquín Pez, which causes her to exult that her life is merely following a well-established literary pattern, "los libros están llenos de cosas semejantes. ¡Yo he leído mi propia historia tantas veces"³²³ (*desheredada* 171), clearly believing them to be a script for her future felicity. Galdós suggests that Isidora is not alone in living in a wishful dream-world and shows us the spoiled *señorito* Melchor Limpio who, "se desesperaba la disproporción grande

³²² *mantillas blancas*: this anti-Amadeus demonstration is described by Dendle (1982).

³²³ Yo he leído mi propia historia tantas veces: Galdós appears to be enjoying a private irony here, as among the sentimental *folletín-sentimental* stories published in the 1860s, studied by Alicia Andreu, is a story by Faustina Sáez de Melgar *La cruz del olivar* (1867) with a tale upon which *La desheredada* could well have been based. In this metafictional *jeu d'esprit*, Isidora could have read "her own story," as she perceives it to be, because it had, in fact, been published. The irony lies in the fact that the heroine of *La cruz* is truly the child of an aristocrat and is finally recognized and welcomed by him. Isidora has thus read only what she *imagines* to be her own story.

entre su posición real y la artificial que se había creado con amistades de chicos pudientes” (*desheredada* 192). We see why Galdós had Rufete name Madrid *Envidiópolis*, the city of avarice and envy, and why he as narrator mockingly editorializes on the unkind indifference of economic inequality, “es cruel eso de que todos seamos distintos por la fortuna.” (*desheredada* 192)

Isidora’s wishful thinking develops new levels of intensity when she sees and mentally appropriates the interior of the Aransis mansion, declaring, “todo es mío,” and spends the following night in a hypomanic state, which Galdós portrays in an extended interior monologue, imagining herself warmly received by the *marquesa* and inheritor of all that she has seen. Galdós gives us an idea of the vividness of Isidora’s imagination and its tenuous relation to reality. Having enabled us to draw a parallel with Melchor, the narrator goes on to show us, in a direct address to the reader, that Joaquín Pez is a bird of the same feather and, as a spendthrift seducer of women, “su vicio era todavía un vicio del corazón, intervenido con la fantasía” (*desheredada* 229); another *madrileño* dominated by his imagination, “con fantasmagorías y esfuerzos de iluminismo”³²⁴ (*desheredada* 230).

That Isidora is not alone in her madness is emphasized even further on the arrival of Christmas when Galdós, as extradiegetic narrator, describes Madrid as *un manicomio suelto*, which might be taken humorously were it not that he continues with biting criticism, “todo lo que es espiritual, moral y delicado, todo lo que es del

³²⁴ Iluminismo: the amoral philandering of Pez is peculiarly well expressed by this reference to the beliefs of the Iluminados, “individuo[s] de una secta herética” who, “pretendía establecer un sistema moral contrario al orden existente en religión, propiedad y familia” (DRAE 21^a ed. 1992).

alma, huye o se eclipsa” (*desheredada* 239). The picture of an open, public madhouse becomes even more sinister,

la gente de mal vivir, hembras inclusive, alardea de sus desvergüenza; los borrachos se multiplican. Tabernas, lupanares y garitos revientan de gente, y con las palabras obscenas y chabacanas que se pronuncian estos días habría bastante ponzoña para inficionar una generación entera.³²⁵ (*desheredada* 239)

This is not the sentimental Christmas of Charle Dickens but a frightening, repulsive mass satiation of appetites, *el delirio de la gula*. Galdós’s narrator is here using Zola’s Naturalistic rhetoric of *La bête humaine*, to describe the madness of a community in which *vicios sociales degenerativos* can have consequences that can destroy a generation. The walls that separate the mad of Leganés from the commonality of Madrid are indeed, as the narrator predicted in the first chapter, too porous to be closely defined. Madness is abroad in Madrid and Isidora is part of it.

Isidora’s recurrent habit of imagining the characters of others, rather than appraising them realistically is shown time after time as she vainly tries to improve her mentally and emotionally retarded brother, Mariano, after the latter’s release from prison for his part in a murderous fight. She appears incapable of understanding the reality of his brutality, “más compatible con su fiereza y condición picaresca” no matter how often he absconds with money only to return in rags when it has been spent. Galdós quotes Miquis, his intradiegetic *alter ego*, on Isidora’s inability to

³²⁵ ponzoña para inficionar una generación entera: poison to infect an entire generation. This is pure degenerationist thinking in which an environmental poison can exert a blight upon a generation. In the context of tabernas, lupanares y garitos, Galdós would appear to be referring to venereal disease. In this context, he sounds much like Philip Hauser.

distinguish fact from fantasy, her, “imaginación soñadora, la indolencia, la ignorancia del cálculo positivo y el desconocimiento de la realidad” (*desheredada* 261). This failure to appreciate external reality is clear as she makes her way through dense crowds to see the *marquesa* of Aransis, oblivious to the serious political changes that have provoked them, “a Isidora le importaba poco que se llevara el diablo a todos los políticos y no se enteró de nada” (*desheredada* 259). After enduring a *hundimiento moral* at her rejection by the *marquesa* de Aransis and, perhaps, anxious to buttress her threatened sense of social superiority, she proceeds to throw herself, again with utter lack of judgement, at the one man who, more than any other will facilitate her self-destruction, Joaquín Pez.

Through the Cervantine device in which the implied author as narrator consults his character, Augusto Miquis, about what happens in the following two years, we learn that the unmarried Isidora has set up house with Joaquin Pez and has given him a son with an abnormally large, deformed head. Such a progression across the generations, from raving lunacy, to mad obsession to congenital deformity is paradigmatic of the deterministic progression as understood by degenerationists of Galdós’s day and must have been understood by him as he composed the novel. The narrator confesses exactly this when he has Miquis tell him, “¡Misterios de la herencia fisiológica! Su madre me pregunta si toda aquella gran testa estaría llena de talento. Yo te digo que su delirante ambición y su vicio mental le darán una descendencia de cabezudos raquíuticos” (*desheredada* 290).³²⁶ This is not purely a metaphorical flight

³²⁶ Cabezudos raquíuticos: Morel described large heads in infants as one of the terminations of inter-generational degeneration (Morel, *maladies* 585). While a large deformed head is one of the features of dietary rickets, “the head of a philosopher” (Opie, Muller & Kamfer 105), the later description of Riquín as having strong arms but short, weak legs (*desheredada* 310) suggests that Galdós may have been drawing on the clinical picture of a mild form of spinal

of fancy, on Miquis' part, but a statement of degeneration theory as it was understood in Galdós's time.

In a further exploration of Isidora's mind, an innovative step in Spanish narrative (*desheredada* 300, n. 186), the extradiegetic narrator addresses Isidora in the familiar second person to analyse her sickness and to counsel her to avoid false imaginings,

no te tormentes construyendo en tu espíritu una segunda vida ilusoria y fantástica [...] no te anticipes a la realidad; no te trabajes interiormente; no te saborees con falsificada sensibilidad goces de que están privados tus sentidos.”
(*desheredada* 300)

He goes on to cite his intradiegetic, medical authority, “Miquis lo ha dicho, bien lo sabes, que eso es un vicio, un puro vicio, como tantos otros repugnantes, como la embriaguez o el juego, y de ese vicio nace una verdadera enfermedad” (*desheredada* 300-1). Here, we are beyond the category of mere bad habits and into the far more serious world of *vicios sociales degenerativos* that so preoccupied contemporary Spanish hygienists. Isidora is suffering from a variety of pre-determined, degenerative madness that many contemporaries regarded as incurable. The narrator continues and counsels Isidora to correct the physiology of her diseased perceptions, “Te engañas con tus propias farsas [...] Enseñas a tus nervios a falsificar las sensaciones y a obrar por sí mismos, no como receptores de la impresión, sino como iniciadores de

dysraphism (spina bifida) of which hydrocephalus and variable lower limb weakness are characteristic features. It is probably no coincidence that Galdós's closest medical friend Manuel Tolosa Latour, who both identified with Augusto Miquis (Schmidt 180), was a pediatrician.

ella [...] ¡Violación de los órdenes de la naturaleza!” (*desheredada* 301). In this *violación* the narrator tells us that Isidora is perceiving things that are not the product of external reality but of her disordered imagination; she is thus but a step away from the hallucinations of her maniacal father. This hereditary psychiatric linkage between father and daughter becomes even more apparent as the novel continues.

The seriousness of Isidora’s detachment from reality and her rootedness in a dream world of wishful thinking are exposed in the dramatic, dialogued scene in which Joaquín Pez exploits her weaknesses while revealing his own, which are strikingly similar. In this supremely ironic encounter, Pez is able to voice lines from Isidora’s script, “¿No es verdad que nací para ser honrado?” having squandered funds derived from her genteel prostitution, as he will continue to during the rest of the novel. Pez exploits Isidora’s disordered perceptions with ruthless efficiency, “te idolatro. ¿Me he portado bien? Como una princesa, como una reina ³²⁷ [...] El orgullo no es en ti un defecto: es una inspiración santa” (*desheredada* 343). Such is his success that she is able to express concern on his behalf that, “tu honor y tu buen nombre estaban en peligro,” emphasizing, in unconscious irony, the overriding importance of exterior appearances of respectability at the expense of interior moral degeneration. Isidora’s madness is the madness of Madrid society, as she continues to claim an elevated social status, “nací para estar arriba, muy arriba” (*desheredada* 343). Isidora and Madrid share this *ansia para trepar*, this mania to climb socially, and the *quiero y no puedo*, the refusal to apply themselves to achieve more than hollow appearances. Her inability to come to terms with reality is expressed pathetically as she later exclaims, “Yo no nací para pobre, yo no puedo ser pobre”

³²⁷ como una reina: a possible ironic reference to the unbridled and notorious promiscuity of the lately deposed queen, Isabel II.

(*desheredada* 365). As the harshness of reality oppresses her increasingly, she retreats to the world of her imagination in an attempt to contradict it.

Through the focalization of the ever-optimistic Miquis we witness a final assessment of Isidora's degraded state and his last-ditch attempt to alleviate it, "Estás enferma, estás llagada. Tu mal es ya profundo, pero no incurable" (*desheredada* 388), though he cannot hide the seriousness of the disease, "viene la extirpación del cáncer, que es la idea del marquesado." Isidora has passed beyond the serious consequences of *vicio* to the mortal danger of *cáncer*. Miquis has put his finger in the wound of Isidora's madness, which demonstrates its hold over her as she rejects his advice. He bluntly describes where her madness is leading, "como tierra común, en la cual todos tienen derecho a sembrar sus deseos para recoger tu deshonra. Desgraciada, si no acabas en la casa de Aransis, acabarás en un hospital" (*desheredada* 391).³²⁸ Even this fails to intimidate Isidora as she replies with the astonishing, "O en lo más alto o en lo más bajo. No me gustan términos medios" (*desheredada* 392), a reaction as heroic as it is unhinged.

The rest of the novel documents Isidora's chosen path to perdition. She is carried away by her own beauty in a borrowed *condesa*'s ballgown as she studies her reflection in the mirror of Eponina's dress shop, "su mentirosa fantasía, excitándose con enfermiza violencia, remedaba lo auténtico hasta el punto de engañarse a sí

³²⁸ hospital: in the context of this unequivocal reference to prostitution, Miquis is probably referring to San Juan de Dios, Madrid's main hospital for venereal diseases, the fearful conditions of which are described in Pura Fernández' (*Fernández, Mujer* 183-85). An eye-witness account of the institution is that of Pío Baroja who, recalling his years as a medical student in Madrid, wrote, "El hospital de San Juan de Dios [...] era un edificio inmundado, mal oliente; las ventanas de las salas daban a la calle de Atocha y tenían, además de las rejas, unas alambradas para que las mujeres recluidas no se asomaran y escandalizaran. De este modo no entraba allí ni el aire ni el sol." (Baroja, *II* 280-1)

misma (*desheredada* 401). Her pleas for cash rejected, she attempts to blackmail Miquis emotionally in the street with, “como Dios me abandona, yo me vendo” (*desheredada* 405), apparently not appreciating that she already has sold herself. Isidora’s detachment from reality is reflected by that of her “protector,” the Quixotic José Relimpio who has become deluded to the point of rhetorically challenging a list of Isidora’s lovers in order to maintain the honor of his *Dulcinea*, “Os mataré a todos, os haré polvo, Soy el defensor de la virginidad ultrajada, de la inocencia perseguida, de la casta paloma” (*desheredada* 427). It appears that, under circumstances of stress, he also can lose his hold on reality.

Imprisoned for fraud after her failed lawsuit, Isidora’s diseased imagination enables her to see herself as the darling idol of the Madrid masses or, alternatively, as a Marie Antoinette oppressed by the mob (*desheredada* 431). Her sense of pride makes her refuse a cash settlement from the *marquesa* as being beneath her dignity, without appreciating the inconsistency of having sponged from friends, lovers and admirers over the course of preceding years. Even the non-medical notary, Muñoz y Nones, can see that Isidora is mentally sick in her obsession, “todavía no se ha curado usted de la enfermedad de esa idea absurda” (*desheredada* 457). The explanation of the circumstances of Rufete’s forgery and the complete baselessness of Isidora’s claim to nobility throw her into a sleepless crisis in which she cries pathetically, “Soy noble. No me quitaréis mi nobleza, porque es mi esencia” (*desheredada* 464). Refusing food, she begins to hallucinate, “Qué me traigan mi baño. ¡Yo no puedo vivir sin baño! Que me saquen de esa pocilga; que me traigan mis vestidos, mi coche; que venga Joaquín...” (*desheredada* 465). Her call for Joaquín is pure fantasy as, according to the chronology that Galdós gives us, Isidora cannot know that Joaquín has returned

from Cuba as she learns this only after her later release from prison when she recognizes him in the street (*desheredada* 488).

The final stage in Isidora's downward degenerative spiral occurs after she leaves prison and takes up with the cruel Gaitica³²⁹ by whom she is physically and emotionally brutalized, shocking even the ever-sympathetic Miquis, "Te encuentro muy variada; tú no eres Isidora" (*desheredada* 487). The back of Isidora's obsession with nobility has been broken at last, "Quiero ser anónima [...] no dar cuenta a nadie de mis acciones [...] Yo no soy Isidora" (*desheredada* 498). In the last phase of moral and physical degeneration to which her madness has led her, Isidora loses her identity and takes the ultimate step into frank prostitution from which, in Spanish society with its *reglamento* system taken after the French model, there was no rehabilitation.³³⁰

The career that Galdós describes for Mariano in *La desheredada* forms a contrapuntal theme of pre-determined degeneration that follows a different route³³¹

³²⁹ Gaitica: apart from showing him as a foul-mouthed, criminal brute, Galdós introduces other features of Gaitica that underline his degeneration. In addition to being physically and mentally abusive, Isidora describes his face as being, "de un tipillo afeminado que no me gusta" (*desheredada* 489) suggesting an element of sexual ambiguity, a prime form of degeneration in the view of Galdós's contemporaries. Huertas notes the medicalization of sexual perversion in the nineteenth century, notably, "la llamada 'inversión sexual,'" associated with ideas of, "locura moral" and "degeneración" (Huertas García-Alejo, *perversión* 91). Sander Gilman comments that, "no realm of human experience is as closely tied to the concept of degeneration as that of sexuality." (Sander Gilman, *difference* 191)

³³⁰ there was no rehabilitation: Pura Fernández quotes Francisco de Sales Mayo's protest (1870) against the inhumanity of the *Reglamento* system, "Mayo se declara partidario de que el principio de 'la libertad del cuerpo' aceptado por los constitucionalistas se acomode al modelo inglés, que representa la libertad absoluta y permite la redención de la prostitutas, frente al rígido e inmisericorde modelo francés, que transforma un medio de subsistencia en un oficio sin redención posible." (Pura Fernández, *Mujer* 241-2)

³³¹ degeneration that follows a different route: Montesinos describes this *l'hérédité dissimilaire* when he writes, "Estos neurosis naturalistas, aunque tengan un origen común, pueden presentar la mayor diversidad; Los *Rougon* tampoco se parecen en nada unos a otros." (Montesinos 12)

from that of Isidora but ends in equivalent disaster. Galdós as narrator summarizes his gravitation toward the low and the gross,

Diríase que la naturaleza quiso hacer en aquella pareja sin ventura dos ejemplares contrapuestos de moral desvarío; pues si ella vivía de una aspiración insensata a las cosas altas, poniendo, como dice San Agustín, su nido en las estrellas, él se inclinaba por instinto a las cosas groseras y bajas (*desheredada* 321).

Lacking whatever gentility the *canónigo* could afford for Isidora in Tomelloso, Mariano was brought up exposed to the less tender mercies of tía Encarnación, the *Sanguijuelera*. We first meet him performing the work of an animal in the treadmill of a rope works, already brutalized by its exhausting, mind-numbing effect on his thirteen-year old body.

Our next encounter follows passages in which Galdós evokes a powerful sense of place and social condition in the poor *barrio* in which the *Sanguijuelera* lives. The young son of a neighbor, *Majito*, dresses up as General Prim, *Plim* in his imagination, and joins a band of similar urchins to play military games. The scene is one of social and physical degeneration and its imagined consequences. In addition to their filthy and ragged clothes, “El raquitismo ³³² heredado marcaba con su sello amarillo multitud de cabezas, inscribiendo la predestinación del crimen. Los cráneos

³³² raquitismo heredado: the dietary cause of almost all rickets was not elucidated until much later (“Unraveling the Enigma of Vitamin D”). Medical authorities of Galdós’s time, such as Monlau and Hauser, viewed it as a form of hereditary degeneration.

achataados,³³³ los pómulos cubiertos de granulaciones [...] ponían una máscara de antipatía sobre las siempre interesantes facciones de la niñez” (*desheredada* 149). Galdós presents the social fraternity of Mariano (*Pecado*) marked with the stigmata of inherited disease, a life of moral degeneration ahead of them and, perhaps, even worse, “cansados de jugar a los toros, jugamos a la guerra civil” (*desheredada* 151), “un plantel del que saldrán quizá hombres de provecho y, sin duda, vagos y criminales” (*desheredada* 150). Into a dispute in this fraternity arrives Mariano apparently anxious to maintain his position as top dog. A fight with the outsider *Zarapicos* ensues and ends with the latter’s death when Mariano knifes him. By the time Mariano is released from prison on account of his youth, his barely articulate oafishness has become worse and his exchanges with Isidora at Christmas are reduced to the level of, “y el pavo. Yo quiero pavo” (*desheredada* 147) and, “Si no me das dinero, no te quiero” (*desheredada* 254). As Galdós’s narrator observes, “todavía quedaba en él algo de niño” (*desheredada* 254); he has the emotional maturity of a child.

Isidora’s attempt to civilize Mariano by sending him off to school is an unmitigated disaster as he becomes proverbial in class for his stupidity and prefers to play truant in order to, “incorporarse a las turbas más compatibles con su fiereza y condición picaresca” (*desheredada* 258). Mariano is sent off, instead, to Juan Bou’s

³³³ Los cráneos achatados: the criminal anthropology studies of Cesare Lombroso of the 1870s, which correlated skull shape with criminal behavior, were beginning to be known in Spain before the Spanish translations appeared. Ángel Pulido addressing the *Ateneo* in 1883 was able to say that the work of Lombroso was already “bastante conocida” (see chapter 2). Labanyi notes that, “Cesare Lombroso, whose work on ‘degenerate types’ was first aired publicly in Spain at the 1881 trial of Garayo, *el Sacamantecas*, giving rise to a public debate on the detection and classification of deviants that would peak in 1887-1895” (Labanyi, *Gender* 79). In addition, I have found a reference by José García Viñas in 1877 to Lombroso of Turin in relation to prison populations, “opiniones que están de acuerdo con la del profesor Torinese.” (García Viñas 155).

lithography press where he lasts long enough to learn some of Bou's anarchist rhetoric of class envy without forsaking his real goals in life, "lo que quiero es moneda" and an, "ardiente anhelo de ser sanguijuela" (*desheredada* 333-4). He loses his job when Bou realises that he is earning additional money part-time by detonating homemade pipe bombs outside the houses of aristocrats.³³⁴ Mariano survives, though physically deteriorated after living rough, in the pay of the criminal Gaitica and Galdós shows us, focalized through a long interior monologue reminiscent of that of Isidora in chapter 11, the elementary state of Mariano's perception, dominated as it is by envy of others' possessions. After suffering two epileptic seizures, Mariano's mental state degenerates further,³³⁵ he withdraws from all social contact and talks wildly, "cual si hubiera perdido la razón" (*desheredada* 453). Like Isidora, he passes several nights without sleeping; perhaps Galdós's narrator is suggesting that a tendency toward a hypomanic state runs in the family. His mental equilibrium becomes abnormal,

La aberración de su pensamiento le llevaba a las generalizaciones, como en otros muchos casos en que la demencia parece tener por pariente el talento. El mismo criminal instinto la ayudaba a personalizar, y, en efecto, siendo tan grande y múltiple el enemigo, ¿cómo aspirar a castigarle, sin hacer previamente él una sola persona?" (*desheredada* 472)

³³⁴ homemade pipe bombs: Schnepf (1989) has written about this topical reference to the brief campaign of street terrorism by casino owners in Madrid in 1881.

³³⁵ Mariano's mental state degenerates further: Montesinos sees Mariano as, "un degenerado epiléptico [...] y al fin casi imbecilizado." (Montesinos 11-12)

Galdós also emphasizes Mariano's desire for momentary fame, "la idea de que todo el mundo se ocuparía de él dentro de poco le embriagaba"³³⁶ (*desheredada* 472) and has Mariano station himself in the *Calle Mayor* and where he suffers one more seizure before firing an attention-seeking, but harmless, pistol shot toward the king that will result in the end his own life in the *garrote*.

6) Two Contributions by Michael Gordon

I have found almost no articles that discuss degeneration theory more than incidentally in *La desheredada*. Among the few that do are two by Michael Gordon that are widely quoted in the literature about the novel. The theme of one article, "Lo que falta a un enfermo le sobra a otro': Galdós' Conception of Humanity in *La desheredada*" is the unbalanced nature of many of the characters of the novel who depart from, "an adequate balance between the claims of imagination and reality" (Gordon, *falta* 33) so severely that they threaten their own survival. Gordon endorses the fundamental role of, "Galdós' social critique, for the heredity which unites Rufete and Isidora in a common madness also unites symbolically Leganés and Madrid" (Gordon, *falta* 29). I would add not-so-symbolically here, if the description of the Madrid crowds at Christmas (*desheredada* 239) is to be taken at face value, as I believe it is. Galdós's critical commentary on Madrid society is well summarized by Gordon's observation that, "Isidora [...] positively embodies, the values and aspirations of the society in which she lives" (Gordon, *falta* 29). Gordon has evidently

³³⁶ todo el mundo se ocuparía de él: Esquerdo describes exactly this pathological need for fame at any price in his description of, "los diferentes movimientos pasionales que agitan y conmueven á la multitud [...] soliviantan el ánimo movedizo de ciertos desgraciados y los impele á realizar esos atentados que estremecen la conciencia humana." (Esquerdo, *Preocupaciones* 316)

studied degeneration theory because he refers to the Rufete madness as a, “degenerative family neurosis” and mentions its “protean character” (Gordon, *falta* 30), a feature described by Prosper Lucas and Morel and extensively employed by Zola in the *Rougon Maquarts* novels. Gordon goes on to describe the, “moral and symbolic purposes” of the macrocephaly of Riquín as an, “ironic comentary on the figurative swollen-headedness of his mother” (Gordon, *falta* 30). Gordon may not have been aware, however, that in addition Galdós’s representation of Riquín also has a long association with degenerative disease of which it was considered a terminal feature (Morel, *maladies* 585) and that this influence was traceable through Zola’s *Rougon Maquart* where Jacques-Louis Lantier suffers from the end-stage of trans-generational degeneration with his, “oligofrenia con hidrocefalia”³³⁷ (Huertas García-Alejo, *Herencia* 30). While not for a moment wishing to undervalue “moral and symbolic” interpretations of Galdós’s text, I would suggest that a more literal, clinical interpretation should also be acknowledged, where appropriate.

I also differ from Gordon, however, in his exaltation of Isidora’s flights of imaginative dysfunction in the face of bourgeois values, which he affects to disdain. He claims that Isidora, in her attempt to sell herself to Miquis, “triumphs by a kind of paradoxical grandeur over the latter’s bourgeois conventionalism” (Gordon, *falta* 32). Furthermore, Gordon disparages Miquis’ ability to withstand his powerful attraction to Isidora on the grounds that, “his idealism retreats into the conventional world

³³⁷ hydrocefalia: it is worth noting that Galdós’s portrayal of Riquín, for which a mild form of spina bifida is probably the model, suggests an infant of relatively normal intelligence in that he is able to play normally with the Castaño children and to develop strong bonds of affection with Emilia Castaño and the *Sanguijuelera*. The fact that Riquín was allowed to make his own choice to stay in the Castaño household rather than accompany his mother, Isidora, suggests that all concerned respected his judgement. The striking deformity, however, as Miquis suggests (*desheredada* 290) was still considered attributable to hereditary degeneration.

through what is clearly a rather unpassionate bourgeois marriage (Gordon, *falta* 34). He faults Miquis for his, “fundamentally adolescent exuberance too light-hearted for him to be taken seriously as a model” [of an adequate balance between the claims of imagination and reality] (Gordon, *falta* 34). In my view, Gordon does not do justice to the significance of Miquis ³³⁸ in the novel and, more seriously, seeks to undermine the values in the novel that Galdós is seeking to promote as a solution to Isidora’s (and Spanish society’s) madness.

The Oxford English Dictionary defines *bourgeois* as, “resembling the middle classes in appearance, way of thinking, etc. Also used disparagingly: selfishly materialistic or conventionally respectable and unimaginative; A socially or aesthetically conventional person.” In common usage, however, it has been defined as, “virtually anything, most commonly anything distasteful” (Stearns 286). While it is true that Miquis exhibits much playful adolescent exuberance as he shows Isidora the sights of Madrid in chapter 4, he is not too adolescent to have a mature appreciation of the significance of what he sees in the public *cavalcades* of Amadeus and the *mantillas blancas*, which Isidora can only interpret at face value. Nor is he too callow to recognize the ostentation of the *Castellana* for what it is. During the course of the novel, Galdós would have us believe that Miquis becomes director of a major Madrid

³³⁸ significance of Miquis: I sympathize with the more usual assessment of Miquis by Denah Lida who writes, “En Miquis la inteligencia, la gracia, la bondad, la alegría, el predominio de un buen sentido al que en nada perjudica su espléndida imaginación son los rasgos que informan una vida fructífera para el y para los demás” (Denah Lida 10). Lida makes the point that Galdós was far from being an orthodox adherent to Krausism but was influenced by Krausist ideas. The hard work, harmony, wide interests and tolerance of Miquis would appear to embody many of the values with which Krausism was associated. As if to underline this connection, the word *armonía* is twice mentioned in connection with Miquis, “la armonía y el admirable plan del cosmos” (*desheredada* 122), and he later tries to, “dar una lección de armonía de la naturaleza” (*desheredada* 123). Lida also comments that Miquis, “Cree en la armonía de la naturaleza con la misma fe que manifiesta su hermano Alejandro en la perfección del mundo natural.” (Denah Lida 10)

hospital, after passing *oposiciones*, in spite of which he still seems to have time for repeated visits to Isidora to try and rescue her from the consequences of her obsession. The exuberant medical student has become a responsible, caring physician wiser than his years. As a representative of the bourgeois virtues³³⁹ of hard work, a stable family, loyalty and accumulation of assets that have been earned, Miquis would seem to represent precisely what the other-worldly Isidora would do well to imitate. If there is anyone who idolizes material wealth and conventional respectability, it is she.

Furthermore, in Galdós's critique of degeneration and madness at an individual and at a societal level, I believe that he is suggesting exactly these *bourgeois* values as an appropriate remedy. Galdós himself was of the middle class³⁴⁰ and looked at society from that perspective.³⁴¹ In Scanlon's words he, "retained a basic faith in the regenerating force of the more humble bourgeois virtues [...] it was precisely the lack of a solid bourgeois ethic which he singled out as one of the principal defects of Spanish society" (Scanlon, *Heroism* 832). His manifesto of 1870, *Observaciones sobre la novela contemporánea en España* specifically identifies the middle-class, the bourgeois, as the appropriate subject for Spanish novelists, "la clase media, la más olvidada por nuestros novelistas, es el gran modelo, la fuente inagotable [...] la base del orden social" (Galdós, *Ensayos* 122). The bourgeois heroes

³³⁹ bourgeois virtues: Scanlon usefully lists these as, "perseverance, work, thrift, honesty, order and family affection [...] and a realistic attitude to life." (Scanlon, *Heroism* 381-2)

³⁴⁰ middle-class: Gregorio Marañón, who knew Galdós for many years as physician and friend, wrote, "En Toledo tuvo Galdós numerosos amigos, casi siempre de aquella capa social limitrofe entre el proletariado y la clase media, en la que le era tan grato convivir" (Marañón, *Elogio* 182). Vicente Llorens emphasizes Galdós's identification with the middle-class and his preference for it as the subject of his novels. (Llorens 51-59)

³⁴¹ middle-class perspective: Sinnigen refers to a shift of focus of the narrator in *Fortunata y Jacinta* to the petty bourgeois of the Rubín family as he, "is not so at home here as he was with the Santa Cruz family" (Sinnigen 124). This is certainly consistent with Galdós's (as true author) manifesto in his *Observaciones* of 1870.

of *La desheredada*, and the hope for a more realistic and less fantasized Spain, are the families of Miquis and of Emilia and Juan José Castaño, the latter able to give a loving and a stable home to Riquín in a way that Isidora cannot. Even the industrious but clownish Juan Bou has a future as he settles down with the daughter of a wealthy blacksmith; he, too, can contribute to the future stability and prosperity of Spain. On the opening page of *La desheredada* is an epigraph dedicated to the bourgeois values of education and to those who purvey the solid, unimaginative but essential skills of, “Aritmética, Lógica, Moral y Sentido común” (*desheredada* 63) that are grounded in everyday reality. In addition, Galdós ends with an epilogue of distilled *Sentido común*, of scaling the heights not with false wings but with a ladder. In contrast and somewhat perversely in my view, Gordon chooses to disdain these bourgeois, middle-class values and while the class has its villains, as the Pez and Pájaro clans exemplify, I believe that Galdós saw in these values a contact with reality desperately needed by Isidora and also by Spain.

Finally there is in this paper the astonishing remark by Gordon that, “Isidora’s fate is neither a tale of naturalistic decline nor a straight-forward comeuppance meted out by a didactically-minded author, but a true human tragedy” (Gordon, *falta* 37). One may readily concur that *La desheredada* is too rich and complex a literary work to be a “straight-forward” example of anything, as the resonance between Isidora’s fate and the society that she reflects pervades the novel. I believe, however, that Isidora’s story is one of naturalistic decline for the most tragic reason in the world that Gordon hints at in his description of Relimpio where, “the tragedy of Don José [...] is inherent in his character and personality” (Gordon, *falta* 36). Isidora is in the grip of a mad obsession largely because she comes from a family of madmen, what la

Sanguijuelera called the *mala cepa* (*desheredada* 109), and she is not responsible for her detachment from reality. Hers is the tragic flaw³⁴² of a beautiful, kind young woman of refined sensibility that dooms her to moral and physical destruction characteristic of Aristotle's *hamartia*.³⁴³ In my view, Galdós portrays Isidora's degenerative inheritance as a tragedy inherent in her "character and personality," for which she suffers but for which she is not as blameworthy as would be one who was entirely sane. Galdós's social critique, which resonates throughout Isidora's story, is a true tragedy of degenerate detachment from reality, which parallels the dysfunction in Spanish society.

The second and earlier published of Gordon's two papers, more widely cited than the first in my experience, is his "The Medical Background to Galdós' *La desheredada*" that pays particular attention to Galdós's portrayal of Mariano and the numerous parallels with the real-life would-be regicide Francisco Otero González who attempted to assassinate Alfonso XII in 1879. Referring to Galdós's famous letter to Francisco Giner de los Ríos about the new direction in his writing,³⁴⁴ Gordon observes that, "a prominent feature of this 'nueva manera' is the emphasis placed on psychological degeneration as the result of heredity and environment---both major elements in the novels of Émile Zola" (Gordon, *medical* 67). He goes on to assert that, "An examination of the medical background to *La desheredada*, however, suggests

³⁴² tragic flaw: The Oxford English Dictionary (OED) quotes a 1913 work by L. Cooper, *Aristotle on Art of Poetry* ii. 40, "the tragic flaw of the hero, described as an 'error of judgment', or a 'shortcoming' [...] The single Greek word, *hamartia*, lays the emphasis upon the want of insight within the man, but is elastic enough to mean also the outward fault resulting from it.

³⁴³ *Hamartia*: The fault or error which entails the destruction of the tragic hero (with particular reference to Aristotle's *Poetics*). (OED)

³⁴⁴ famous letter: Galdós's letter to Giner de los Ríos contains the phrase, "entrar por un nuevo camino, o inaugurar mi segunda o tercera manera." (Cossío 62, see above)

that much of Galdós' medical documentation for the novel was drawn from Spanish sources" (Gordon, *medical* 67), but fails to cite an authority for this statement. In contrast, while the records of the Otero trial were undoubtedly fundamental in the portrayal of Mariano, a review of chapters 1 and 2 of this dissertation will indicate that effectively all psychiatric theory in Spain at this time was derived from ideas developed in France, notably the moral treatment of Pinel,³⁴⁵ the monomania nosology of Esquirol³⁴⁶ and the degeneration theory of Morel and Magnan. In common with their contemporaries, Pedro Mata and José María Esquerdo mixed-and-matched these ideas at will, while original contributions from Spain were negligible.³⁴⁷ Taking this into account, Gordon's statement, "In the period 1860-1885 psychiatry was dominated by the belief that mental illness was invariably a symptom of degeneration" (Gordon, *medical* 67) is demonstrably untrue and must be revised in the light of much subsequent investigation by historians of French and Spanish nineteenth century psychiatry.³⁴⁸ Campos Marín specifically contradicts this when he maintains,

"el escaso interés que el degeneracionismo suscitó en los alienistas de estas instituciones [los manicomios privados] a pesar de la importancia que éste

³⁴⁵ moral treatment of Pinel: Campos Marín observes that, "hasta bien entrado del siglo XX, los psiquiatras españoles cantarán las glorias del tratamiento moral y del manicomio para volver al alienado a la razón." (Campos Marín, *psiquiatría* 55)

³⁴⁶ monomania nosology of Esquirol: the genesis and decline of this nosology in France are well described by Jan Goldstein in *Console and Classify*, chapter 5.

³⁴⁷ negligible contribution: This melancholy assessment is supported in the oft-quoted passage in the prologue of Laín Entralgo to Peraza de Ayala's *La psiquiatría española en el siglo XIX*. (1947). After discussing the contributions to psychiatry of Germany and France, Laín continues, "¿Qué hizo la Psiquiatría española mientras acontecía esa enorme gigantomaquia en torno a la enfermedad mental? El excelente estudio de Peraza, a cuyas páginas asoman, de cuando en cuando, saetillas de melancólica ironía, nos da la respuesta innegable: nada." (Peraza de Ayala xii)

³⁴⁸ invariably a symptom of degeneration: this erroneous generalization is repeated (Franz 36), and is an example of the not uncommon repetition of incorrect secondary sources that I have encountered.

tenía en Francia y otros puntos de Europa. Así el degeneracionismo fue ‘moneda de uso corriente’ en aquellos campos de la medicina con una mayor implicación en el medio social: en la lucha antialcohólica, significativamente abanderada por higienistas y no por psiquiatras, y por la antropología criminal y la psiquiatría forense.” (Campos, *psiquiatría* 60)

While Morel worked to extend the scope of hereditary degeneration to account for many mental illnesses, he left others outside that purview.³⁴⁹ In Spain, where the only “scientific” study of mental disease worthy of note occurred in Cataluña,³⁵⁰ leading psychiatrists like Giné y Partagás³⁵¹ and Pi y Molist³⁵² appear to not have written specifically about the degenerationist nosology as such, the former finding it, “inaplicable como guía de diagnóstico” (Huertas, *Estrategias* 95). Giné’s assertion must be interpreted, however, in the light of the statements in his *Tratado teórico-práctico de frenopatología* (1876) in which he avers that predisposition to insanity is the most common malady transmitted by heredity and that it may be manifest in a family as, “una neuropatía de distinto orden, tal como la epilepsia, el histerismo, la corea” (Giné y Partagás, *tratado* 221-3), in other words, a family “neuropathic” genealogy may be affected by epilepsy in one generation, hysteria or writhing (chorea)

³⁴⁹ outside that purview: In his *Traité de maladies mentales* (Morel xii) lists as the headings to chapters 4-7, “Maladies de systèmes circulatoire, respiratoire et digestif, Causes physiologiques and Causes spécifiques [intoxications]” as causes of aliénation. Of the range of Morel’s nosology of mental disease, therefore, only part is hereditary and degenerationist.

³⁵⁰ mental disease in Cataluña: “a lo largo de toda la centuria [XIX] la psiquiatría puede decirse que no existió en el país como tal especialidad, si exceptuamos al núcleo catalán y--- con muchas reservas---al de la capital de la nación.” (Espinosa Iborra 83)

³⁵¹ Joan Giné y Partagas (1836-1903): Catalán physician, positivist *alienista*, author, editor and teacher and the main Spanish contributor to scientific psychiatry in the latter half or the nineteenth century. From 1864 onwards he was the director of the asylum of Nuevo Belén in Barcelona.

³⁵² Emilio Pi y Molist (1824-1892): Catalán physician, *alienista*, author and, from 1855, medical director of the psychiatric department of Santa Cruz Hospital in Barcelona. In contrast with Giné y Partagas, he had little sympathy for the organic outlook of positivist psychiatry and confessed adhesion to the school of medical vitalism.

in another and insanity in yet another. All these nervous diseases were seen to be related to each other as variable manifestations of a common, inherited, neurological predisposition. Such a statement of *l'hérédité dissimilaire*, together with a restatement of Prosper Lucas' outline of the patterns of inheritance, which included that of acquired characters, has the hallmarks of Morel's degeneration theory. Thus, while overtly rejecting Morelian degenerationism, many alientistas could espouse most of its individual features. Such apparent inconsistency is illustrative of the eclectic confusion in psychiatric thinking of the time.

As Huertas has observed (Huertas, *Esquerdo* 107), Spanish psychiatrists like Esquerdo in private clinical practice in the 1870s and 1880s were reluctant to undermine optimistic representations of their treatment by referring to degeneration theory, with its inherent determinism and pessimism. It was only in the field of forensic psychiatry, and motivated by a variety of agendas, that Esquerdo and his disciples felt free to express a degenerationist interpretation of criminal insanity with its associated pessimistic prognosis. This double standard reflected the *realpolitik* of contemporary psychiatry and, "respondía [...] a las estrategias de profesionalización e institucionalización de la psiquiatría en sus diferentes campos de acción" (Campos Marín, *profesionalización* 188). In contrast, Gordon's statement that, "Morel's ideas were accepted by the majority of contemporary writers on mental illness" (Gordon, *medical* 67) needs to be corrected in the context of the 1880s when Galdós was writing his Naturalist novels.³⁵³ Also in need of qualification is Gordon's description of

³⁵³ Morel's ideas: a review of Esquerdo's slender list of publications, "Preocupaciones reinantes acerca de la locura" (1978), "Locos que no lo parecen" (1880), "Locos que no lo parecen. Garayo el Sacamantecas" (1881) and "De la locura histérica" (1889) reveals repeated use of the monomania nosology, which goes back to Esquirol. There is an indirect reference to degeneration in the address of 1880, a single mention of it in the paper of 1889, while the

Esquerdo as, “the most prominent Spanish psychiatrist of the day” (Gordon, *medical* 68). It is certainly true that, by virtue of his high-profile appearances in the Otero and Garayo trails, his private asylums, his group of loyal disciples and his activity as a liberal politician that he was probably the best-known psychiatrist in Madrid. Taking Spain as a whole, however, there were other psychiatrists with a much greater claim to national recognition for their publications and their work to advance the care of the insane, primarily Giné y Partagás and Pi y Molist.^{354, 355}

Gordon’s account of the Leganés asylum in 1881 is valuable in emphasizing the appalling conditions in the under-funded, makeshift, national institution that was subject to much criticism in the early 1880s. Psychiatrists particularly resented that the direction of the asylum was in clerical hands ³⁵⁶ and that they often employed medical staff with no experience in psychiatry, who were in turn subject to the

address of 1881 is replete with references, direct and indirect, to degeneration. Esquerdo refers to Morel’s work, but Gordon’s unreferenced assertion that, “Morel’s ideas were accepted by the majority of contemporary writers on mental illness” is incorrect. The actual state of affairs is closer to that described by Campos Marín and Huertas when they state that, “salvo en el ámbito médico-legal, los más destacados representantes de la psiquiatría decimonónica consideraron de muy escasa utilidad, para la nosografía psiquiátrica, la reflexión etio-patogénica introducida por Morel.” (Campos Marín & Huertas, *teoría* 233)

³⁵⁴ national recognition: the bibliometric study of Rey González lists 11 books on psychiatry published in the nineteenth century by Cubi y Soler, 10 by Giné y Partagás, and 9 by both Galcerán Granés and Pi y Molist. Esquerdo wrote no book (Rey González, *saber* 12).

³⁵⁵ Prominent psychiatrist of his day: Rey Gonzalez refers to Esquerdo as, “una figura de escasa categoría respecto a los verdaderos alienistas de su tiempo” (Rey Gonzalez, *Esquerdo* 103), in comparison with men of the stature of Mata and Giné y Partagas. Huertas considers that there was only one true “escuela psiquiátrica” in Spain in the last third of the nineteenth century, that of the Catalán, Giné y Partagás, and that there was, “ninguna contribución original a la ciencia psiquiátrica” during that century (Huertas, *Estrategias* 102). Sancho de San Román sees Giné y Partagás with Pi y Molist as, “figura máxima de la psiquiatría española del siglo XIX.” (Sancho de San Román 247)

³⁵⁶ clerical hands: the Catholic church retained control of most public asylums.

Contemporaries quoted by Espinosa Iborra complained that mental disease was still being treated by exorcism while, in the community there persisted, “las prácticas irracionales de la brujería, del quiromantismo” (Espinosa Iborra 81). Escuder (1883) and Fraser (1879) were among many other who protested.

authority of nuns of the nursing orders.^{357, 358} While paying tribute to Esquerdo's vision of humane treatment for the insane practised in his two for-profit institutions at Carabanchel and Villajoyosa, Gordon fails to emphasize that Esquerdo patients paid much higher fees than the minimal rates of the municipal institution of Leganés, and that Esquerdo's admissions were therefore restricted to the relatives of the well-to-do.

Gordon provides an excellent discussion of the medico-legal debate over *locura moral* and the fight for its recognition by the courts and he attributes to Esquerdo's leadership much of the campaign to have diminished criminal responsibility by reason of insanity accepted as a plea at law. He blunders, however, in his note to this section where he claims that, "The term *locura moral* (moral insanity) was coined by the professor of legal medicine at London University, Harold (sic) Maudsley" (Gordon, *Medical* 77 n. 17) for while *Henry Maudsley* (1835-1918) was indeed a pioneering English psychiatrist and professor of medical jurisprudence from 1869-1879, the term *moral insanity* was used over 90 times in *A Treatise of Insanity and Other Disorders affecting the Mind* (1835) by James Cowles Prichard (1786-1848), who is widely credited with originating the phrase (Sass and Herpertz 635, Ernst 645), though the concept of deranged personality without frank signs of

³⁵⁷ Nuns of the nursing orders: According to Villasante, it was the nuns who provoked the dismissal of the innovative Luís Simarro from Leganés in 1879 (Villasante, *Leganés* 14), provoking the comment of his colleague, José Escuder, in 1895 that, "they command, dispose, order, put on straight-jackets and, when a doctor gets in their way, ensure that he is removed." (Escuder, *Anómalos* 307)

³⁵⁸ authority of the nuns: the struggle for control between psychiatrists and religious orders was still taking place in 1895, when the modernizing Arturo Galcerán, a respected pupil of Giné y Partagas, and his medical colleagues were forced to leave the staff of San Baudilio de Llobregat when the Hermanos Hospitalarios de San Juan de Dios assumed direction of the hospital (González Duro, *III* 41).

madness probably goes back at least as far as Pinel's *manie sans délire* in 1809 (Sass and Herpertz 633).

Gordon's account makes clear the extremely close correlation between Galdós's portrayal of Mariano and the real-life circumstances of Otero, though whether the author was actually present at Otero's trial appears not to be known. He posits a direct, though undocumented, influence of Esquerdo and Tolosa Latour upon the author by which I am not entirely convinced, since Galdós was exposed to news of the notorious trial,³⁵⁹ which was of extreme public interest at the time, and was writing a novel containing criticism of contemporary failures of social justice. The story of Otero was an example of the potential dangers to society of failing to provide any safety-net for the deranged. I am not convinced that Galdós needed the help of his medical friends for his description of the end of Mariano, paralleling the socio-moral death of Isidora. Only by implication does he criticize the inhumanity of executing a retarded epileptic for what was primarily an attention-seeking gesture, showing none of the reforming zeal that Gordon describes in Esquerdo. Muñoz y Nones' unreassuring comment about, "la corta edad y evidente desorden cerebral de éste pesaría algo en la balanza de la justicia" (*desheredada* 480) is marked by resignation rather than protest and Galdós does not describe Isidora's reaction to Muñoz' opinion.

Gordon's assessment of Mariano's living and working environments as Galdosean critiques of Madrid society is excellent as is his summary of Otero's story.

³⁵⁹ news of the notorious trial: Without specifying examples other than the Galeote trial of 1886, Berkowitz writes of Galdós, "that he attended assiduously all the leading murder trials." (Berkowitz 107)

His pungent account of Esquerdo's strengths and weaknesses seems to me to be just and is very much in accord with my readings of Esquerdo's polished, rhetorical and often vacuous orations.³⁶⁰ Something of the charisma and the force of personality of the man, however, may be inferred from the circle of the brilliant *young Turks* who were devoted to him; Ángel Pulido, Luís Simarro, Jaime Vera, Manuel Tolosa Latour, Vitoriano Garrido and José María Escuder among them. One suspects that he excelled at social and clinical interaction ³⁶¹ in a way that outstripped his capacity to theorize about them in writing. Gordon's summary of the evolution of Mariano's story suggests a strong social constructivist bias whose rhetoric elides some important aspects of the novel. In saying of the society that surrounds Mariano that, "the virtues of hard work and common morality no where get a look in" (Gordon, *medical* 75), Gordon ignores the examples of Miquis, Muñoz y Nones, and the happy Castaño household and undervalues the rough integrity of the *Sanguijuelera* and of Juan Bou.³⁶² The latter's "revolutionary rhetoric" may seem "mindless" to Gordon but, to my mind, it amplifies Galdós's social critique focalized through the (rotatory) eye of a proletarian who has suffered harsh, official repression and whose class-based resentment (mitigated in the course of the novel) reflects contemporary movements of socialism and anarchism

³⁶⁰ vacuous orations: Peraza de Ayala uses the phrase *lenguaje florido*. (Peraza de Ayala 131)

³⁶¹ social and clinical interaction: Fraser, on his visit to Spanish asylums in 1878, records the helpfulness and charm of Esquerdo, "whose kindness we shall never forget" and observed of him that, "The doctor and his patients were evidently on the most excellent terms" (Fraser 353, 349). A public hymn of praise to Esquerdo's humanity as a clinician was published in successive editions of *El Siglo Médico* in 1882 by Ángel Pulido and Manuel Tolosa Latour under the title, "De Carabanchel al Paraíso."

³⁶² virtues of hard work: I find exactly this list of exemplary workers in Michael Schnepf's note on Galdós's development of Isidora's character judged from comparison of the published novel with a preliminary version of the *La desheredada* manuscript. Schnepf notes that in an earlier draft, Isidora discovers the spiritual and material virtues of work, and only later did Galdós modify her character to make her entirely work-averse as she is in the final published version of the novel. Schnepf comments, "Galdós focuses attention on one of Isidora's greatest flaws and thus creates a powerful opposition between the protagonist and those characters in *La desheredada* who work for what they have." (Schnepf, *Manuscript* 249)

that were beginning to gain momentum in Spain in the 1870s. As such, it adds referential realism and authenticity to the novel.

While the concept of “moral perfectability” (Gordon, *medical* 75) involves philosophical and hermeneutic perspectives which may have changed slightly since Gordon wrote in 1972, I believe that the concept is inappropriate in relation to Mariano for much the same reason that his responsibility for his crimes can be questioned. He is the victim of inherited and environmental degenerative influences that make the application of the concept of moral perfectability as inappropriate as it would be in any other brutalized adolescent suffering from epilepsy and impaired emotional and intellectual development (*evidente desorden cerebral*, in Muñoz y Nones’ words). Mariano’s brief transformation as a result of his visit to the theatre, which Gordon cites as an example of Mariano’s capacity for improvement (Gordon, *medical* 75), and which offers Isidora such contentment (*desheredada*, 257), can be viewed from a less rose-tinted perspective as yet another example of Isidora’s complete inability to understand the seriousness of Mariano’s emotional and moral degeneration. In support of this are the contrasting events of the very next page in which Mariano’s lack of aptitude at school leads to his being cruelly marginalized with the result that he reverts to the familiar street gangs, “más compatibles con su fiereza y condición picaresca” (*desheredada*, 258). In this bathetic contrast, I believe that Galdós is underlining the refractoriness of Mariano’s nature, a key to his tragedy, and a suggestion that not all *dolencias sociales* are amenable to improvement through the *beneficios reconstituyentes* that he lists in his epigraph (*desheredada*, 63).

Gordon's papers, then, are well-researched, elegant and highly readable but painted in broad-brush strokes, some of which can be debated and others of which are frankly erroneous. He has done good service in drawing attention to the role of degenerationist thinking in *La desheredada*, illustrated by the sentence at the end of his first paper, "To the reader versed in the nineteenth-century concept of hereditary transformational neurosis, there is an obvious link between the ravings of Tomás Rufete in the Leganés asylum, the psychological quirks of Isidora and the epileptic degeneration of Mariano" (Gordon, *medical* 76). He might also have mentioned Tomás Rufete's father, who may also have ended his days in Leganés, and the eccentric, deluded simpleton of a *canónigo* (an honorary title only) who confirmed Isidora on her path to perdition. My contention is, however, that Gordon underestimates the influence of degeneration theory in the novel, partly because of his preoccupation with Galdós's moral vision and partly because of his idea of the moral perfectability of Mariano. While not for a moment denying Galdós's profoundly moral preoccupation with the physical and moral degeneration and the injustices he saw in Madrid society, which Isidora's fall does so much to symbolize, I regard his statements on Mariano's potential for moral redemption as being a counter-fictional speculation, rather than based on anything that Galdós has written. Mariano is a truly tragic victim of an uncaring society, the degenerative influences of his heredity and the environments to which he gravitates. A major part of his tragedy is that he is as incorregible as his sister.

7) Conclusions

The concept of degeneration is deeply embedded in Galdós's novel partly because it is, as a Naturalist work, a social study (Pattison, *naturalismo* 89). Galdós was concerned not to foreground the ideal and the moral, as did Romantic authors, so much as to create imaginatively the realities of Madrid society as he knew it. Galdós did not approach his theme as a supposedly detached observer, as Zola's theory of the Naturalist novel preached, but from the point of view of a middle-class liberal disappointed with the Restoration's betrayals of the hopes and promises of the *sexenio revolucionario* (Goldman, *trabajo* 149). Galdós saw a vivid, vibrant city about him cursed, on the one hand, with ostentatious and improvident consumption³⁶³ on the part of a self-satisfied, rising middle-class and, on the other, by life-threatening poverty and disease in the underemployed lower classes. He contributed to the widespread debate on this poverty, the so-called *cuestión social*, that was the result of social and economic injustice and carried with it the threat of political upheaval³⁶⁴ that would undermine the social order that the middle-class had established in its own interests. He saw a society with many features of degeneration, both physical and moral, a society with widespread disease, crime and prostitution vitiated by insufficient will on the part of its leaders, with degenerative failings of their own, to remedy its fundamental problems. With the disappearance of the old aristocracy, represented by the tomb-like house of Aransis and its fleeting *marquesa*, political leadership had passed to the likes of egotistical self-made men like Sánchez Botín and vacuous señoritos such as Joaquín Pez, presiding over an endlessly self-serving,

³⁶³ improvident consumption: Labanyi notes that, "Isidora is seduced not so much by men as by consumerism." (Labanyi, *Gender* 109)

³⁶⁴ threat of political upheaval: Campos Marín observes the constancy of this concern among the middle-class, "El temor de las masas obreras, a las clases populares, es una constante de la literatura burguesa decimonónica sobre la cuestión social." (Campos Marín, *psiquiatría* 55)

nepotistic beurocracy of dynasties like those of the Pez ³⁶⁵ and the Pájaros. Small wonder, then, that a writer of liberal instincts like Galdós, sympathetic to Krausist notions of open-mindedness, hard work and harmony (Denah Lida 20), and faced by signs of lower-class unrest, should regard the whole state of society not only as degenerate in the present but as bearing evil portents for crime, and even revolution, in the future.

In *La desheredada*, Galdós tackles the perception of reality through the eyes of a family stricken with a disease often viewed as degenerative at that time, that of madness. He creates a story in which an incorrigibly distorted view of the realities of everyday life leads with grim inevitability to death and dishonor. The theorists of degeneration allowed that the process might be mitigated or even arrested under the direction of skilled hygienists who knew how to stop the process.³⁶⁶ The tragedy of the *Rufetes* is one in which degeneration was so deeply ingrained that the best efforts of an enlightened and wise physician, represented by Augusto Miquis, are insufficient to halt it.

Galdós creates in this cautionary tale a warning to a society ³⁶⁷ whose future is threatened by whole classes who refuse to learn appropriate lessons from reality.

³⁶⁵ the Pez: the authenticity of Galdós's portrayal of the Pez clan is underlined by the similarity with a real-life family in the Spanish bureaucracy of that time, that of Manuel Cantero (Cruz 208).

³⁶⁶ skilled hygienists who knew how to stop the process: Loarden y López' recommendations (1867) of abstinence and religious piety give some idea of how slender the hygienists' therapeutic armamentarium really was. Gómez y Ferrer (1884) was no less earnest, but remained even less specific.

³⁶⁷ warning to a society: the symbolic role of Isidora as a reflection of the madness of Spain is emphasized by Caudet, "los culpables de la progresiva degradación de la heroína pertenecen a distintos sectores de la sociedad [...] que Galdós hace responsables del estado de ruina y prostración de España. La novela es una *autopsia* de la España de la Restauración hecha por

Joaquín Pez and Melchor Relimpio live in the borderlands of *quiero y no puedo* fantasy and frank crime, paralleled by the crudities of Mariano, while Botín and Gaitica represent criminality as the solution to survival in Madrid. It is small wonder that the industrious Juan Bou should resort to the anarchist rhetoric ³⁶⁸ of class warfare as a response to such injustice and moral degeneration in the upper classes, parodied by Mariano. Galdós is telling us that a clear-eyed assessment of degeneration of society is a vital first step for its regeneration on humane, liberal grounds, foretelling the movement which would gain momentum in the following decade and in the opening years of the twentieth century led by visionaries like Joaquín Costa. Costa would be additionally impelled by that ultimate consequence of national degeneration and decline as a result of detachment from reality, the disaster of 1898.³⁶⁹

Chapter 4: *El doctor Centeno*

1) Introduction

un Galdós que ha visto fracasar la Revolución del 68” (Caudet, *novelas 275*, author’s italics). Caudet here endorses the perception of Galdós as a physician, performing an autopsy on Spanish society.

³⁶⁸ Anarchist rhetoric: Labanyi notes that, “Bou’s utopia without money seems to have more in line with the International’s insistence on the abolition of private property [...] at the time Spanish socialist demands for the abolition of property were based more on Proudhon than Marx. Bou’s utopia based on the exchange of services echoes the anarchist concept of “mutual aid.” (Labanyi, *Gender 107* n.10)

³⁶⁹ the disaster of 1898: impelled by national, imperialistic jingoism triggered by the outbreak of the Spanish-American conflict in 1898, the unfortunate admiral, Cervera y Topete, was forced by the Spanish admiralty to abandon his plan to face the American fleet at the Canary Islands, where he would have been at an advantage, and made to undertake a crossing to Cuba. He was ordered to engage the US fleet commanded by Admiral Simpson at the battle of Santiago de Cuba and knew that he was out-numbered and outgunned. Inevitably, his fleet was destroyed. The detachment from reality on the part of Spanish national leaders here rivalled that of Isidora.

The appearance of *La desheredada* represented the beginning of a Naturalistic period of novel writing, not only in Galdós but also in his contemporaries. As Pura Fernández observes, “Tras la decisiva aparición de *La desheredada* galdosiana, en 1881, comienza a afianzarse una tendencias médica y sociológica en las novelas españoles, íntimamente vinculada a la irradiación de la escuela naturalista (Pura Fernández, *Mujer* 11), stressing, as she does so, the intimate relationship between Naturalism and medicine that would continue in *El doctor Centeno*. There are many links between the two novels. Isidora and Alejandro Miquis are both members of families from La Mancha with strains of madness. Both live detached from reality, both are incapable of working to provide for themselves, both suffer from *locura crematística* and both suffer devastating consequences as a result of their insanity.³⁷⁰ Unlike *La desheredada*, however, *El doctor Centeno* has not one principal character but two and there is debate in the literature ³⁷¹ as to whether the first half of the novel, largely devoted to Pedro Polo, truly represents an independent novel separate from the second part that revolves about the story of Alejandro Miquis. The adventures of Polo and Miquis are quite separate with only the picaresque “secondary” hero, Felipe Centeno (*Celipe*), forming a link between them. I incline toward the interpretation of José Montesinos, who sees in *El doctor Centeno* a, “fusión de dos novelas” (Montesinos, *Galdós II* 62) and who concludes that, “ésta es la novela de Alejandro Miquis” and that, “creo que puede decirse que todo el tomo

³⁷⁰ a result of their insanity: Montesinos draws a clear comparison between the mad Manchegans Isidora and Alejandro, in addition to doña Isabel de Godoy, “dentro de la galería de locos que es la obra galdosiana [...] es una de los ejemplares más notables,” when he writes, “en las novelas que se suceden en poco tiempo aparecían tres tipos manchegos, Isidora, Doña Isabel, Miquis, los tres aquejados del mismo mal [...] se debiera a las mismas o parecidas causas [...] Creo que Galdós, muy consciente en su indagación del mal de España, que siempre ve encarnado en el admirable Caballero.” (Montesinos, *Galdós II* 75)

³⁷¹ debate in the literature: for example, Germán Gullón, “Unidad de ‘*El doctor Centeno*’” and Moreno Castillo, “La unidad de tema en ‘*El doctor Centeno*.’”

primero no es más que una introducción al segundo, aunque la extensión de ambos sea más o menos la misma” (Montesinos, *Galdós II* 72-3). For the purposes of this dissertation, *El doctor Centeno* is very much the novel of Alejandro, since it is he, in association with his mad great aunt, who exemplifies best the presence of degeneration in the novel.

1) Summary of the Novel

The ironically named hero of this novel, who has little chance of becoming a doctor, is a Balzacian hold-over from Galdós' previous novel *Marianela* (1878). A poor lad, Felipe Centeno, arrives in Madrid, having walked from the mining village of Socartes in Asturias, with hopes of going into service and preparing himself for a profession. Meeting the sympathetic law student, Alejandro Miquis, on the hill of Madrid's astronomical observatory, he obtains a recommendation as a servant to the priest-school master, Pedro Polo, in exchange for tuition at Polo's school. In that school, Felipe is subjected to brutal rote learning from which he gains nothing, however, and is mockingly christened “doctor Centeno” for his ambition in one of Polo's cruel punishments. Despite the sympathy and support of the gentle teaching assistant, José Ido de Sagrario, Centeno is thrown into the street, ostensibly as punishment for a prank but, in fact, because he has the accidental misfortune to witness Polo one night in an illicit assignation in the streets. Felipe finds himself branded as a liar when he leaves as Polo endeavors to make sure that no report of his affair will receive credence.

After survival on Madrid's streets for two weeks, Felipe finally manages to encounter the ever-generous Alejandro Miquis once again and is hired by him as servant and companion. In the course of the next year, Felipe shares his master's misfortunes as the latter squanders an irregularly acquired legacy, is obsessed by his composition of an outmoded drama to the extent of giving up his university studies and dissipates his money and limited energy with a prostitute. The rest of the novel is devoted to the decline and death of Miquis from pulmonary tuberculosis, during which Felipe serves him faithfully, learning a great deal about life and privation as he does so. He is able to observe the contrast between true friends and parasitic acquaintances as they circle about his dying master. A re-established friendship with Ido de Sagrario, who turns out to be a neighbor, is rewarded at the end of the novel by the offer of a job aiding a street vendor in the distribution of petroleum for domestic lighting.

3) The context of the novel

At first sight *El doctor Centeno* (1883) would appear to represent a major departure from the pattern of the preceding *La desheredada* (1881). The historical period of the novel (1863-4), the years of late Isabelline Spain, is ten years earlier than that of *La desheredada* and the story of the central character that links the two halves of the novel, Felipe Centeno, is not one of Isidora's degenerative decline, but rather one of survival under harsh circumstances as a witness to the decline of others. The events of the story are focalized through Felipe and are represented as they would be perceived by a young adolescent (Gullón, *Centeno* 580). Galdós represents Felipe as a character who, miraculously, suffers no moral or physical harm in spite of his

harrowing experiences but rather demonstrates remarkable patience and resilience as he matures in sympathy and understanding.

Within the detailed structure of the novel, however, there are many themes in common. The Quixotic detachment from everyday reality seen in Alejandro is emphasized by virtue of his family roots in Toboso, the *pueblo* of the Godoy, Herrera and Miquis families. The village is, in turn, close to Tomelloso where the *canónigo* Santiago Quijano can offer his insightful assessment of Isabel Godoy's mental stability (Pérez Galdós, *Centeno* 261).³⁷² The degeneration of multi-generational insanity with its origins in la Mancha is illustrated by Isabel Godoy whose obsessions with ultra-cleanliness, an exclusively Manchegan diet, fortune telling and her imagined clairvoyance mark her in the view of all who meet her as one quite mad. In Montesinos' words, "Dentro de la galeria de locos que es la obra galdosiana, Doña Isabel es uno de los ejemplares más notables" (Montesinos, *Galdós II* 73). The force of her obsessive lunacy is such that she is able to compromise the sanity of her housemaid, Teresa, who consequently comes to share her delusions.³⁷³ Her belief that she, Isabel de Godoy, has died and that she is the reincarnation of her late sister (Centeno 258) and that Alejandro is not a Miquis but an Herrera (the family of her late sister Piedad's deceased husband), illustrate the profundity of her mental

³⁷² (Pérez Galdós, *Centeno* 261): All citations of *El doctor Centeno* are from the edition of Isabel Román Román (2008). For brevity, all further citations will be given simply as *Centeno*.
³⁷³ Teresa, delusions: I have found no reference in the literature to the fact that Galdós is here portraying the psychological syndrome of *folie à deux*, the condition in which an initially sane person assumes the delusions of a lunatic with whom they live in close contact. A short history of the condition was included in Emmanuel Régis' monograph *La Folie à deux* published in Paris three years before *El doctor Centeno* appeared. While the condition was the subject of a thesis by a Dr. Maret in 1868, the phrase appears to have been coined simultaneously by Charles Lasègue and Jules Falret in their descriptions published in 1873. News of this rare condition thus had ample time to reach Spain, assuming that Galdós or his medical friends had not recognized it independently.

disorder. In spite of the man who married her niece, the hated Pedro Miquis, by illegally diverting a legacy from him to his son, Alejandro, she appears unaware that she is destroying the young man. Her surrealistic mix of ignorance and perspicacity is demonstrated on her visit to her dying great-nephew when she appears not to realize that *La Tal* is a woman of the streets but does perceive, as the pompous Ruiz does not, that the woman's beauty might comfort (if not cure) Alejandro. A more Quixotic detachment from reality is difficult to imagine.³⁷⁴

Alejandro Miquis, is the embodiment of kindness, optimism and fellow-feeling and Felipe owes to him his survival in Madrid, first by recommendation to the household of Pedro Polo, though the mutual friend Francisco Morales, and then to his employment as *criado* to Alejandro himself. Alejandro suffers from the ancestry shared with his mad great aunt, however, and the familial degenerative pattern of madness manifests itself in the obsessions which detach him from the demands of reality. He unconditionally worships a prostitute, who he christens *la Carniola* after a character in his historical drama, and allows himself to be manipulated by her into parting with sums of money he can increasingly ill-afford, and into living in the most sordid and unhealthy of dwellings. So obsessed is he by the life of his imagination that he forsakes his legal studies in order to complete his drama, written after an outdated Romantic model, with no insight into its unsuitability for contemporary theatre. At every point, as he squanders his way to destitution, his insane optimism allows him to foresee great profit from his drama that will resolve all financial problems and enable him to restore to his parents the funds his great aunt has diverted to him. His

³⁷⁴ Isabel Godoy's detachment from reality: Scanlon comments that, "Her name is clearly significant. She shares with Isabel II, whom she fervently admires, a superstitious piety and blindness to the inevitability of social and political change." (Scanlon, *Centeno* 253 n.20)

saturation with the imagined life and times of Pedro Téllez Girón, duke of Osuna and viceroy of Naples, his secretary Quevado and the historical Catalina Paoli, nicknamed *La Carniola*, is such that he projects their images on to his own life, seeing himself as the tragic duke, Felipe as his faithful secretary and the prostitute *la Tal* as La Carniola. These literary and sexual fantasies are serious but not necessarily fatal. What dooms Alejandro is his third obsession, a self-destructive open-handedness with a complete incapacity to manage money, which is taken full advantage of by almost all who come into contact with him. This suicidal liberality with every sponger, to the extent of causing his own starvation, is insane in its intensity and Galdós has it interpreted as such through the eyes of other characters who know him. The extradiegetic narrator describes him as, “enfermo sin dolor, quisás loco, quisás poeta [...] un victima de la neurosis” (*Centeno* 321), the three student friends Zalamero, Poleró and Arias comment, “es un suicida. Él se ha matado. ¿Pero tú has visto a Miquis hacer alguna vez una cosa derecha y con sentido común? Si no hay quien lo entienda [...] Es un desgraciado, un loco” (*Centeno* 405). Morales has his own xenophobic explanation, “Tu amo es un loco [...] emponzoñado con las ideas extranjeras” (*Centeno* 419) and even the loyal Felipe finally concludes of his hero that, “Era una desesperación vivir en tan gran desarreglo y no poder contar con nada, por la liberalidad furibunda de aquel pobre loco.”³⁷⁵ (*Centeno* 440)

Given Alejandro’s absence of mania or obvious hallucination, one must conclude that Galdós portrays him, like Isidora, as one of the *locos que no lo parecen*,

³⁷⁵ aquel pobre loco: Galdós as narrator expresses ambivalence about Alejandro’s madness, blurring his eccentricities with those expected of a poet, “Era un enfermo si dolor, quizás poeta. En otro tiempo se habría dicho que tenía los demonios en el cuerpo. Hoy sería victima de la neurosis” (*Centeno* 321). Galdós’s representation of Alejandro’s self-destructive detachment from reality, his familial diathesis and the opinions of those close to him leave little doubt as to his degenerative insanity.

not ravingly insane but insanely dysfunctional. In addition to his innumeracy and related *locura crematística*, traits which he shares with Isidora Rufete, he also shares with her a self-destructive detachment from reality and a complete and incorrigible inability to learn from experience (Rundorff 233). He learns no more from his self-imposed penury than Isidora does and he ties his besetting sins to his irrevocable identity as a person, “yo soy así, y no puedo ser de otro modo. Por más que me empeñe en ello, no consigo ser egoísta. Mi yo es un yo ajeno” (*Centeno* 399). Galdós presents the tragedy of one who is destroyed by ignoring himself in the act of being himself, one totally preoccupied with others. Isidora and Alejandro are cousins in their inherited, degenerative madness, but lacking her beauty and being, “raquítico y de constitución muy pobre” (*Centeno* 321), he has nothing, such as she has, to sell.

4) The Past and Obsolescent Values in *El doctor Centeno*

El doctor Centeno has been described as containing some of Galdós’s most autobiographical writing (Ortiz-Armengol 158; Rodríguez, *Estudios* 90; Caudet, *naturalismo* 201, 219), most especially as it relates to the student community of *huéspedes* in the house of doña Virginia that was based on the author’s own experiences in a student boarding house in the calle del Olivo in 1862-3. Furthermore, the figure of Alejandro Miquis, “with his dreams of glory and his romantic dramas in verse” is a, “reincarnation of the Galdós of twenty years before” (Nimitz 26). Perhaps even more than in *La desheredada*, Galdós reveals himself in this novel as a critic of the institutions and injustices of Madrid society. In Brennan’s words, Galdós identifies himself as a moralist,

Galdós, more than any other of the great novelists apart from Proust, is a moralist. We see this not in his comments---for he rarely makes any---but in his choice of themes. He had a very clear picture in his mind of the social and political vices of Spanish society and every one of his novels is devoted to the analysis and portrayal of one or more of them. (Brenan, *Literature* 391)

Galdós's projects on to the period of 1863-64 of *El doctor Centeno* his conviction of the 1880s, the time of his writing, that education was the key to putting Spaniards in contact with common sense and reality, so clearly enunciated in the epigraph and epilogue to *La desheredada*. This conviction is continued in the first half of the bipartite *El doctor Centeno*, fueled by the belief that education was also a remedy for social ills,

Education was the nineteenth-century panacea for social ills: education of the right sort would produce responsible individuals who would contribute to the moral, intellectual and material advancement of society and it would ensure social stability by saving the working classes from crime and revolution.

(Scanlon, *Centeno* 23)

This ideal is undermined in the first half of the novel, however, in which Polo's brutal system of traditional, rote learning is exposed by Galdós with Dickensian vividness not only for its uselessness but also for the conservative complacency of parents who, knowing no better, favor it for their children. The rational and modern alternative is left to the isolated *cesante*, Jesús Delgado, who goes mad trying to persuade his betters in the *Dirección de Instrucción Pública* of the superiority of the new teaching

techniques of Froebel and Pestalozzi (*Centeno* 342). As with Canencia and Quijano-Quijada in *La desheredada*, it is left to the mad Delgado to pronounce wisdom that the “sane” society about him is unwilling to acknowledge, implying detachment from reality on the part of society itself. His fellow *cesante*, Don Basilio Andrés de la Caña, similarly goes mad trying to expose the fiscal irresponsibility of *Hacienda*, using as he does so the organicist rhetoric of regenerationism ³⁷⁶ (*Centeno* 305).

Galdós’s vision of Spain’s madness in its adherence to the values of the past in *El doctor Centeno*, is assessed by Geraldine Scanlon when she describes, “the dominant preoccupation of Galdós’s novels of this period: the crisis of values in a society which was undergoing significant economic and political change” (Scanlon, *Centeno* 245). She finds a unity in the novel, not so much in the linking focalization of the developing, young Felipe Centeno, which is emphasized by Gullón (Gullón, *Centeno* 580), as much as in the portrayal of, “the survival of anachronistic values” (Scanlon, *Centeno* 245): those of Francisco Morales attached to xenophobia and chauvinism (*Centeno* 419), of Federico Ruiz adhering to a dilettante’s ridiculous attempt to reconcile science with religion by giving Catholic names to the constellations (*Centeno* 231), those of Isabel Godoy for whom only the traditional food and recipes of la Mancha are tolerable (*Centeno* 253), and Alejandro adhering nigh unto death to a total dedication to an outmoded, backward-looking epic drama of the baroque age that has no future in the theatre of his time (*Centeno* 333). The implication is that, like Ruiz, “Spain has failed to absorb the modern scientific spirit”

³⁷⁶ organicist rhetoric of regenerationism: Román Román notes Galdós’s expression of concern for, “las enfermedades y remedios del organismo español” when the regenerationist movement was in full swing at the turn of the century but notes that he had used the image of “la patria enferma” as early as 1876 in *El 7 de julio* and in *Gloria* (Román Román, *regeneracionismo* 102).

(Scanlon, *Centeno* 246) and that, like Morales, the country, “has imperfectly assimilated the ideals of liberal democracy” (Scanlon, *Centeno* 246). This resistance to change and failure to come to terms with the modern world is characterized by its, “predominance of the poetic over the scientific spirit (and related concepts of idealism, superstition, spontaneous creativity of the imagination over observation of reality, rational analysis, perseverance in prosaic tasks etc.) is central to the novel” (Scanlon, *Centeno* 246).

5) The Themes of the Second Half of *El doctor Centeno*

The second half of the novel, however, raises a number of issues that Scanlon has chosen not to address. Is the failure of adjustment to the changing circumstances of the present one of conservative eccentricity or is it something more serious? Why is the description of Alejandro’s decline and demise from pulmonary tuberculosis so prolonged, being well beyond what might be considered necessary merely for the development of Felipe in a *Bildungsroman*? Why is the Naturalistic description of Alejandro’s last dwelling and death,³⁷⁷ suggestive of a mixture of Dickens and Zola, so excruciatingly vivid? The grimness of these descriptions seems prolonged even in this novel in which “nothing happens.”³⁷⁸ Montesinos emphasizes Galdós’s fascination with medicine and with the process and clinical details of death,

³⁷⁷ Alejandro’s last dwelling and death: these loom so very large in the final chapters that they have been likened to major characters in the novel, “Al final podría decirse que los protagonistas son la enfermedad de Miquis y la siniestra casa en que vive.” (Montesinos, *Galdós II* 92)

³⁷⁸ novel in which “nothing happens:” this is a quote from a letter to Galdós about *El doctor Centeno* written by his great friend (with whom he had visited Leganés) José Ortega y Munilla, director of *El Imparcial*. In praising the novel, Ortega wrote in 1883, “Lo mejor de este libro es que no *pasa nada*. El que busque acción [...editor’s note “ilegible” here...] y díscola a las órdenes de la lógica que se meta en el manicomio de los dramáticos o en el tonticomio de las

Galdós ha seguido con un interés casi clínico el proceso de la enfermedad [la tuberculosis], tan frecuente entonces, sobre todo entre gentes que vivían como aquel muchacho [Alejandro]. El curso de la agonía especialmente está observado, con escrúpulo, tal vez machaconamente. (Montesinos, *Galdós II* 88)

which he finds almost excessive, and goes on to observe that when it comes to one of his characters expiring, “no deja ya morir a nadie sin auscultarlo y tomarle el pulso, ni deja de puntualizar los síntomas, sin ahorrar tecnicismos” (Montesinos, *Galdós II* 88). Shoemaker observes, in the context of all of Galdós’s novels that, “nowhere as well as in *El doctor Centeno* did Galdós present the misery of poverty, illness, hunger, ugly filth, pathological disintegration; the elements of Naturalistic content are provided in abundance and at length” and that, “Alejandro’s prolonged dying occupies no less than three eighths of the novel, and his conduct has been called suicidal much earlier.” (Shoemaker, *Novelistic II* 192)

Perhaps an answer to one of these questions is that Galdós, as a social critic with a consuming interest in all aspects of the human condition, had taken the trouble to explore the poorer locations in Madrid that many of his readers would have taken trouble to avoid. We know from his preface to the third edition of *Misericordia* (1913) that he had researched Madrid’s poverty³⁷⁹ thoroughly for that novel, and may safely

folletines. La buena novela es análisis y nada más que análisis” (Ortega 198-200, author’s italics). Ortega y Munilla was the father of the philosopher and essayist Ortega y Gasset.
³⁷⁹ researched Madrid’s poverty: “En *Misericordia* me propuse descender á las capas ínfimas de la sociedad matritense, describiendo y presentando los tipos más humildes, la suma pobreza, la mendicidad profesional, la vagancia viciosa, la miseria, dolorosa casi siempre, en

assume from the graphic descriptions in *El doctor Centeno* that similar investigations had preceded the earlier novel. Just as the city of Madrid has been considered as achieving the status of a subject in *Fortunata y Jacinta* (Boring 13), the wretchedness that surrounds Alejandro becomes a documented subject in itself with which the characters interact. On a larger scale, Galdós proclaims to his readers and to those responsible for Madrid's city government the results of their failure to take care of the population, with extremes of malnutrition and ill-health as a consequence. As a prime example, the ill-health of the depressed, scrofulous children of Ido de Sagrario prompts the narrator's outrage as he describes their potentially preventable infirmities, "dechado tristísimo de la caquexia popular, mal grande de nuestra raza, mal terrible en Madrid, que de mil modos reclama higiene, escuelas, gimnasia, aire y urbanización" (*Centeno* 431). Galdós is here identifying with the anguish of public health physicians forced by their professional commitment to confront the extremes of human misery of the poor in Madrid. Galdós was also identifying himself with the medical-literary lobby that clamored for constructive remedies on the part of the authorities,

El papel del médico en toda esta evaluación fue decisivo, prestando al ideólogo y al literato toda su experiencia, y convirtiéndose en no escasas ocasiones en al auténtico paladín de las reformas. Este hecho no tiene nada de extraño, ya que

algunos casos picaresca ó criminal y merecedora de corrección. Para esto hube de emplear largos meses en observaciones y estudios directos del natural, visitando las guaridas de gente mísera ó maleante que se alberga en los populosos barrios del Sur de Madrid. Acompañado de policías escudriñé las *Casas de dormir* de las calles de Mediodía Grande y del Bastero [...] No me bastaba esto para observar los espectáculos más tristes de la degradación humana [...] donde viven las familias del proletariado ínfimo, puede ver de cerca la pobreza honrada y los más desolados episodios del dolor y la abnegación en las capitales populosas" (Pérez Galdós, *Prefacio* 5-6). Galdós shares with that other great Spanish realist, Goya, the courage to look the extremes of human misery in the face.

el médico era el más directo testigo de la calamitosa situación del proletariado.

(López Piñero, García Ballester & Faus Sevilla 397)

by being himself a, “directo testigo de la calamitosa situación del proletariado.”

Consistent with this, as a study of Galdós’s journalism has revealed, he was not one to rely on the reports of others, but characteristically had to see and touch for himself, “el afán referencial, el testigo que es Galdós de la vida contemporánea en sus novelas, tuvo que surgir, en buena parte, de ese afán de testimoniar lo *visto* que [...] informa casi la totalidad de su labor de reportero” (Palomo 224, author’s italics). Years later, Galdós would confirm this explicitly, “no me gusta que nadie me cuente lo que puedo ver con mis ojos y tocar con las manos.”³⁸⁰ The overlap here between the investigative journalist, the researching novelist and the physician was blurred, “for the doctors did not merely heal; they observed, took notes, published findings, thus delineating the reality of the lower class” (Goldman, *Pueblo* 155). When the physicians wrote fiction about their experiences, as some of them did, they did so as Naturalist authors. For their colleagues, dealing with a poor population profoundly weakened by malnutrition and disease, the explanations of degeneration theory seemed particularly relevant.³⁸¹ What is apparent in this study is that the socially-committed and observant Galdós shared their perspective.

³⁸⁰ ver con mis ojos y tocar con las manos: newspaper account dated 18 Dec. 1883 of a ship explosion in Santander by Pérez Galdós for *La Prensa* of Buenos Aires. (Pérez Galdós, *cartas* 505)

³⁸¹ degeneration theory seemed particularly relevant: “El impacto del degeneracionismo entre los médicos españoles fue notable, sobre todo entre los que dedicaban su actividad a la higiene pública y a la medicina forense” (Campos Marín, *sociedad* 1107). It may be no coincidence that many forensic opinions were called upon in connection with members of the same *masa obrera*. Campos Marín also writes, “la incapacidad de los obreros para controlarse e integrarse en la nueva sociedad, aceptando su condición social era, a juicio de los higienistas, la principal causa de la conflictividad social. Esta reducción de las causas del pauperismo y a la enfermedad a una cuestión moral y ambiental contribuyó a culpabilizar de su propia situación a los individuos y clases sociales que la padecían, criminalizando sus conductas.” (Campos Marín, *sociedad* 1099)

Meanwhile the response of the government and of the aristocracy was minimal. The mortality among Madrid's poor was so high ³⁸² that the population of the city would have declined had it not been for the constant influx of new blood from the provinces. Between 1887 and 1900, more than half Madrid's population came from outside the city (Goldman, *pueblo* 197). Later writers analyzing this situation would make the description of the capital *la ciudad de la muerte*, a commonplace in medical texts (Huertas, *Vivir* 254), as the epidemic and endemic diseases in the city became progressively worse between 1880 and 1900 (Goldman, *pueblo* 204). Despite these horrors, the Establishment ignored the plight of the underclass, paying passing attention to it only if there was an indication of social unrest,

No institutions except the charities gave them either protection or consolation, and there is reason to believe that even the charities failed in this regard [...] they [the poor] existed not merely without the aid of, but in spite of, the government, the Church and the economic system which exploited them mercilessly. The lower classes of Galdós's *pueblo* were not merely considered eminently expendable by their rulers; they were geographically, physically and spiritually marginal to all aspects of Madrid society, even to the economic system from which they could always be replaced by a constant stream of new immigrants. (Goldman, *pueblo* 272)

³⁸² mortality among Madrid's poor was so high: Labanyi quotes figures from Hauser (1902) showing that while the population of Madrid increased from 282,635 in 1868 to 480,081 in 1888, deaths outnumbered births. A table of births and deaths in sample periods between 1860 and 1900 shows that deaths consistently outnumbered births (Hauser, *Madrid* 51). Madrid's mortality rate was second in Europe only to that of St Petersburg and in the period 1880-84, almost 50% of children died before the age of 5 years. The mortality among the poor, of course, was disproportionately high. (Labanyi, *Gender* 186)

Set against this kind of background, but on a more individual scale, Galdós uses the environment of *misería* to show how it can bring out the best and the worst in his characters. On the one hand, he portrays Felipe as an idealized portrait of fidelity and Ido de Sagrario is a sympathetic companion in poverty. On the other hand, Cienfuegos and the sisters Cirila and La Tal circle about the dying Alejandro like vultures ready to snatch anything of value. In the middle ground, Zalamero and Poleró exercise a helpless friendship, incapable of halting Alejandro's self-destruction, while the sermonizing Federico Ruiz demonstrates the worst mean and self-righteous pomposity.

6) Degeneration theory in *El doctor Centeno*

I believe an answer to another question, that of the prolonged decline of Alejandro, may be found in degeneration theory as it was understood in Galdós's time. What the author is inviting us to contemplate is not ill-fated eccentricity but madness. The *locura crematística* (Montesinos, *Galdós II* 85) of Alejandro, mirroring the fiscal irresponsibility of the state, is not merely one of prodigality but, like Isidora, one of a fatal degenerative obsession. Typical of degeneration is its persistence across generations taking different forms in different individuals and occasionally skipping a generation or individuals within a generation. The source of Alejandro's madness is, in the light of the understanding of Galdós's time, the ancestry which he shares with his great aunt Isabel Godoy. Neither Alejandro nor his great aunt are raving and they

retain some critical faculties, “loca, pero no tiene nada de tonta” (Montesinos, *Galdós II* 77), but both are, “locos que no lo parecen.” Alejandro, like Spain, is an image of deep degenerative decline masked by gaiety, reality-defying imagination and improvident spending.

Alejandro is witty, charming and generous (as Isidora is charming and beautiful), and is as acceptable as she is in normal social situations at the beginning of the novel. There is no suggestion of madness in the view of those who know him superficially. That he is afflicted with an underlying madness, however, is apparent to all who know him more closely over time. Galdós has his fellow students, Zalamero, Poleró and Arias, agree among themselves, “Es un desgraciado, un loco” (*Centeno* 405), with which Morales concurs (*Centeno* 419). Even that *loco que no lo parece* of a different stripe, Jesús Delgado, (also *loco pero no tonto*) recognizes in Alejandro, “el más enfermo de todos [...] lisiado [...] el más cojo, manco y ciego [...] un triple suicida” (*Centeno* 353). The parallels with the superficially normal Spanish society are all the stronger; beneath the outwardly sane forms of everyday life lies a degenerative *locura crematística* which the moralist Galdós sees as threatening that society’s stability and survival.

There are additional aspects of degeneration theory which Galdós has incorporated into his portrayal of Alejandro. For a contemporary hygienist like Philip Hauser, Alejandro exhibits a full range of degenerative features. In his essay on the state of the public health in Spain published one year after *El doctor Centeno*, Hauser notes the increase in nervous diseases in the previous half-century and examines statistics of other Western European countries and concludes that many of

the insane in Spain must be on the streets for lack of a national asylum system (Hauser, *siglo* 202-205). In a moralist's tone not far removed from Galdós's own, Hauser sees in contemporary society a fatal obsession with wealth and pleasure,

la sed insaciable de riquezas y amor al lujo y al placer; en una palabra, la ambición bajo sus diferentes formas. Es incontestable que nunca ha estado tan generalizado el delirio de grandezas y de reputación como en la última mitad de nuestro siglo; jamás esta terrible pasión ha causado tantas víctimas entre la juventud y la edad viril como en nuestros días, particularmente entre los artistas, sabios y militares.” (Hauser, *siglo* 339)

that seemed particularly to afflict the young, associated with vanity, “dando lugar á excitaciones nerviosas que degeneran en aberraciones mentales” (Hauser, *siglo* 339) giving rise to mental disturbance. Hauser goes on to employ the economic metaphor of the human life force, maintaining that it is finite in quantity and therefore to be spent with care (Labanyi *Gender* 133),

y cada vez se perturba más el equilibrio entre nuestros deseos y nuestros medios, y al paso que aumentan las necesidades gastamos mayor actividad vital y mayor cantidad de fuerzas nerviosas. Esta falta de equilibrio tiene á la larga que conducir á un estado degenerativo físico y moral de la raza humana. (Hauser, *siglo* 342-3)

So in general sociological terms, the prolonged and profligate expenditure of mental and physical energy could be expected to result in rapid degenerative decline. While I

know of no evidence that Galdós knew Hauser personally, Galdós's network of medical informants would certainly have made him aware of degenerationist explanations for the *vicios sociales* which seemed to be afflicting Madrid society to an unprecedented degree, and which he crystallized, in fictional form, in the lives of Alejandro Miquis and Isidora Rufete.

It might be questioned, at this point, to what extent the degenerationist discourse of the 1870s and 1880s should be applied, somewhat anachronistically, to events of the novel that took place in 1863-4. This issue has been discussed by Michael Schnepf who, in the context of *La desheredada*, points out that in order to understand the novel the reader, "cannot be content to pursue social, political and historical knowledge about only the text's actual chronology" but that the, "modern reader must now do likewise with the milieu in which the text was composed and written if he is to come to any conclusions about the questions that this text asks and about its full impact in 1881" (Schnepf, *Beneficencia* 44). In another text, (Schnepf, *Scandal* 39), he illustrates this theme by reference to the national scandal in 1881 surrounding the *Cárcel Modelo* that is referred to indirectly in the novel that is set in the years 1872-77. The *petardos* of Mariano, a topical reference to a campaign of bombings by casino and gambling interests in an attempt to intimidate the administration of Sagasta in 1881, is another illustration of this double temporal perspective (Schnepf, *Beneficencia* 39; Schnepf, *petardos* 107 ff.). In a parallel manner, Hauser's urgent public health concerns and the degenerationist warnings of the early 1880s exist side-by-side in *El doctor Centeno* with events of 1862-63 that include Galdós's memories of his time as a student lodger in the *calle del Olivo*, anticipation of a forthcoming revolution, and the historical burial in 1863 of the

journalist Calvo Asensio (*Centeno* 241-2). It was not uncommon practice in the Realist novel to use events set in the past to make comments about the present. Another example is the satirical letter sent to Jesús Delgado in 1863 by the young students and dated as if from 1883, the future date of composition of the novel, confirming that all the overdue educational reforms that he recommended had at last been implemented (*Centeno* 349-50) (when in fact none had been) thus satirically underlining the complete absence of any progress in educational reform in the intervening twenty years.

Another plane of degenerationist thinking lies in the, “interés casi clínico” with which Galdós describes Alejandro’s wasting away from rapidly progressive pulmonary tuberculosis. Galdós had a particular interest in describing the process of dying in his novels ³⁸³ and did so with clinical accuracy. In no other of the four novels of this study, however, did Galdós devote so much of a whole book to a character’s physical and mental dissolution. The fearfully widespread disease of pulmonary tuberculosis is described by Hauser as, “la más terrible de todas aquellas à que está sujeta la raza humana” calling it a *plaga social* that was so common that it exercised a eugenic effect, “un mal inherente á la organización viciosa de nuestra sociedad, sirviendo de medio de eliminación de los individuos degenerados” (Hauser, *siglo* 218). Continuing

³⁸³ process of dying: In the other three novels of this study the deaths of Tomás Rufete and José Relimpio are described in detail in *La desheredada*, as are those of Pepe Carrillo and José María Bueno de Guzman in *Lo prohibido*, and Mauricia la Dura and Fortunata in *Fortunata y Jacinta*. Galdós’s description of severe, exsanguinating hemorrhage by mouth in Pepe Carrillo resembles Alejandro’s hemoptyses closely and may indicate a similar underlying cause. As quoted earlier, this propensity for detailing the process of death has been commented on, “Galdós [...] no deja ya morir a nadie sin auscultarlo y tomarle el pulso, ni deja de puntualizar los síntomas sin ahorrar tecnicismos.” (Montesinos, *Galdós II* 88)

with the organicist metaphor³⁸⁴ common in the latter nineteenth century, he goes on to comment, “del mismo modo que las sustancias no asimilables son expulsadas del organismo humano, los individuos degenerados son eliminados del seno de la colectividad viviente.” The comparison of tubercular individuals like Alejandro, and his innumerable fellow-sufferers, to human waste is offensive to modern susceptibility but throws an interesting light on how some of the degenerationists of Galdós’s time thought about this major epidemiological problem of the day, this at a time when social Darwinism was being used to give a quasi-scientific gloss to the frequently fatal social disease.³⁸⁵ It also suggests a reason why physicians may have preferred to withhold their degenerationist discourse in direct encounters with patients, in contrast with their more generalized discourses about society as a whole.

The introduction and selection of contemporary writings on tuberculosis anthologized by Molero Mesa provides a testimony to the thoroughness of Galdós’s research on the disease. Galdós’s description of Alejandro Miquis’ decline lists almost all of the factors thought to predispose to the disease in the 1870s and 1880s. Although Robert Koch had announced his discovery of the tubercle bacillus, the organism responsible for tuberculosis and scrofula in 1882, the year before *El doctor Centeno* was published, the significance of the finding was assimilated slowly

³⁸⁴ organicist metaphor: the consideration of the human body as a useful way of analyzing society as a whole. Berberis concludes that organicism was, “crucial in the establishment of “society” as a scientific object” in fin-de-siècle France (Berberis 51). In Spain, in contrast, Suárez Cortina maintains that, “the last quarter of the nineteenth century saw a decline of organicist thought and the rise of positivist notions of social life” (Cleminson and Fuentes Peris 390). In the following century, however, Losada Malvárez observes that, “organicism was to be an important component of the belief-system of Francoist military officers and ministers” (Richards 18), while Michael Richards himself notes that, “organicism and degeneration had been part of liberal and leftist discourse [in Spain] since the nineteenth century.” (Richards 186 n.90)

³⁸⁵ fatal social disease: as noted in chapter 1, Charles Darwin expressed similar eugenic musings in relation to smallpox well before Galton coined the word *eugenics* in 1883 (Darwin, *Descent* 168).

in Spain where the long-held belief that the disease was the result of a degenerative, hereditary predisposition ³⁸⁶ was still being propounded years later. Moreno Fernández in 1889, for instance, asks rhetorically, “El bacilo tuberculoso ¿es causa de la enfermedad o efecto de la fusión [de varias causas]?” (Molero Mesa 55). He concludes, “que es hereditaria la predisposición” to the disease and proceeds to define that predisposition as characterized by, “la exageración del temperamento linfático-nervioso,³⁸⁷ propio de la infancia y del principio de la juventud, sobre todo, si a él se llega por el uso inmoderado, anormal o vicioso de la función generadora” (Molero Mesa 59). Explaining the prostration attributable to excessive sexual activity, Moreno Fernández continues, “la célula espermática es un elemento igual o semejante al

³⁸⁶ hereditary predisposition [to TB]: the belief in hereditary predisposition and transmission of TB was expressed by Galdós in a later novel by means of no lesser authority than Augusto Miquis, “un mal de familia, que se perpetuaba y transmitía en ella como [...] la tisis hereditaria” (Pérez Galdós, *prohibido* 136). The degenerationist José María Escuder saw a link between inherited nervous diatheses and the inheritance of tuberculosis, “Estos neurópatas, hereden manifestamente la tuberculosis [...] no por eso se interrumpe la cadena hereditaria, sino que les cruza, engarzando á sus hijos en la forma clásica de la tuberculosis pulmonar.” (Escuder, *ultra* 296)

³⁸⁷ temperamento linfático-nervioso: the DRAE defines temperamento as, “Fisiol. Predominio de uno u otro de los tres sistemas nervioso, sanguíneo o linfático, o de alguno de los aparatos orgánicos, compatible con el estado de salud” (DRAE 12th ed. 1884). The theory of temperaments (or humors) goes back to classical times and was summarized by Pedro Monlau in his *Elementos de higiene privada*. He emphasizes the difficulty of their analysis, “El conocimiento de los temperamentos es de la mayor importancia, porque envuelve aplicaciones higiénicas y terapéuticas muy especiales; pero es un conocimiento sobremanera difícil. Galeno estaría bien persuadido de tal dificultad cuando dijo que el conocimiento de los temperamentos particulares le igualaría á los dioses” (Monlau, *privada* 3^a 497). For Monlau, they were the basis not so much for health as for disease, “Los temperamentos, á pesar de que se consideran como compatibles con la salud, y á pesar del nombre que llevan, son verdaderos destemperamentos ó destemplanzas, porque consisten en desproporciones ó en desequilibrios: son en el fondo verdaderas predisposiciones morbosas” (Monlau, *privada* 3^a 497). Monlau’s description of the *nervioso* temperament seems most pertinent to Alejandro, “Caracterizan este temperamento una exquisita sensibilidad de toda la economía y una grande impresionabilidad, [...] y en especial de los nervios destinados á la vida animal ó de relación. El nervioso es delgado de cuerpo; sus músculos están muy poco pronunciados; el menor ejercicio le fatiga [...] Los nerviosos suelen tener mucha disposición para las bellas artes y la literatura [...] Son inconstantes y fantásticos, porque siempre buscan una posición mejor [...] Cuando la preponderancia nerviosa se manifiesta en el cerebelo y en los nervios destinados á la vida de la especie, entonces resulta el temperamento erótico ó genital, que llega á veces hasta la morbosidad, hasta la ninfomanía y la satiríasis” (Monlau, *privada* 3^a 498-9). It is possible that Galdós may have had this stereotype in mind while delineating the character of Alejandro.

nervioso: perdiendo semen, se pierden fuerzas, se pierden vida” and leads on the way to, “empobrecimiento anímico, que es la forma más viva y perfecta de la predisposición tuberculosa” (Molero Mesa 63), propounding that loss of semen is equivalent to loss of neurones, both leading to a loss of energy and life. He illustrates this by reference to his clinical experience of patients in whom death from overwhelming tuberculosis followed sexual excess (Molero Mesa 64). Galdós pursues this linkage of moral (sexual) degeneration with predisposition to tuberculosis and death so very faithfully that it strongly suggests that he had sought degenerationist advice in the preparation of the second half of *El doctor Centeno*. In the context of such profligacy, Labanyi observes that, “in the late nineteenth century, the economic terminology central to [Herbert] Spencer’s thought invaded medical discourse in the form of a terror of male physical, and particularly sexual, over-expenditure” (Labanyi, *Gender* 133).

Writing in 1875, before the publication of *El doctor Centeno*, Gutiérrez Jiménez expressed a similar opinion relating the undermining of the constitution, associated with the loss of sperm and nerve cells, to the, “abuso del instinto genésico” most particularly in connection with prostitution (Molero Mesa 187-8). In advising measures to prevent infection with tuberculosis, at that time of unknown cause, Gutiérrez Jiménez lists the very opposite of all the features which characterize Alejandro’s circumstances: space, cleanliness, healthy food, good ventilation with clean air, avoidance of mental and emotional overstimulation, and harmonious equilibrium of bodily function and intellectual energy (Molero Mesa 197-204). He very specifically counsels avoidance of mental overstimulation, “con la lectura de obras que, hablando mucho a los sentidos, exciten demasiado su sensibilidad, que

conviene mantener dormido,” and of sexual licence, “huya del libertinaje, como maldito escollo en el que necesariamente había de despertar el podrido germen” (Molero Mesa 203). One might almost be forgiven for wondering if Galdós had not had before him a checklist, such as that of Gutiérrez Jiménez, in order to incorporate into his portrayal of Alejandro all the known risk factors that were thought to predispose to pulmonary tuberculosis.

Gutiérrez Jiménez also anticipates Hauser in wondering if pulmonary tuberculosis did not serve a eugenic function in weeding out the weak, “un medio de eliminación de las razas degeneradas” (Molero Mesa 181). The tragedy of Alejandro, with his puny physical constitution, his febrile imagination, his insane and incorrigible detachment from the realities of survival in everyday life, his *locura crematística* and his intense liaison with *La Tal*, is that he fits the degenerative profile all too well and appears, according to the ideas of the time, to be destined ineluctably for early extinction.

7) Conclusions

Degeneration theory, then, can be seen to underlie the representation of Alejandro at, at least, four levels. As an individual, he is subject to detachment from reality associated with a suicidal generosity that destroys him. As a member of a family, he suffers from inherited madness, the manifestations of which might vary from generation to generation (*hérédité dissimilaire*),³⁸⁸ which in him takes the form

³⁸⁸ *hérédité dissimilaire*: Huertas quotes Prosper Lucas' *Traité de l`hérédité naturelle* (1847-50) on the importance given in the mid-nineteenth century to the idea of inheritance, “not only of physical but also of psychic and moral traits as well, together with the genesis of mental

of *locura crematística*. As a member of society, hygienists like Hauser saw individuals such as him as representative of a malaise throughout “civilized” urban life where physical and mental overstimulation led to decline associated with poverty and its associated *vicios sociales degenerativos*. In Alejandro these were represented by prodigality, unhealthy desire for fame, and sexual overindulgence leading to weakening of the bodily *economía* that predisposes him to his fatal disease. On a greater scale still, Galdós as moralist and social critic saw Alejandro’s failings as representative of the Spanish state and feared for his nation an equivalent process of degenerative decline.³⁸⁹ The prominence of Galdós’s subsequent rhetoric of national regeneration (Román Román, *regeneracionismo* 100) seems to be a reaction to this earlier, apprehensive assessment.

As moralist and social critic anxious to reform Spanish society at the same time that he gave a new direction to Spanish literature,³⁹⁰ Galdós seems intent to draw attention to three national abuses that he saw as obstacles to national progress: a painfully antiquated primary educational system, urban poverty and an insane detachment from reality. Characteristically, he took care to research all three in detail. His description of Polo’s brutal classes suggests that he had experienced something similar, directly or indirectly, and his knowledge of the visionary promulgations of the

illness” (Huertas, *Madness I* 398). Lucas influenced Morel in the writing of his *Traité de maladies mentales* (1860), in that it gave him, “arguments on which to base his ideas on the hereditary transmission of insanity in families in the process of degeneration.” (Huertas, *Madness I* 398)

³⁸⁹ nation in degenerative decline: Beck comments that, “in spite of economic progress, [Spain] remained weak and backward in the Europe of the late nineteenth century. But the ruling classes of the country sought to insulate themselves from this realization” (Beck 197). It was Galdós’s ambition to attempt to disabuse them of that insulation.

³⁹⁰ reform Spanish society: Caudet writes of Galdós that, “sus ambiciones y sus manías eran fundamentalmente de orden socio-político: cómo contribuir a transformar la sociedad de su tiempo y cómo conseguir que también en su país se escribiera, ‘la moderna novela de costumbres.’” (Caudet, *naturalismo* 201)

humane educational theories of Froebel and Pestalozzi by Jesús Delgado indicates that he must also have studied them. Galdós's vivid Naturalistic descriptions of Alejandro's garret strongly suggests that he had inspected such quarters for himself, as he would later admit to having done in preparation for writing *Misericordia*. He wanted to make his relatively protected readers aware of the ghastliness of Madrid's slums and their human cost. It is also clear that Galdós threw himself into the portrayal of Alejandro's obsessive *locura* and his pulmonary tuberculosis with similar attention to detail. His reference to, "broncophonía nos indica la formación súbita de grandes cavernas [...] observa usted el curioso fenómeno de la pectoriloquia"³⁹¹ (*Centeno* 429) indicates a clinical interest in the technicalities of chest auscultation. In portraying Alejandro's tuberculosis, believed at that time to be the result of an inherited predisposition, in such a detailed manner and in making it apparent that Alejandro's insane obsessions were equally inherited in nature, Galdós was making his awareness of degeneration theory apparent. His preoccupation with the degeneration-madness-poverty triad, in the second half of *El doctor Centeno*, extends from the archetype of Alejandro to all of Spanish society. He doubtless hoped that his readers would draw appropriate conclusions.

In the next novel in this study, Galdós's creativity and originality resulted in a shift in the social context of degeneration, from the lower reaches of the middle-class

³⁹¹ broncophonía [...] pectoriloquia: I was introduced to broncophony (syn. pectoriloquy) as a medical student in the 1960s. It was still recognized as a useful sign in the auscultation of the chest and refers to abnormally loud transmission of vocal sounds from the larynx to the surface of the chest as a result of abnormally consolidated (solid) lung immediately beneath the chest wall. Barrier comments, "hay broncofonia al nivel de los puntos en qué (sic) se hallan aglomerados los tubérculos, y aumentan notablemente la densidad del pulmon" (Barrier 180), suggesting that even in 1843 bronchophonia was known to be a sign of pulmonary solidification rather than cavitation. Galdós's intention, of course, is simply that his readers be impressed by Moreno Rubio's clinical acumen.

in *La desheredada* and *El doctor Centeno* to its upper echelons of the *clase acomodada* exemplified by the Bueno de Guzman family, with its social status and, at least initial, financial well-being. Galdós will show us that hereditary degenerative madness, obsession and *locura crematística* have no respect for class and that the follies of Restoration society are also deeply seated within its governing classes. Much as the bourgeois would like to attribute Madrid's social problems to the *masa obrera*, Galdós seems to be telling us that the *alta burguesía* he represents in *Lo prohibido*, by virtue of the lack of responsible leadership that is its duty, is even more to be held to account for the malaise of Restoration Spain.

Chapter 5: *Lo prohibido*

The idea of an inherited predisposition to nervous disease is, in the nineteenth century, [...] “The Christian notion of original sin embedded in the nervous system.”

Aldaraca/Drinka

En el Romanticismo el poeta enseña al hombre de ciencia; en el Naturalismo es el hombre de ciencia el que ofrece su saber al poeta

Luís Alberti López

1) Introduction

As we move to the world of the *alta burguesía* in this novel, the principal themes are superficially those of adultery and consumerism. In this autobiographical tale, José María Bueno de Guzmán is a man neurotically obsessed with his married cousins and incapable of undertaking a normal, conjugal relationship with an eligible, single woman. At a deeper level, however, Galdós represents the age-old linkage between physical and moral degeneration.³⁹² On the one hand we learn that the entire Bueno de Guzmán family is tainted with a neuropathic trait that manifests itself in a variety of degenerative conditions ranging from frank insanity to *locura crematística* to variations of female hysteria to the principal character’s obsession with *lo prohibido*, the “forbidden fruit,” a sexual relationships with married family members who are also relatives. On the other hand, we see how, José María, a newcomer to Madrid from the provinces like Isidora Rufete and Alejandro Miquis before him, is also corrupted by the social environment of Madrid.³⁹³ We see him plot to betray his

³⁹² physical and moral degeneration: as Labanyi observes, “José María’s moral degeneracy expresses itself in his physical degeneration; both are linked to his excess consumerism.” (Labanyi, *Gender* 132)

³⁹³ social environment of Madrid: Labanyi draws attention to, “the equation of civilization with moral and physical degeneration” (Labanyi, *Gender* 136). This common opposition to the countervailing equation of nature and the primitive with moral and physical health is an ancient one that was given renewed momentum by Rousseau. Given the appallingly unhealthy

in-laws, and even consider killing one of them, and observe him devote himself enthusiastically to hectic speculation in the Madrid *bolsa*, with its large but totally unproductive profits based on insider-trading. In contrast with *La desheredada* and *El doctor Centeno*, in which the characters affected by degeneration are viewed from the exterior perspective of an extradiegetic, implied author, in *Lo prohibido* the central character, José María, is represented as an intradiegetic narrator who is able to tell the reader how the degenerative process feels to one directly involved. As Labanyi observes, the recurring themes of adultery and degeneration are clearly linked,

the medical discourse of degeneration that was always implicit, and became increasingly explicit, in the late nineteenth-century concern with social reform. The concern with degeneration first raised in *La desheredada* becomes a central issue in *Lo prohibido*. (Labanyi, *Gender* 132)

In 1870, Galdós sees the middle-class ambivalently as the source of energy and innovation in Restoration Spain, “cuanto bueno y malo existe en el fondo de esa clase” with its, “grandes innovadores y los grandes libertinos, los ambiciosos de genio y las ridículas vanidades” (Pérez Galdós, *Ensayos* 123). He also considers the family of the middle-class, “constantement preocupada por la organización de la familia” (Pérez Galdós, *Ensayos* 123) as the bed-rock upon which its achievements are based and has faith, at least in 1870, in its capacity to hold it together, “ese empeño que manifiesta por encontrar ciertos ideales y resolver ciertos problemas que preocupan a todos, y conocer el origen y el remedio de ciertos males que turban la familia” (Pérez Galdós,

and epidemic-ridden nature of Madrid’s *masa obrera* suburbs, the infections of which the well-to-do could not escape entirely, the equivalence of the capital’s “civilization” with physical degeneration is understandable.

Ensayos 122-3). In 1884, however, with increasing misgivings about its leadership and the capacity of the class to implement the hopes of the 1868 Revolution, he was more preoccupied with the *grandes libertinos* and the *ridículas vanidades* that seemed to be dominating the class in Madrid society. The world of *Lo prohibido* is full of these *libertinos* and *vanidades* as well as, “los estragos del vicio esencialmente desorganizador de la familia, el adulterio” (Pérez Galdós, *Ensayos* 124). While admitting that, as a novelist, he has no quick solution to the problems facing the family, Galdós sees it as his function as a novelist to portray them, “sí tiene la misión de reflejar esta turbación honda, esta lucha incesante de principios y hechos que constituye el maravilloso drama de la vida actual”³⁹⁴ (Pérez Galdós, *Ensayos* 124). In this *maravilloso drama* Galdós the moralist³⁹⁵ also makes clear his critique of the corrupt consumerism that involves not only things but people.

Because of its sustained representation of pathological behavior, *Lo prohibido* has been described as, “la obra más estrictamente naturalista en toda la labor de Galdós” (Casalduero 185) and Pattison expresses a similar assessment in saying that it is, “la más zolaísta de sus novelas” (Pattison, *naturalismo* 133). A related observation is that, “*Lo prohibido* es con toda probabilidad la novela galdosiana en que más hay una abundancia de enfermedades, reales o imaginarias” (Whiston, *Introducción* 109),

³⁹⁴ drama de la vida actual: the phrase is apt here as *Lo prohibido* is the only one of the four novels in this study, written between 1881 and 1887, that is strictly contemporary, *actual*, being set between 1880-84 (published in 1884). In contrast *La desheredada* is set in the years 1872-75, *El doctor Centeno* in 1863-64 and *Fortunata y Jacinta* in the period 1869-76.

³⁹⁵ Galdós the moralist: In his letter to Clarín of 5th May 1885, Galdós expressed doubts about having made his moral points in *Lo prohibido* too bluntly. He wrote of the novel, “Lo que sí resulta es de una moralidad gruesa que salta a la vista hasta de los más ciegos. Por eso quizá le he tomado tirria a este libro, no me gusta que la moral de una obra sea de las que están al alcance de todas las retinas” (López-Barault 17). Galdós’s preoccupation with the moral was closely linked to his passion for medicine, which he expressed in 1889, “envidio tanto á los que poseen la ciencia hipocrática, que considero llave del mundo moral.” (Pérez Galdós, *Niñerías* viii)

while a medical historian reflects that, “anthropological pessimism was also the product of the incorporation of the degenerationist doctrine into the literary sphere [...] for instance, *Lo prohibido*” (Huertas, *Madness I* 403). This sense of a world permeated by disease is recognized by *Clarín* in his review of the novel in 1885 with its fierce critique of the pretensions, corruption and vanities of contemporary society,

Es un estudio penetrante y muy aproximado a la exactitud de la miserable vida de nuestra pobreza encopetada y ostentosa, y de nuestra riqueza holganza, viciosa y enfermiza. José María representa el dinero que se gasta mal, que se desperdicia en locuras y tonterías, en sobornar a la virtud y levantar templos a la prostitución [...] Es *Lo prohibido* también reflejo de la vanidad más antipática e irracional en ciertas clases, y sobre todo en los grandes centros; la vanidad de fingir fortuna y gastar como si se tuviera; reflejo de corrupción estúpida, casi animal,³⁹⁶ que vende cuerpos y honras por el boato, por trapos y muebles, por objetos de arte que sólo se estiman por lo caros.” (Alas, *prohibido* 144)

In this novel, Galdós has wide scope for his skills as a social commentator and as a physician *manqué* observer, both of physical disease and also of pathological behavior that belongs to the province of psychiatry.

³⁹⁶ casi animal: a recurring theme in degeneration theory, after the publication of *On the Origin of Species* in 1859, was that perverted or antisocial human behavior represented an evolutionary regression (atavism) to more primitive human or animal forms (Russett 63-64). In the sphere of criminal anthropology, this was the basis of much of Lombroso’s work, which was being discussed in Spain at the time that *Lo prohibido* was published. Labanyi claims that Lombroso’s “work on ‘degenerate types’ was first aired publicly in Spain at the 1881 trial of Garayo el Sacamantecas” (Labanyi, *Gender* 79), though the Italian criminologist was not actually named.

2) Summary of the Novel

The story of the novel concerns the Anglo-Spanish, José María Bueno de Guzmán, who retires from Jerez with a fortune from a successful career in sherry production and shipping. Still relatively young at 36, he decides to enjoy his wealth in Madrid in the company of relations. A victim of nervous symptoms himself, he discovers that his relatives are all afflicted with more or less debilitating diseases often associated with detachment from reality. He is much taken with the elegance and beauty of the second of his three married cousins, Eloísa, and is able to seduce her with the help of expensive gifts under the nose of her good-natured but preoccupied husband, *Pepe*. Their passionate affair is marred for him, however, by Eloísa's compulsive spending on luxuries and entertainment that exhausts *Pepe's* resources and seriously diminishes his own. When *Pepe* dies, José María discovers that his attraction to Eloísa fades and he detaches himself from her and her insane extravagances that she appears unable to control. At the same time, he develops a passion for the youngest of his three cousins, Camila, married to an apparent buffoon of a soldier, Constantino Miquis, who survives rather meagerly on reduced pay for limited military service. He realizes that much of Eloísa's attraction for him lay in her being forbidden fruit, *lo prohibido*, and that his obsession with her evaporates when she becomes free to marry him. The nature of his perverse vice becomes even clearer to him when he is introduced to the entirely eligible and desirable Victoria Trujillo for whom he can muster neither passion nor desire to marry. Transferring his attention instead to another illicit, and therefore attractive, prospect, José María devotes much of his time and wealth in the course of the rest of the novel trying to corrupt Camila and to undermine the standing of her husband in her eyes, but his efforts meet with

complete lack of success. Partly as a distraction through work and partly in order to recover his diminished fortunes, José María enters the stock market and the world of financial speculation in which he enjoys some success. He also develops a relationship with his moralizing oldest cousin, María Juana, who ostensibly tries to cure him of his adulterous vice but allows herself to become prey to it herself when José María avenges himself upon her husband, who he dislikes.

José María's continuing obsession with Camila becomes so all-encompassing that he is driven to extremes of malice in which he finds himself trying to drown Constantino. Never physically robust, he ages prematurely in the course of the following four years to the extent of finding consolation in the company of sick, old relatives. As a result of this distraction, he fails to pay adequate attention to his financial transactions and incurs debilitating losses on the stock market. At the same time, his increasingly desperate and violent attempts to seduce Camila continue to be repulsed. After a scene of violent frustration outside Camila's door, he suffers a stroke that leaves him hemiplegic and unable to speak. During the course of a partial recovery, he is nursed by Camila and Constantino, who have forgiven him, and receives help in settling his almost overwhelming debts from his cousins and from Severiano, the one true friend among his trading partners. Having written two installments of his autobiography, he receives help from the abruptly-appearing *folletinista*, pulp-fiction writer, Ido de Sagrario, in order to bring his story up to date and gives his amanuensis strict instructions that it be a true and unembellished record. After he bequeaths his remaining assets to Camila and Constantino, the novel ends and we are left to assume that he has died, since he has directed that his

biography should only appear after his death.

3) Degeneration theory in *Lo prohibido*

At the very beginning of the novel we are introduced to a virtually clinical history of the Bueno de Guzmán clan in which there is transmission across many generations of a congenital predisposition (or diathesis) to varieties of nervous and neurotic dysfunction. If these do not take the form of actual raving insanity, they are manifested by obsessions and eccentricities very close to madness, though often associated with relatively normal social behavior that Esquerdo described in his category of *locos que no lo parecen*. We have already encountered in earlier novels the concept of an inherited predisposition to mental disorder that may take varying forms in different individuals across the generations, the *hérédité dissimilaire* of Prosper Lucas. As already stressed, this recurring theme of variable manifestations of disease, both physical and mental, represents, an intrinsic feature of degeneration theory,

uno de los ejes centrales de la teoría moreliana de la degeneración, [que] tuvo un importante éxito entre los psiquiatras españoles que abordaban el degeneracionismo. La llamada ‘herencia disimilar’ fue utilizada por P[rosp]er Lucas para explicar la heredabilidad no sólo de rasgos físicos, sino también psíquicos y morales. (Campos Marín, Martínez Pérez & Huertas 21)

This degenerative cluster of nervous disorders, considered at the time to be related to each other, in generations of the Bueno de Guzmán family is described to José María by his great uncle Rafael and his cousin Raimundo. The disorders include frank

insanity requiring institutionalization, religious mania and visions requiring that the sufferer be assigned to the church, depression, terrors, uncontrollable passion, wild eccentricity and severe phobias of objects like birds, dogs and olives. Galdós includes in this risible catalogue of neuroses a link for readers of *El doctor Centeno* since he has Rafael recount that his sister Rosario married one Delgado and that their son, Jesús, had the amiably mad habit of writing letters to himself.³⁹⁷ To explain these woes, Rafael proceeds to draw on the authority of Augusto Miquis³⁹⁸ when he identifies the family illness with, “el mal de siglo, el cual forzando³⁹⁹ la actividad cerebral, creaba una diátesis neuropática constituida en toda la humanidad” (Pérez Galdós, *prohibido* 136).⁴⁰⁰ Rafael goes on to explain to José María that the latter’s nervous complaints were part of the, “mal de familia, que se perpetuaba y transmite en ella como en otros el herpetismo⁴⁰¹ o la tisis hereditaria [...] los efectos de una

³⁹⁷ Jesús Delgado: As we saw in chapter 4, this benignly lunatic soul not only wrote letters to himself, but also answered them.

³⁹⁸ Augusto Miquis: this illustrious doctor of *La desheredada* is no more introduced at his first mention in this novel than Jesús Delgado. Galdós appears to be framing a joke for those who have read his previous novels. It would appear that Augusto (and hence Galdós) may have read Pedro Monlau’s *Estudios superiores de higiene pública y epidemiología* of 1868 since it contains a similar phrase about, “la diátesis del siglo, la endemia de la civilización contemporánea,” (Monlau, *Estudios* 19), a sign of degeneration resulting from the loss of energy (Labanyi, *Gender* 133).

³⁹⁹ forzando: I take this verb to be used in the sense of “strain” rather than “force.” It was a common belief at the time that madness was often due to the abnormal strains imposed upon the nervous system by the stresses of modern (mostly city) life. This overtaxing leading to nervous exhaustion or *neurasthenia*, a term introduced by George Beard in the USA in 1880 (Beard 217). José María’s loss of energy is related to financial and sexual over-expenditure, which, “makes both Eloisa and José María ‘degenerate’ physically, but she recovers and he does not.” (Labanyi, *Gender* 133)

⁴⁰⁰ (Pérez Galdós, *prohibido* 136): All quotations from *Lo prohibido* are from the Cátedra edition (2001) edited by James Whiston. For the sake of brevity the text will be referred to henceforth as (*prohibido*).

⁴⁰¹ herpetismo: currently, predisposition to the skin rash caused by a Herpes virus. In the 1880s, it was applied more widely to any skin rash of which blisters were a feature, and is so defined in Donadío y Puignau’s *Diccionario de la lengua castellana* (1890). The clustering of a blistering skin rash, tuberculosis and neurological disease in the same nosological group is illustrative of the confusion which reigned in the nineteenth century, where unrelated diseases were thought to have common pathologies. The inheritance of insanity was related to a tendency toward pulmonary tuberculosis (Escuder, *Ultra* 296), while the cause of Down’s syndrome was postulated to be due to tuberculosis in the parents by Down himself (Down

imperfeccioncilla nerviosa, cuyo origen se pierde en la crónica oscura de los primeros Buenos de Guzmán de que tengo noticia” (*prohibido* 136). Warming to his topic, *tío* Rafael goes on to observe, “Recorre la historia de la familia en los individuos más cercanos, y verás cómo hay en ella una singularidad constitutiva ⁴⁰² que viene reproduciéndose de generación en generación, debilitándose al fin, pero sin extinguirse nunca” (*prohibido* 136). Such a description owes much to the understanding of degeneration theory of the time, for it was accepted that heredity was one of the most (if not *the* most) important causes of madness. Even the negative final clause reinforces this interpretation in that it implies that inherited *singularidades* could be associated with extinction of an affected family line, a key tenet of Morelian theory. Rafael continues, “No han faltado en la raza [los Bueno de Guzmán] tragedias lastimosas [...] ni los manicomios han carecido en sus listas del apellido que llevamos ” (*prohibido* 137). One is left with the impression that, with such a family history, José María has a difficult life ahead of him, and that if he can stay out of an asylum, such as that to which Rafael’s brother, *tío* Enrique, was committed (*prohibido* 139), he will be doing well. On a more conventionally accepted level, José María learns that his father was a notorious womanizer and that this habit continued after he was married (*prohibido* 138).

262). In the opposite direction, the syphilitic cause of *tabes dorsalis* and general paralysis of the insane was not finally proven until the 20th century (Crissey & Parish 356, 223-4), and the common cause of pulmonary tuberculosis and scrofula, though demonstrated by Koch in 1882 (Cardoso Leão & Portaels 8), was still not considered definitively established by Osler in 1892 (Grzybowski & Allen 1472).

⁴⁰² singularidad constitutiva: some idea of what Galdós meant by this phrase is afforded by James Whiston’s study of the equivalent phrases that the author essayed in the manuscript of the novel prior to publication (*prohibido* 137, n.13). They include, *desorden neuropático*, *neurosis constitutiva*, and *chifladura constitutiva*.

From these determining elements and an awareness of degeneration theory, which is implicit in Galdós's narrative as it was in *La desheredada*, most of the events that happen in the novel seem to be inevitable. We are not entirely surprised that the seemingly normal Rafael should have intermittent sensations of being suspended in the air, or that his brother, the distinguished retired navel man, should be an unreformable kleptomaniac. We are not completely surprised that the older of the three married cousins, María Juana, should have hallucinations of a sensation of cloth in her mouth when anxious, that the middle, Eloísa, should suffer from feeling of a feather in the throat when disturbed, and that the youngest, Camila, should be so ungovernable and wild when young that a psychiatric opinion and admission to an asylum should be considered for her.⁴⁰³ We are also not surprised that cousin Raimundo should be an imaginative idler whose difficulty with speech and general debility are reversible only following repeated infusions of cash, mostly from the hand of José Mariá. It is clear to the reader that this degenerate family is not a healthy one for José María to associate with; his perverse refusal to recognize this is the cause of his downfall and the theme of the novel.

The list of psychological and somatic complaints seems so remarkable that it leads Rodríguez and Rodríguez to see in it a parody of Naturalism, “una tan acumulativa e invariablemente cómica presentación de la problemática central del Naturalismo de escuela no puede menos que sugerir, nos parece, una intención paródica” Rodríguez and Rodríguez 53). Whilst not denying the possibility of Galdós's intention to extract humor from the Bueno de Guzmans' extraordinary afflictions, I consider it probable that they may have seemed less comic to his more

⁴⁰³ psychiatric opinion: the occasion of one of Galdós's references to his friend, the prominent Madrid psychiatrist, José María Esquerdo (1842-1912).

knowledgeable, contemporary readers and that Galdós was here indulging his *penchant* for clinical detail that may have been over the head of much of his audience (not to mention the Rodríguez). James Whiston notes (*Lo prohibido* 141 n.21) that the sensation of being suspended in the air is described (Armangué 211) in one of the two Armangué y Tuset texts in Galdós's library (de la Nuez 98), annotated by Galdós himself, *Estudios clínicos de neuropatología* (1884). The *reblandecimiento cerebral* and *afasia* of Raimundo were described by contemporaries as features of cerebral syphilis, with aphasia specifically being mentioned in Galdós's text (Armangué 97). The same disease was described by Jaime Vera as being responsible for the combination of kleptomania and *locura faldamentaria* exhibited by Serafín. *Lo prohibido* was written at the time that Charcot was undertaking studies of hysteria that excited widespread interest.^{404,405} As one of the most notorious symptoms of hysteria in women was the sense of fullness in the throat and chest leading to a feeling of suffocation, the so-called *globus histericus*, it seem more than likely that Galdós was abreast of these studies, whose demonstrations by Charcot were being observed in Paris by his contemporary Luís Simarro, and that Galdós indulges in his passion for medicine by giving related symptoms to Eloísa and María Juana. With these findings in mind, and especially in the context of the self-destructive passions that form so

⁴⁰⁴ Charcot [...] hysteria [...] widespread interest: the growth of Charcot's interest in hysteria and its cultural and political ramifications are studied by Goldstein (1982).

⁴⁰⁵ Charcot was undertaking studies: Charcot appeared to have no doubt about the organic and hereditary nature of hysteria, "l'hérédité névropathique figure [...] au premier rang dans l'étiologie de l'hystérie. Cette cause peut être invoquée 30 fois por 100, d'après Briquet: tantôt il s'agit, suivant la nomenclature proposée par M. Prosper Lucas, de *l'hérédité homonyme* ou de *similitude*, une hystérique donnant naissance à une hystérique" (Charcot 98-99). Charcot finds the hereditary influence equally important in male hysterics, "chez l'homme l'hystérie es le plus souvent héréditaire; cette circonstance s'est présentée 23 fois sur 30, et il s'agit là d'hérédité maternelle et d'hérédité similaire, ce qui revient à dire que l'hystérie chez la mère engendre souvent l'hystérie chez le fils" (Charcot 114-115). An excellent account is that of Roy Porter in his "The Body and the Mind, The Doctor and the Patient: Negotiating Hysteria" (1993).

much of the theme of *Lo prohibido*, a less ludic and more sombre aspect to Galdós's inclusion of so much medical detail should be considered.

As the characters of *Lo prohibido* interact with each other and José María ponders the meaning of family events and their parallels with the corruption and insanity of Madrid society, references to degeneration recur. When, for instance, José María first encounters the wildly eccentric Camila, he considers, “si no era loca la faltaba muy poco” with, “ojos [...] como algunos que solemos ver cuando visitamos un manicomio” (*prohibido* 152), perhaps raising the question later of what it tells us about him that he should so idolize one who first seemed to him to be nearly mad. The good-for-nothing cousin, Raimundo, detached from reality in the excesses of his imagination, is able to recognize his own lethargy in José María, “una manifestación del estado *adinámico*,⁴⁰⁶ carácter patológico del siglo XIX en las grandes poblaciones” (*prohibido* 179) and, specifically in Madrid, the moral degeneration to which it leads, “el mal madrileño, esta indolencia, esta enervación que nos lleva a ser tolerantes con las infracciones de toda ley, así moral como económica” (*prohibido* 569). Galdós has Raimundo drawing a parallel between the moral and physical degeneration of José María and that of Madrid society.⁴⁰⁷ Raimundo's preference for imaginative excess over practical labor is shared with Isidora and with Alejandro Miquis and illustrates

⁴⁰⁶ estado *adinámico*: it is interesting that this preoccupation with lethargy in the early 1880s foreshadows the pained preoccupation with national *abulia* of the writers of the Generation of 1898 in the following decade (Shaw 14).

⁴⁰⁷ moral and physical degeneration of José María and that of Madrid society: wise words and unheeded warnings in the mouths of the mad, such as those of Raimundo, is a recurring feature in Galdós as is apparent in the observations of Canencia and the *canónigo* in *La desheredada*, and Isabel de Godoy and Jesús Delgado in *El doctor Centeno*. It is the subject of Peter Bly's book *The Wisdom of Eccentric Old Men* (2004). Eoff observes that, “Galdós characteristically presents favorite ideas through persons who are considered mad by society.” (Eoff, *novels* 117)

the continuing theme of not being prepared to work productively to achieve one's dreams, the typical *madrileño* failing of *quiero y no puedo*.

Entirely incapable of putting his own life and affairs in order, Raimundo nevertheless is able to identify the *locura crematística* that destroys his middle sister, Eloísa,

en Madrid se gasta más dinero del que existe [...] la sociedad matritense está en perpetuo déficit, en perpetua bancarrota [...] no se verifica una transacción grande o pequeña, desde el gran negocio de Bolsa a la insignificante compra en una tiendecilla, sin que en dicha transacción haya alguien que sea chasqueado. (*prohibido* 311)

and that infects all of the society that surrounds her.

Signs of physical and mental degeneration recur throughout the novel. We learn that José María, apart from his recurring, severe migraine attacks ⁴⁰⁸ and often unbearable noises in his ears, also suffers from disturbing, auditory hallucinations, “voces humanas, a veces un extraño coro [...] que llegaba a producirme alucinación de la realidad.” (*prohibido* 181) and, on another occasion, suffers from unspecified, “síntomas de decadencia física que me alarmaban” (*prohibido* 201). At times, Galdós

⁴⁰⁸ severe migraine attacks: the *jaquecas* that José María suffers throughout the novel are paralleled by Galdós's personal experience (Berkowitz 409). In Galdós's copy of Armangué y Tuset's *Estudios clínicos de neuropatología* (1884) dedicated, to him by the author (Nuez Caballero, 98), the second half of the 244-page volume is entirely devoted to chapters dealing with *jaqueca*. Underlinings in the text highlight many of the medical complaints that are suffered by characters in *Lo prohibido* (see above). Severe headaches were also considered a feature of neurosyphilis (see later).

portrays José María as puzzled as he struggles to come to terms with the irrational manifestations of his familial degeneration. He cannot understand, for instance, why, contrary to all reason, he should be obsessed with the idea that the soul of his late fiancée, Kitty, should be apparent in the body of Eloísa,⁴⁰⁹

quizás una nueva manifestación de las manías de nuestra raza, tan bien monografriadas por mi tío, porque bien me sabía yo que las almas no juegan a la gallina ciega, y mis ideas respecto a la transmigración eran tan juiciosas como las de cualquier contemporáneo.” (*prohibido 2*)

Similarly José María struggles to understand the sheer perversity of the loss of his passion for Eloísa once she becomes free to marry him,

Era pasión de sentidos, pasión de vanidad, pasión de fantasía la que me había tenido cautivo por espacio de dos años largos; y alimentada por la ilegalidad, se debilitaba desde que la ilegalidad desaparecía. ¿Es tan perversa la naturaleza humana que no desea sino lo que le niegan y desdeña lo que le permiten poseer? Después de dar mil vueltas a estos raciocinios, me consolaba otra vez atribuyendo mi desvarío a los pícaros nervios y a la diátesis de familia (*prohibido 341*),

and appears to derive a curious consolation from attributing it to the determining degeneration of his family which, being out of his control, is something that he need not struggle with. This failure to battle against his inherited degeneration, a feature of

⁴⁰⁹ transmigración of souls: one recalls the similar obsession with *metempsychosis* of Isabel de Godoy in *El doctor Centeno*, where she believes herself the reincarnation of her dead sister Piedad (*Centeno 258*).

his *estado adinámico*, is crystallized in his resignation to the inherited and environmental influences, the *race, milieu* and *moment* of Taine, that have made him what he is,

No, yo no soy *héroe*; yo, producto de mi edad y de mi raza, y hallándome en fatal armonía con el medio en que vivo, tengo en mí los componentes que corresponden al origen y al espacio. En mí se hallarán los caracteres de la familia a que pertenezco y el aire que respiro. De mi madre saqué un cierto espíritu de rectitud, ideas de orden; de mi padre, fragilidad, propensión a lo que mi tío Serafín llama *faldamentarios* [...] No domino yo las situaciones en que me ponen los sucesos y mi debilidad, no. Ellas me dominan a mí. ⁴¹⁰
(*prohibido* 370)

with a much more pessimistic interpretation of the Krausist concept of harmony. Finding himself guilty of despicable behavior, which he is unwilling to amend, he even seeks a religious justification, “Yo era más bruto que Constantino, más tonto que Barragán, más simple que *No Cabe Más*, pero Dios me había hecho así y no podía ya ser de otro modo” (*prohibido* 459). In seeking to understand his physical and moral degeneration, like his cousin Raimundo, he recognizes it and at the same time confirms and reinforces it by his refusal to consider change. In his moralizing but corrupt coquetry with María Juana, he describes her ostensible efforts to effect his, “regeneración moral y física”⁴¹¹ (*prohibido* 460) but shows little sign of effort to

⁴¹⁰ yo no soy *héroe*: for all his upper class connections and wealth, José María here identifies himself as the typical character of the Naturalist novel, by not rising above his circumstances in the manner of the Romantic hero but by being subject to them in the manner of the Naturalist Everyman (Furst and Skrine 42).

⁴¹¹ regeneración moral y física: An increasingly prominent topic of debate in the public sphere in Spain into the first decade of the twentieth century. It has been noted that, “Es imposible comprender lo que ha supuesto el regeneracionismo en España, en tanto que movimiento

achieve either until his ultimately fatal stroke forces him to reconsider at least the former of these.⁴¹²

In the world of moral and physical decay that surrounds and penetrates José María, there are further implicit indications of degeneration. Though he is only in his later 30s, Camila's recurring taunts that he is *tísico* (tubercular) emphasize his physically weak and unhealthy appearance. He undergoes strikingly precocious aging, to the point of enjoying the companionship of his elderly and frail great-uncles Rafael and Serafín at the end of the novel, when they are amused by Serafín's senile woman-chasing *faldamentarios*,⁴¹³ and when José María can include himself as one of their number as the *tres tristes triunviros trogloditas (prohibido 572)*. There are references to his *debilidad* and *apatía* as a result of his sexual and financial exhaustion. His perceptive, mad cousin Raimundo notes permanent weakness in him after an attack of malaria, "Poca fuerza febril primero, poca fuerza reparatriz después,

social y cultural, sin referirse al concepto clave de degeneración" (Alvarez-Uría 184). Similarly, "the complementary terms 'degeneration' and 'regeneration' started to be used in the 1860s and were common currency by 1880," and that, "the realist novel in many ways anticipated turn-of-the-century regenerationism" (Labanyi, *Gender* 28). An example of degeneration-regeneration rhetoric in 1868 can be seen in Monlau (*Estudios* 572) and in Morel in 1857 (*Traité* 693). The literature of regenerationism in Spain has been reviewed by Alonso Alonso (1997).

⁴¹² the first of these [regeneración moral]: there has been much critical discussion about the reliability of the narrator's account of himself following the *deus ex machina* appearance of the *folletín pendolista*, José Ido de Sagrario, at the very end of the novel (Terry 1970; Whiston, *Ironía* 1990; Willem 1991). Despite José María's injunctions to Ido that his autobiography not be embellished (*prohibido* 617), the appearance of Christian pieties in José María's thoughts during his final days suggests that his amanuensis may have found the temptation to include conventional moral sentiments too great to resist (Willem 186). Galdós creates innumerable ironies in the life and opinions of José María not the least of which is to be found, in the midst of his Christian, benevolent warmth toward Camila and Constantino, with his complete failure to remember his previously strongly-stated commitment to underwrite the educational expenses of his adoring quasi-son, Rafaelito, Eloísa's boy.

⁴¹³ Serafín's senile *faldamentarios*: as discussed later, Serafín's elderly *erotomanía* and his kleptomania may be suggesting a more sinister underlying cause, as the combination was described in *parálisis progresiva de los alienados* (or G.P.I.) by Jaime Vera (Vera, *parálisis* 60).

debilidad siempre” (*prohibido* 179), while José María later attributes his failing concentration on the trading floor to his, “gran debilidad física [...] el entumecimiento cerebral, la misma oscuridad en las ideas, y sobre todo, una apatía y una desgana que me abrumaban” (*prohibido* 528). Galdós provides a vivid, imaginative description of what the experience of degeneration feels like. Like the society that he symbolizes, José María has failed to take himself in hand and his premature demise is only a matter of time.

The un-masculine weakness and indecisiveness of these male characters contrasts with the supposedly un-feminine strength of the three female cousins. While both Eloísa and José María experience, “the same financial and sexual over-expenditure” that causes them to, “degenerate’ physically, she recovers but he does not” (Labanyi, *Gender* 133). The inadequate and feeble Raimundo is even more neurotic than his sisters. José María finds himself not only reflecting that women have stronger nervous systems than men but he is actually overpowered physically by Camila when he attempts to force himself upon her (*prohibido* 537). María Juana is confidently able to tell José María of the superiority of her sex, “Vosotros los hombres sois más débiles que nosotros. Os llamáis sexo fuerte y sois todos de alfeñique. ¡Nosotros sí que somos fuertes!” (*prohibido* 503). In contrast with the enervated and feminized José María, “Eloisa and María Juana become masculinized in a negative sense by their entry into the world of consumerism, finance, and philanthropy” (Labanyi, *Gender* 137), as a result of having entered the public sphere and leaving the accepted private domain of the *ángel del hogar*.⁴¹⁴ In contrast with the prescribed

⁴¹⁴ *ángel del hogar*: the retiring middle-class wife with her, “feminine domesticity was clearly an ideal which marked off the middle classes both from the aristocracy and from the the working classes” and, “signalled a preoccupation to differentiate the model woman from the

roles of, “Sea hija, esposa ó madre, su destino y su mision en la tierra es siempre sufrir y resignarse” (Sinués 217) recommended in a contemporary guide for women, the two sisters pursue their differing ends with intensity and energy, qualities that Galdós’s generation preferred to identify with the masculine.⁴¹⁵ This transgressive reversal of gender stereotypes ⁴¹⁶ was regarded as potentially degenerative and contrasts with the idealized Camila, whose physical strength and force of personality might also be considered masculine and suspect, were they not exercised exclusively in the support of her husband, the maintenance of the home and children and the vigorous defense of her conjugal integrity by the constant rejection of José María’s advances. Domination of men for their own good in the home was acceptable; competition with men in the public sphere was not.⁴¹⁷

image of the aristocratic lady who, in the eighteenth century, had begun entertaining on a lavish scale [...] and behaving with less public restraint than had traditionally been demanded of her” (Jago, *Angels* 21). Distinction from the working class was effected by the fact that the *ángel del hogar* did not work herself, even in the home, but instead directed the household labors of at least one criada (Jago, *Angels* 26). The virtues of the *ángel* included constant activity, thrift and avoidance of upper class extravagance or lujo. In their love of luxury, Eloísa and María Juana violate this norm, whereas Camila does not. Briget Aldaraca has written a definitive study of the *ángel del hogar* (1991).

⁴¹⁵ identify with the masculine: as late as 1922, gender stereotypes were being similarly defined, “El hombre es reflexivo, analizador; la mujer imaginativa. El primero obra principalmente la razón, la conciencia, en la segunda, el sentimiento, el afecto. El primero es excepcionalmente apto para la vida pública, para la vida de relación, para el comercio social; la segunda es, por esencia, el ángel del hogar.” (Escartín y Lartiga 73)

⁴¹⁶ transgressive reversal of gender stereotypes: 40 years later, grave warnings were still being written about the evil consequences for women of leaving the domestic nest assigned to them, “La [mujer] es, por esencia, el ángel del hogar. Y ¡ay! de la Humanidad, y ¡ay! de la mujer, si un día el ángel deja abrasar sus ténues alas en el fuego destructor de la soberbia y abandona el oculto y amoroso albergue donde siempre viviera, para lanzarse locamente en el raudo torbellino de esa vida pública en medio de la cual el hombre tiene que reñir la más violentas y terrible batallas” (Escartín y Lartiga 73). Copeland (2009/10) sees an underlying homoerotic relationship between José María and both Pepe Carrillo and Constantino, which, in its violation contemporary gender codes, would add another layer of perversion and moral degeneration.

⁴¹⁷ competition with men in the public sphere was not: a vivid example of this was the absurdly truncated academic career of the brilliant Emilia Pardo Bazán, whose lecture series at the Universidad Central as late as 1916 failed because male students refused to be lectured by a woman. (Pattison, *Bazán* 109)

Galdós emphasizes the degeneration, almost universal in the novel, by contrast with the two characters, Camila and Constantino, who have chosen to live moral and healthy lives.⁴¹⁸ Time after time, Galdós emphasizes Camila's superabundant good health and makes it one of the reasons why the sickly José María is attracted to her (*prohibido* 353). He is amazed by her fondness for repeated cold baths at all times of the year and notes that she emerges from them *respirando salud*. He likens her healthy beauty to that of the, “Edad de oro, o las sociedades primitivas” (*prohibido* 392) referring back to that mythical time of perfection before everything degenerated, or to the state of primitive societies considered not as atavistic regression but as a return to Rousseauian innocence and nobility. Camila and Constantino have integrity, loyalty, and an ability to live within their means that Galdós presents as an idealized portrait⁴¹⁹ of everything that the society surrounding them is not. In a surrounding world of degenerative neuroticism and disease their qualities are symbolic of hygiene and health (Blanco 71). They embody the solid family-centered middle-class values of the Miquis and the Castaño families in *La desheredada* that so emphasizes Isidora's shortcomings, and whose absence so dooms Alejandro in *El doctor Centeno*. Whatever Galdós's reservations about the political leadership of Madrid's middle-class when he wrote *Lo prohibido*, his faith in the best values associated with the middle-class appears intact. As a moralist Galdós points us to a

⁴¹⁸ moral and healthy lives: Whiston notes this contrast when he writes, “Galdós construye *Lo prohibido* alrededor del contraste entre este sector de la alta sociedad madrileña, vista como artificial, repetitiva o regresiva, y de la escondida senda caminada por la pareja Miquis, camino insospechadamente progresivo, y que sigue, sin esclavizarse, el ritmo renovador de la naturaleza.” (Whiston, *Introducción* 13)

⁴¹⁹ idealized portrait: I agree with Scanlon who observes that, “Despite Galdós's largely successful attempt to humanize the abstract stereotype [of the *ángel del hogar*], Camila proves, on close inspection, to be almost as idealized a character as the heroine of a popular novel” (Scanlon, *Heroism* 841). Whiston observes that, “Camila [...] ha de resultar más mito que realidad cotidiana.” (Whiston, *Ironía* 207)

way of life that appears to hold a future for Spain, symbolized by the arrival of Camila's twins Belisario and César at the end of the novel. When all the infertile degenerates are swept away, there is still hope for the Camilas of this world who can escape their noxious early environments to lay the foundation of sane and fulfilling lives.

4) Contemporary Views on Physical and Financial Exhaustion and Degeneration

Views on degeneration and society in late nineteenth century Spain were much influenced by the writings of Herbert Spencer (1820-1903),⁴²⁰ the foreign author most translated in Spain after 1875 (Maurice and Serrano, 22).⁴²¹ Spencer's thinking was, "increasingly influenced by degeneracy theory, which in turn was reinforced by Darwin's suggestion that evolution could be accompanied by pockets of regression, manifested in genetically transmitted racial deterioration"⁴²² (Labanyi, *Gender* 132). Spencer adhered to the belief that sum of human energy was in fixed equilibrium ⁴²³

⁴²⁰ Herbert Spencer (1820-1903): English philosopher, sociologist, and liberal political theorist, Spencer developed a unifying conception of evolution as the progressive development of the physical world, biological organisms, the human mind, and human societies. Profoundly influenced by Darwin and an ideologue of Social Darwinism, it was he who coined the phrase "survival of the fittest."

⁴²¹ writings of Herbert Spencer: three of Spencer's texts in Spanish translation are recorded in Galdós's library: *Estudios políticos y sociales*, *Creación y evolución* and *De la educación intelectual moral y física* of which the latter is annotated (Nuez 64). Spencer is mentioned twice in *Lo prohibido*, being read by José Maria's English relations and by María Juana.

⁴²² genetically transmitted racial deterioration: There were also Spanish expressions of this idea of regression. Monlau (*Estudios* 572) wrote optimistically in 1868 of the capacity of the exercise of hygiene to correct, by regeneration, the degenerating effects of social vices that cause man, "bajo el punto de vista genésico, se va volviendo inferior á los animales." A related description of human nastiness in terms of animal regression is made by Eloísa when she refers to the detested Sánchez Botín as, "ese orangután" (*prohibido* 607).

⁴²³ energy in fixed equilibrium: Russett (128) relates that Spencer was appalled when entropy and the Second Law of Thermodynamics were explained to him by the eminent physicist, John

and that over-expenditure of energy, especially with loss of semen, could have undesirable consequences such as cerebral inactivity, headache and even insanity (Spencer 263). According to this view, José María can be seen not only as cause and participant in a corrupt society but also as its victim in his financial and sexual over-expenditure, and in his moral depravation and physical degeneration (Labanyi, *Gender* 133), of which severe headaches are a feature. The economic metaphor linking sexual vitality and economic prosperity prevalent in nineteenth century thinking is implicit, “sexual energy becomes a matter of spending or conserving; promiscuity may be compared to rash investments” (Terry 75). An individual consumed by a love affair thus has inadequate cerebral resources to devote to speculation. As María Juana’s husband, Cristóbal Medina a successful financier, warns José María, “Hombre enamoriscado, cerebro inútil para trabajar” (*prohibido* 553).

Similar views were expressed in 1884 by Philip Hauser, an eloquent social critic and, “the leading Spanish public health expert” (Labanyi, *Gender* 73), from his perspective of hygienist medicine. While recognizing the phenomenal intellectual and industrial output of the century, he goes on to note its social cost,

la acumulación de fortunas colosales por una parte, y la fuerza moral de la supremacía del talento por otra, han engendrado un sin fin de pasiones [...] como el amor excesivo al poder y á la reputación, el deseo inmoderado de distinciones y dignidades. (Hauser, *siglo* 339)

Tyndall, with its implication that the only true equilibrium attainable was that of, “heat death of the universe.”

Hauser sees in this excess not only social malaise but also medical consequences, “la vanidad [...] dando lugar á excitaciones nerviosas que degeneran en aberraciones mentales” (Hauser, *siglo 340*), leading to an imbalance between desires and the resources needed to implement them giving rise, in turn, to physical and nervous exhaustion and then to physical and moral degeneration that extends to all of society,

y cada vez se perturba más el equilibrio entre nuestros deseos y nuestros medios, y al paso que aumentan las necesidades gastamos mayor actividad vital y mayor cantidad de fuerzas nerviosas. Esta falta de equilibrio tiene á la larga que conducir á un estado degenerativo físico y moral de la raza humana.” (Hauser, *siglo 343*)

Hauser is clearly as outspoken a moralist as Clarín and no less deeply felt one than Galdós. Furnishing even more details of what he sees as rottenness in Madrid society, his account draws us even closer to the story of *Lo prohibido* as he identifies stock market speculation as the means by which socially ambitious consumers seek to underwrite their extravagant life-styles, “necesitando de continuo nuevos recursos, acude á maniobras que pueden proporcionar riquezas sin trabajo, por medio de agiotaje ó juego de bolsa”⁴²⁴ and comments, “fácilmente se comprenderán las consecuencias fatales del agiotaje sobre la moralidad pública.” (Hauser, *siglo 343*)

With a further expression of Spencerean, degenerative exhaustion, Hauser goes on to specify the Lamarckian inheritance of acquired characteristics, a hallmark

⁴²⁴ agiotaje ó juego de bolsa: speculation or gambling. In this age of hedge funds and complex investment derivatives, Hauser’s judgements could scarcely be more topical.

of degeneration theory, when he lists the consequences of a life-style of vice, such as that of José María, upon future generations,

pérdidas de las fuerzas nerviosas de aquellas personas que se dejan arrastrar por el vertiginoso torbellino del juego y de amor al lujo, resultando, por la ley de herencia y de la transmisibilidad de los vicios orgánicos de los padres á los hijos [...] más expuestos á todo el cotejo de enfermedades materiales y funcionales del centro cerebro-espinal, tan frecuentes en nuestra época.

(Hauser, *siglo* 344)

Self-conscious though Galdós may have been about his unabashedly moral perspective in his portrayal of a degenerate libertine and adulterer in *Lo prohibido*, it is nothing compared with the righteous fulminations of the hygienist Pedro Monlau⁴²⁵ in his highly successful *Higiene del Matrimonio*, the fifth edition of which appeared in 1881. Monlau saw refusal to marry as a national problem requiring governmental intervention, *una verdadera epidemia*, and included in its causes uncontrolled luxury, licentiousness and public corruption. He cites the voluntarily

⁴²⁵ righteous fulmination [...] Monlau: Labanyi (*Gender* 69) observes that in the competition between hygienists and the church for control on social issues, “this rivalry led to a mutual poaching of each other’s discourse by the religious and the medical ‘improvers’, causing [...] ideological confusion.” I confirm this with a review of Monlau’s *Elementos de higiene privada*, *Elementos de higiene pública* and his *Higiene de matrimonio* that revealed that the word moral appears a total of 302 times in the three texts combined. Assertions like, “la Moral y la Higiene son una misma cosa, formando un todo inseparable” (Monlau, *privada* 3a 532), “El Evangelio [...] es un curso de la mas sana moral, y por consiguiente un curso de higiene privada y pública” (Monlau, *pública* I 9), “toda cuestión de moral es también una cuestión de higiene” (Monlau, *pública* I 371, author’s italics) and “los preceptos higiénicos, que son también los de la religion y de la moral” (Monlau, *pública* II 724) show an extreme missionary zeal to fuse cleanliness, morality and religion. He even combines them in the phrase, “La higiene moral.” (Monlau, *matrimonio* 127). It may be no accident that the great disseminator of degeneration theory, Bénédict Morel, had once trained for the priesthood and remained active in religious observance throughout his life. More than a trace of zealotry appears to link Monlau and Morel.

unmarried as causes of prostitution and adultery and, as such, a form of *enfermedad social esporádica* (Monlau, *matrimonio* 58). Of even greater interest, in view of the relation of José María to Spanish society as a whole, is Monlau's affirmation that the unmarried, found mostly in large cities, increase in number during times of bad government and in societies with a markedly unequal distribution of wealth (Monlau, *matrimonio* 58). He concludes, finally, that they are harmful to the state and, "contribuye en mucho á la decadencia y ruina de los imperios" (Monlau, *matrimonio* 59). On a more individual level, Monlau echoes Spencer's warnings about the harmful effects of unregulated loss of seminal fluid. He quotes Le Camus' belief that, "el esperma estaba compuesta de *cerebros microscópicos*, directamente emanados del gran cerebro," that sperm are derived from the brain, and cites the similar belief of classical times that seminal fluid was derived from the spinal cord and brain (Monlau, *matrimonio* 187). He continues with the explanation that spermatic fluid contains vital energy that can be reabsorbed, with vitalizing effects upon the sexually-continent male, and contrariwise warns of the dire effects when, "cada emisión es una gran pérdida de fuerza nerviosa"⁴²⁶ (Monlau, *matrimonio* 189). The latter, he somberly advises, has the potential for debilitation, pulmonary tuberculosis and a wide variety of cerebral and psychiatric disorders. Such opinions, coming from one of the most distinguished hygienists of his day, provides ample, medical authority upon which Galdós could base his portrayal of José María's story of moral and physical degeneration, leading to premature death.

There is reason to think that Galdós not only saw the morally and physically degenerate José María as representative and cause of a corrupt and vain Madrid

⁴²⁶ cada emisión es una gran pérdida de fuerza nerviosa: Herbert Spencer was also a great proponent of the beneficial effects of the retention of seminal fluid.

society, as assuredly did Clarín in his review of *Lo prohibido* cited above, but also saw him as a consequence of unjust government and social inequality resulting from the Restoration betrayals of the liberal promises of 1868. In common with others of Krausist and regenerationist sympathies,⁴²⁷ such as his friend Francisco Giner de los Ríos,⁴²⁸ Galdós lamented the economic and moral decline of Spain. In the sphere of national politics, that decline had become institutionalized in the *cacique*-mediated system of electoral fraud that guaranteed the *turno pacífico*, a simulacrum of the alternation of power of the British two-party political system. The liberal “conquests” of the Constitution of 1869, universal (male) suffrage, trial by jury, liberal press laws, freedom of worship⁴²⁹ and freedom of association had made it Spain’s, “first truly democratic constitution” (Smith 112). With the restoration of the Bourbon monarchy in 1875 and the Constitution of 1876, however, many of these privileges were withdrawn. The Catholic Church again became the religion of the state, maintained by the nation, with the right to control state-provided education and hence freedom of thought. In this environment, the academic freedom of the professors of the *Universidad Central* in Madrid, of whom Giner was one, was withdrawn in 1875. Even in 1870, Giner had been disillusioned by the results of the Revolution, “It affirmed principles in legislation and violated them in practice; it proclaimed liberty and exercised tyranny [...] it professed to abominate the ancient iniquities and

⁴²⁷ Krausist and regenerationist sympathies: it should be stressed that though influenced by Krausist ideas in education, free-thought and inquiry, Galdós was not a Krausist in the way that the committed Giner was and that, “sólo en sentido muy elástico puede llamarse [Galdós] ‘krausista.’” (Clara Lida 21)

⁴²⁸ Francisco Giner de los Ríos (1839-1915): the great educator and Krausist was on the lookout for young men of talent who might further the project of the regeneration of Spain, with, “su afán de encontrar y formar hombres que salvaran a España de su decadencia” (Landa 93). Furthermore, “Giner exigió mucho a Galdós, quizá porque esperaba mucho de él.” (Cacho Viu 508)

⁴²⁹ freedom of worship: Carr comments that, “It was in the realm of religion the the Revolution had its profoundest reverberations [...] It is the debate on the religious clauses of the Constitution of 1869 which reveals, once more, those divisions in Spanish society which were to be disastrous to right and left alike.” (Carr, *Spain* 344)

nourished itself on them alone” (qtd. Carr, *Spain* 346). After ten years of the Canovist Restoration, Galdós was equally gloomy, seeing the political revolution, with its guarantee of political rights, as having been quite impotent in achieving a social justice,

Únicamente la revolución social, si tuviera en España elementos preparados para ella, podría encontrar lema y bandera [...] Pero la revolución política es un delirio, porque los derechos políticos se conquistaron de un modo definitivo en la revolución de 1868. (Pérez Galdós, *Rey* 145)

while eight years later in 1893, he would be equally explicit in his criticism of the failure of government to reduce the grotesque inequalities of the governed, “vivimos como antes, rodeados de injusticias, de desigualdades, de monstruosas aberraciones del sentido moral. Aun hay cándidos que todo lo esperan de la forma de Gobierno [...] y no ven que la forma de Gobierno no resuelve nada.” (Pérez Galdós, *Confusiones* 187)

This failure of the nation to make palpable progress during the Restoration was associated with effective disenfranchisement of the lower classes. They might have the right to votes, but who they voted for was determined for them. There was no access to political power with resulting widespread skepticism about the political process.⁴³⁰

⁴³⁰ skepticism about the political process: “Los demócratas del 68 fracasaron en sus planes de acelerar el progreso nacional. La crisis se había aguzado por los restrictivos pactos políticos de la Restauración borbónica. Renace el sentimiento de decadencia y el término “regeneración” cobra un sesgo apocalíptico, que desconfía de los instrumentos políticos de la democracia canovista y propone vanas medidas arbitristas, dada la impermeabilidad del poder establecido a las discrepancias de la izquierda burguesa.” (Alonso Alonso 15)

5) Conclusions

In *Lo prohibido*, Gladós moves away from the lower-middle class environments of *La desheredada* and *El doctor Centeno* to the reaches of the wealthy upper middle-class and the new aristocracy. The social vices that he portrays, a love of luxury and ostentation, and a boundless capacity to spend beyond one's means, the *locura crematística*, are played out on a grander scale in Madrid's upper social circles but with similar end results, penury, prostitution, exhaustion and death. Underlying these social vices are the same features of trans-generational degenerative decline: madness, neurosis, obsession and detachment from reality. The accusation of degeneration in the wealthy bourgeois, rather than in the poor, was beginning to be made by anarchist thinkers at very much the same time that *Lo prohibido* was published. In answer to the condemnation of degeneration by middle-class professionals directed at the underclasses of the *masa obrera*, anarchists reversed the charge, accusing the idle, exploitive rich of social and physical degeneration in being not only constitutionally weak but also of failing in their leadership of society and of merely amusing themselves with ostentatious consumption. An anonymous polemic in *Bandera Social* in 1885 entitled *La lucha por la vida* addresses the, "privilegiados y afortunados de la tierra" as, "la enervada raza, la degenerada especie, envilecida por la molicie, corrompida y gangrenada por vuestro estúpido egoísmo." (*La lucha*)

To these social vices, the story of *Lo prohibido* adds the evil of financial speculation in a stock market riddled with insider trading that was often related to

information derived from political office.⁴³¹ Galdós takes aim at the great speculators of the age, like the *marqués* of Salamanca of a former generation,⁴³² who made a fortune in railways and in building substandard houses to the east of the old center of Madrid before losing everything in 1867 because of the lack of cheap domestic credit (Carr 281). The undermining social vice of much speculation was that it was essentially unproductive, being unassociated with manufacture, exportation of goods or the creation of employment or national wealth. In Clarín's words, "dinero que va y viene en especulaciones artificiales, que nada tiene que ver con la natural circulación del capital en la vida de la riqueza" (Alas 144). Galdós knew well that such activity was parasitic and he was apprehensive about where it would lead.

The pre-determined, degenerative nature of José María's condition is underlined by the apparent inevitability of events. At the beginning of the novel, in what might be called a *final de otra novela*, he completes a successful business career and manages to cope with his *nervios* and *jaquecas* well enough to reconcile the competing influences of his thrifty English mother and his impulsive, *locura faldimentaria*, Andalusian father, and to survive the loss of a possibly normal relationship with Kitty. The combination of Madrid's wealth and corruption and his neurotic family, however, is too much for him. Given his degenerative traits, so fully described at the beginning of the novel, his self-indulgent passivity in the face of events and his obsessions, José María's dire decline and end seem pre-ordained. He is, at once, the victim and the perpetrator of the social vices of his time and suffers the

⁴³¹ political office: Carr notes of the *marqués* of Salamanca, "his immense fortune was created by speculation in the borderlands of public and private finance." (Carr, *Spain* 281)

⁴³² *marqués* de Salamanca (1811-1883): maker and loser of colossal fortunes, the *marqués* died in penury in the year before Galdós started work on *Lo prohibido*. James Whiston (*prohibido* 145, n. 24) speculates that the *marqués* may have been one of the inspirations for the novel.

end that degeneration theory would predict. An examination of contemporary texts by Herbert Spencer and by two Spanish hygienists, Pedro Monlau and Philip Hauser, all of which were available to Galdós when he wrote, illustrates the diffusion of degenerationist thinking among social commentators of the time that has a striking resonance and many parallels with the plot of *Lo prohibido*.

The almost unrelieved landscape of moral and physical degeneration in the novel is thrown into relief, as it is in *La desheredada*, by the shining example, idealized though it may be, of a Miquis family. Galdós portrays Camila as one who can escape the pathological degeneration of her family with its inherited predispositions, through an honest marriage, vigorous good health and a rock-like integrity. In contrast with the sickly and prematurely aged José María, who uses his wealth to corrupt, Camila's force of character is sufficient to guide her rough diamond of a husband to the path of solid bourgeois values: industry, sobriety, thrift, honesty and loyalty. In contrast with the other characters in the novel who display neurotically rigid behavior and who do not evolve in the course of the story, Camila and Constantino learn from their trials, the death of their child Alejandro and the stratagems of José María; they exhibit a healthy resilience and adaptability. With their example, Galdós will have us realize that there is an alternative to degenerative forces in society and that the future of Spain, if there is to be one, lies with a regenerating physical and moral integrity, a holistic Krausist harmony of body and mind, of good Spaniards like the Miquis. That philosophy with its Christian and humanist roots, "un rico y dilatado movimiento humanista, que tuvo además la virtud de dejar clarearse con cierta nitidez el viejo reformismo español, de inequívoca raigambre cristiana [...] con el fin de ensayar la regeneración de la vida nacional"

(Heredia Soriano) provides grounds for hope. With this anticipation, the twins Belisario and César Miquis at the end of this novel provide a hopeful outlook for Spain's future.

In the novel of the next chapter, *Fortunata y Jacinta*, which is a much more complex and ambiguous work, another heroine's child also points toward Spain's future, but with much less confidence. Processes seen as degenerative will be seen at work distributed more widely in the common people, the *pueblo*, and in the lower middle-class as well as in the *alta burguesía*. Galdós's faith in the middle-class is even more qualified and he tentatively espouses a faith in the regenerative energy from a different level of society, the despised and feared but potentially vigor-infusing *pueblo* embodied in the character of Fortunata.

Chapter 6: *Fortunata y Jacinta*

Tuberculosis is the disease of romanticism, while that of naturalism is syphilis

1) Introduction

From the world of the degenerate and expiring José María Bueno de Guzman, Galdós takes us to the prosperous and prudent environment of the Santa Cruz family comfortably ensconced in their ample town mansion in the *Plaza de Pontejos*. As the long socio-economic introduction to the family background explains, the family is reaping the rewards of the labor of previous generations and the economic boom of the 1850s and 1860s. While the family is the scene of grave moral problems, there is no overt clinical pathology within it to exercise the author's passion for clinical description. In other social levels in the story, however, it is a different matter. Galdós as Naturalist writer will find himself obliged to represent one of the most frightening and tragic scourges of his time, that of syphilis, and will draw upon the accepted medical narratives of his time to describe it. Writing 20 years before the infectious agent responsible for the condition was discovered, but at a time when a connection between it and the widespread condition of general paralysis of the insane was beginning to be suspected, the theory of degeneration still remained a plausible explanatory metanarrative. Galdós's strong medical leanings, reinforced by information from his medical friends, enabled him to describe the disease with the clinical detachment that would be required of a Naturalist writer, if he were not to appear a sensational *voyeur*. Degeneration theory was part of the borrowed professional baggage that enabled him to portray frightening disease professionally. The same holds true for the repellant *vicio social degenerativo* of public alcoholism, and the poverty, prostitution and madness considered to be associated with it. An awareness of degeneration as a unifying metanarrative for conditions that threatened to overwhelm the social order of an insecure middle-class is implicit in this novel.

An overview of the novel will be followed by a detailed consideration of two of its characters who best illustrate the medical theory of degeneration in the lower middle-class and in the *pueblo*. A more metaphorical use of the idea of degeneration, more political and social than medical, will be considered in a figure in the story from the *alta burguesía* whose failings represented, nevertheless, an equally serious threat to social stability.

2) Summary of the Novel

The four books of *Fortunata y Jacinta* (1886-7) form the longest of Galdós's novels and are widely viewed as his greatest, "indisputably his masterpiece" (Berkowitz 219). The novel is commonly considered as the last of his novels written in a purely Naturalistic mode, with signs of a transition to the later *naturalismo espiritual*⁴³³ becoming evident in its later chapters. In comparison with the social register of *La desheredada* and *El doctor Centeno*, which is confined to the middle-class and lower classes, and *Lo prohibido*, which is limited to the *alta burguesía*, this great novel is characterized by individuals from almost all strata of society. In contrast with *El doctor Centeno* whose historical background is that of the later Isabelline years of 1863-64, when Galdós first arrived in Madrid as a law student, and with *Lo prohibido*, which is set in a period contemporary with that in which it was written (1880-4), *Fortunata y Jacinta* returns to the momentous years

⁴³³ *naturalismo espiritual*: "una huida de la realidad que era, en definitiva, un fenómeno determinado por 'les évènements de la vie et du milieu'" (Caudet, *naturalismo* 100). This refers to human actions which arise not so much as a result of *race, milieu et moment* as from ideas in the realm of the imaginary. Caudet suggests that this is an ironic concept in that such ideas arise in, "unas conciencias degradadas y enajenadas" in which the imaginary realm is created as part of a flight from reality and therefore as a direct response to it.

(1869-1876) that included the *sexenio revolucionario* that saw the expulsion of the Bourbon dynasty, a military junta, the attempted establishment of a new ruling house and the abortive First Republic that was followed by the restoration of the Bourbon monarchy in the person of Alfonso XII in 1875. These events of national history form a contrapuntal background, as they do in *La desheredada*, to those of the novel.

The work begins with a description of the origins of a wealthy family, the Santa Cruz, whose fortunes derive from the retail textile trade in the economic boom years of the 1850s and 1860s, when the arrival of the railways and of foreign capital were a great stimulus to speculation.⁴³⁴ The years 1844-48 and 1856-66 established Madrid as the financial capital of the country with development of a speculative *bourgeoisie* that monopolized the sources of power, to reach its peak in the Restoration (Bahamonde and Toro 22). Over two generations, with prudent marriages into families with related businesses, the present generation, headed by don Baldomero II and his wife doña Barbarita, is sufficiently well-off to be able to live in style on invested income without the need to involve themselves directly in the family business (Pérez Galdós, *Fortunata y Jacinta I* 116, n. 35).⁴³⁵ The single adored child of this couple Juan (*Juanito*, the *Delfín*) is a young man entirely removed from the practicalities of business with no greater concern than that of amusing himself. For readers of Galdós's earlier novels, an indication of Juanito's apprenticeship in pleasure-seeking is provided by a list of other dissolute *señoritos* with whom he keeps company, Zalamero and Alejandro Miquis (*El doctor Centeno*), and Joaquín Pez (*La*

⁴³⁴ economic boom years: the interweaving of these years with the description of the rising fortunes of the Santa Cruz and Arnaiz families, which form the background to the novel, is described by Rodríguez-Puertolas (*Fortunata* 15).

⁴³⁵ (Pérez Galdós, *Fortunata y Jacinta I* 116, n. 35): all citations are from the Cátedra edition, 2 vols., of 1999-2002 edited by Francisco Caudet. For brevity, all future citations will take the form of (*Fortunata I* or *II*).

desheredada). After getting through university and revealing a total absence of any practical ambition, Juanito temporarily develops a taste for lower-class clothes and speech that suggests to his mother that he is philandering in the poorer parts of Madrid. She attempts to put a stop to these adventures by arranging a suitable marriage to a cousin belonging to another family in the textile trade. Juanito drifts into this marriage with the well-bred and charming Jacinta but, in the course of their honeymoon, he is unable to resist Jacinta's persistent inquiries about his affair with a lower-class girl, Fortunata, and reveals that he abandoned her when she was pregnant with his child. In a rare moment of drunken candor, he admits the cruelty of his class, "los señoritos somos unos miserables, creemos que el honor de las hijas del pueblo es cosa de juego" (*Fortunata I*, 229). As a recurring topic of discussion, Fortunata becomes an unseen, third presence throughout their honeymoon.⁴³⁶

The newly-weds settle into the Santa Cruz household for the next two years with every sign of being content though Jacinta becomes obsessed with her failure to conceive a child. Juanito's attentions begin to stray such that, by the time of Amadeus' renunciation of the throne in 1873, Jacinta becomes aware of his unfaithfulness and extracts from him promises of reform and fidelity. On the basis of information provided by the unreliable *fabulista*, Ido de Sagrario, she goes in search of the supposed child of Juanito and Fortunata only to discover that the trail has been a false one, and that the real son of Juanito has died.

Against the political background of the restoration of the Bourbon monarchy, a fall from grace of the ideals of the Revolution in the view of Galdós, Juanito also falls

⁴³⁶ unseen presence: Caudet observes, "la que será la verdadera protagonista del viaje: Fortunata." (*Fortunata I*, 203, n. 158)

from grace as he spends more time away from home late at night. In addition he receives news from his crony Villalonga, which is carefully concealed from Jacinta, that Fortunata has returned to Madrid looking more beautiful than ever with the result that Juanito haunts the poorer districts of Madrid looking for her.

Galdós next introduces the *burguesía baja* in the form of the Rubín family, in which the money-lending widow, Doña Lupe, *la de los pavos*, supports three adult nephews, the wastrel Juan Pablo, the pock-marked, gluttonous priest Nicolás and the emotionally and physically retarded Maximiliano. The latter's family history, physical description and medication strongly suggest that Galdós intends the reader to perceive the picture of delayed congenital syphilis. Maxi sees Fortunata for the first time in a café, is completely bewitched by her beauty and resolves to court her. He does this by revealing the nobility of his intentions, by renting rooms for her and by attempting to teach her reading, writing and the customs of polite society. Achieving previously unrealized heights of determination and boldness, he tells Fortunata that he must marry her or die, to which Fortunata responds with gratitude but absence of affection. Maxi offers the added incentive of giving her a family name and of making a respectable, "decent" woman out of her.

Doña Lupe discovers Maxi's romance from other sources and takes him to task for his deception, but finding an entirely new independence in him, realizes that he is now beyond her control. At a family conference with Maxi's brothers, they determine that the condition for Fortunata's admission to their respectable family must be that she spend time in a convent for the reform of prostitutes, *Las Micaelas*, while Maxi continues his professional studies in pharmacy. Fortunata consents to this plan but in

the convent meets an old prostitute friend, Mauricia *la Dura*. Mauricia's influence is critical, for while on the one hand she is a supportive friend, on the other she is an alcoholic who undermines any supposed reform by telling Fortunata that Juanito is looking for her and by encouraging her to resume their relationship. She is also mentally disturbed and alternates between episodes of depression and hallucinating mania.

When the months in the convent are over, Fortunata leaves to marry Maxi only to find that he is physically incapable, something which had been assumed by all who knew him. Hunted by Juanito, who rents adjacent rooms and bribes a maid for access to her, she resumes her affair with him. She is unable to disguise her lack of interest in Maxi, while he is tormented by the comments of friends and family about his sexual inadequacy. He proposes murder-suicide to his terrified wife, and later confronts Juanito in the street, only to be easily beaten to the ground. Fortunata moves out of the Rubín household to rooms provided by Juanito, an arrangement that Jacinta finds out about at the same time that the fickle Spanish madrileños, paralleling the inconstant Juanito, abandon their republicanism and welcome Alfonso to the capital. Juanito lies to Jacinta about the nature of his relationship and, becoming tired of the liaison again, abandons Fortunata for a second time.

Fortunata is rescued from dire straits by the kindly, retired, military man, Evaristo Feijoo, who supports her while trying to teach her the overriding importance of public appearances. After an affair of three months he leaves her with a small, independent income and firm advice that she should return to Maxi. He even promotes her reconciliation with the Rubín family and, while doing so, finds that

Maxi has become obsessed with idealist philosophy. Partly manipulating this, he succeeds in effecting the reunion so that Fortunata moves into the marital household once again. As she struggles with her dislike for his extreme unattractiveness, Maxi's madness becomes more acute and he accuses those about him of trying to poison him.

Not long afterwards, Fortunata is lured by Juanito into his carriage in the street and their affair resumes for a third time. She is obsessed with the idea of her "true" marriage to him, on the basis of her proven fertility and her capacity to provide the son and heir that Jacinta cannot, but refuses to reveal these thoughts to her lover. Meanwhile, Maxi becomes progressively unhinged and dangerous with recurring plans for murder-suicide using drugs from his place of employment, the pharmacy. Fortunata becomes pregnant and Juanito abandons her yet again, leaving her with no option but to leave the Rubín household for good and to return to her aunt's rooms in the *Cava de San Miguel*. There she delivers a healthy son but is soon disturbed by a visit from Maxi with the news that Juanito is now having an affair with another woman, Aurora. Despite her precarious condition, she assaults her rival and returns to her room much weakened by the violent confrontation. Her condition subsequently deteriorates, prompting her to sign a document commending the care of her infant son to Jacinta and to the house of Santa Cruz. As she dies, the child is swiftly given to Jacinta, who discovers new respect and sympathy for her rival, whose desire for a child she has shared. Juanito now faces a meeting with his contemptuous wife and his mother who finally understand the reality of his cruelty and deceit, and has to face the rest of his life without Jacinta's love or respect. Maxi realizes the enormity of his mistake in wanting to marry Fortunata and is now permanently deranged and

indifferent to external circumstances. In accord with multiple family predictions throughout the novel, he is finally admitted to the asylum of Leganés.

3) The Theme of Syphilis in *Fortunata y Jacinta*

In his desire to represent all aspects of middle-class life in Madrid, Galdós had portrayed obsessional detachment from reality in *La desheredada*, the *vicios sociales degenerativos* of poverty, detachment from reality and tuberculosis in *El doctor Centeno* and hereditary neurotic obsession and *locura crematística* in *Lo prohibido*. In *Fortunata y Jacinta*, he set himself the task of representing more overtly one of the most feared conditions of his day, which was widely viewed as hereditary and degenerative in origin, that of syphilis. Despite increasing acceptance of the germ theory of disease ⁴³⁷ and an enormous amount of work on the epidemiology of syphilis and its differentiation from other venereal diseases by workers such as Parent-Duchatelet and Ricord (Flegel 586), it was not until the work of Schaudinn and Hoffmann, published in 1905, that the responsible organism was finally recognized (Crissey & Parish, 356). Confusion with coexisting diseases ⁴³⁸ such as scurvy, scrofula and gout was described as a problem by Hernández as early as 1812 (Flegel 584),

⁴³⁷ germ theory of disease: The Germ Theory Calendar at <http://germtheorycalendar.com/db.aspx> lists scores of investigators who have contributed to the germ theory of disease. Particularly important were the contributions of Pasteur in 1859, and Koch in 1876. Koch's postulates, a guide to the establishment of causation of disease by a microorganism, were first published in 1883.

⁴³⁸ Confusion with coexisting diseases: an example from 1886 is that of the great syphilologist Alfred Fournier who writes, "la syphilis sert parfois d'origine indéniable à diverses affections d'allure et d'essence très différentes, telles que le lymphatisme, la scrofule, la tuberculose, le lupus, le rachitisme" (Fournier, *tardive* 32). In the absence of a diagnostic test for syphilis, confusion with scrofula, tuberculosis, lupus and rickets, which may co-exist, is understandable.

while confusion with rickets ⁴³⁹ continued to be a problem in the nineteenth century (Holmes et al. 1178). Given the complete ignorance of the causes of these distinct conditions, several of which might often appear in the same individual, recourse to the unifying nosological metanarrative of degeneration, with its great explanatory power, must have been very attractive.

With the almost excessive number of Galdós's pointers to the nature of Maxi's underlying condition, some of which would have been understood by contemporary readers, there has been a remarkable reticence among Galdós scholars to identify it.⁴⁴⁰ Congenital syphilis has been recognized since 1529 (Crissey & Parish, 92) and can vary in manifestations from stillbirth to childhood lesions such as skin rashes, jaundice and bone disease, though many other features were described (Caldwell 1768). Of particular relevance to Galdós's portrayal of Maximiliano Rubín, however, was the announcement by Jonathan Hutchinson ⁴⁴¹ in 1858 of his recognition of congenital syphilis presenting in adult life rather than childhood, with characteristically irregular permanent teeth indicating that exposure to the disease dated from or before early infancy. Irregularities in position of the teeth are "very common" (Hutchinson 264-65). Features that Hutchinson described included: a bad, pale, earthy complexion, though the skin may be thin and stretched, a sunken and

⁴³⁹ confusion with rickets [with syphilis]: a notable example of this confusion was expressed by the pioneer Paris pediatrician, Joseph Marie Jules Parrot (1829-1883), who claimed at an international conference in London in 1881 that inherited syphilis was the only cause of rickets and that it represented the transformation of one disease into the other. (Parrot 35-40, 57)

⁴⁴⁰ Scholarly reticence: Howard Mancing tells me that there is a comparable reluctance among literary scholars to recognize obviously sexual references in Cervantes' works. (personal communication 25th June 2010)

⁴⁴¹ Jonathan Hutchinson (1828-1913): English surgeon and pathologist, and leading authority in the field of venereal disease. His discovery and description of, "On the Means of Recognizing the Subjects of Inherited Syphilis in Adult Life" (1858) is regarded as one of the classic texts of nineteenth century venereology.

flattened (“saddle”) nose,⁴⁴² short stature, discolored, notched and worn-down teeth, and chronic enlargement of the tonsils in childhood. Coryza (catarrhal inflammation of the mucous membranes of the nose) was also associated with the condition.⁴⁴³ Other features enumerated by Alfred Fournier ⁴⁴⁴ in 1886 in his *La syphilis héréditaire tardive* were that, “ils sont maigres [...] n’ont qu’un système musculaire faiblement développée” (Fournier, *tardive* 23), “grêles de forms [...] ils semblent réduits de toutes proportions, comme atrophiee une façon générale, comme réduite, étriqués dans toute sa personne” (Fournier, *tardive* 31) and their testicles are “rudimentaires,” their facial hair sparse and late in appearance, their secondary sexual characteristics, “lente à s’accentuer” with the result that they appear, “ratatinés, rabougris, atrophies” (Fournier, *tardive* 29). So strongly did Fournier associate severe headaches ⁴⁴⁵ with this disease that he recommended anti-syphilitic treatment for all young men suffering from them (Fournier, *tardive* 488-89), if there were any possibility at all of syphilis in the family. Fournier goes on to list a series of diseases that he considered to be associated with late congenital syphilis, of which ailments relating to Maxi are, “le lymphatisme [...] le rachitisme [...] la paralysie générale” (Fournier, *tardive* 32).

⁴⁴² saddle nose: 200 years before the significance of saddle nose was understood, Rembrandt painted a portrait of Gerard de Lairese, a talented artist colleague with the condition. His well-known portrait hangs in the Metropolitan Museum of Art in New York (Johnson 301). Hutchinson describes, “The flattening of the bridge of the nose [...] is a very marked condition in most cases, and constitutes a very valuable sign.” (Hutchinson 265)

⁴⁴³ Coryza: Lancereaux describes the perceived link with syphilis, “Con frecuencia se comprueba el romadizo de las fosas nasales, la exageración de la secreción de la membrana pituitaria, un verdadero coriza, en una palabra.” (Lancereaux, *Tratado* 668).

⁴⁴⁴ Alfred Fournier (1832-1914): “the foremost syphilologist in France in the last 30 years of the 19th century” (Waugh 232). He established the causal relationship between syphilis and general paralysis of the insane on the basis of clinical experience, reported in *La syphilis du cerveau* (1879), well before he was eventually vindicated, after the spirochete was identified in 1905 by Schaudinn and Hoffmann, and it was finally found in the brains of patients with general paralysis of the insane by Noguchi in 1913 (Crissey & Parish 356, 223-4).

⁴⁴⁵ severe headaches: “Los tres hermanos, Juan Pablo, Nicolás y Maximiliano, padecían frecuentes e intensas cefalgias, que nos hacen pensar en meningoencefalitis sifilítica, adquirada, antenatal.” (Pérez Bautista 192)

Particularly relevant to the image of Maxi that Galdós elaborates was the popularization by William Wallace ⁴⁴⁶ in 1836 of potassium iodide in the treatment of congenital syphilis (Wallace 5-11) and the recognition by Francis Welch ⁴⁴⁷ in 1875 of the link between the disease and abnormal dilatation (aneurysm) of the aorta (Welch 769-71, Suy 359). Bone pain has been repeatedly described in syphilis (King & Catterall 119, Rauh et al.). Contemporary with the composition of *Fortunata y Jacinta* was the discovery by Julius Wagner-Jauregg ⁴⁴⁸ that high fever, even when therapeutically induced, can sometimes result in improvement in mental disturbances.⁴⁴⁹ The definitive proof of the causal relationship of syphilis with general paralysis of the insane, with its symptoms of grandiose delusions and mania ⁴⁵⁰ associated with progressive dementia, had to wait until the landmark papers by Alfred Fournier in 1893-4 (Crissey & Parish 220), though his earlier researches, published in *La syphilis du cerveau* (1879), had suggested a probable link (Crissey & Parish 223). The connection was also cited in page 540 of the Spanish translation (1889-91) of Albert Eulenburg's earlier *Real-Encyclopädie der gesammten Heilkunde; medicinisch-chirurgisches Handwörterbuch für praktische Ärzte*.⁴⁵¹

⁴⁴⁶ William Wallace (1791-1837): Irish surgeon, author and founder of the Dublin Infirmary for Diseases of the Skin. He lived before venereology was recognized as a separate branch of medicine when the many forms of cutaneous disease related to sexually-transmitted diseases caused them to be treated in a dermatological setting. For a biography see Morton (1966).

⁴⁴⁷ Francis J. Welch F.R.C.S.: Assistant professor of pathology, British Army Medical School.

⁴⁴⁸ Julius Wagner-Jauregg (1857-1940): Austrian physician who received the Nobel Prize in 1927 for his work on the treatment of mental diseases using high fever (*pyrotherapy*).

⁴⁴⁹ mental disturbances: according to Raju (320) and Howes (409), the mental disturbance that improved in the 1880s were of various types. Only in the 1890s did Jauregg realize that general paralysis of the insane seemed to benefit more than other diseases, and it was not until 1917 that he had the chance to apply therapeutic infection with malaria to confirm this finding.

⁴⁵⁰ delusions and mania: a modern text (Holmes et al. 490) lists among the delusions manifested in general paralysis of the insane those of, "great wealth or political power, extraordinary physical or intellectual prowess, or inappropriate social or political importance."

⁴⁵¹ Albert Eulenburg's *Real-Encyclopädie*: I surmise that the *Diccionario enciclopédico de Medicina y Cirugía prácticas* is a translation of the second edition (1885-90) of the German

Such then were the contemporary medical views that Galdós had available to him at the time that he wrote *Fortunata y Jacinta*, acquired either from his own reading or from his medical friends. It should not be thought, however, that the picture of Maxi represents any one individual in real life, rather that his descriptions can be thought of as a composite mosaic of signs and symptoms with which a fictional image is constructed. The complex of features,⁴⁵² some more than others, provides a more or less indirect hint to his readers as to what they should understand the nature of Maxi's condition to be. Despite the changing climate in the 1880s as to what in the realm of sexuality was acceptable in literature, certain taboos remained in force, to be contravened at the author's peril.⁴⁵³ Among these were explicit descriptions of sexual activity, overt references to variations in sexual orientation (homosexuality, for example, which was medicalized at the time as a pathological perversion ⁴⁵⁴) and venereal disease.

work rather than the first (1880-1883), though the Biblioteca Nacional catalogue and the text itself do not make this clear.

⁴⁵² complex of features: the importance of assessing all the clinical features together is emphasized by Hutchinson, "I must beg to remark most emphatically, that it is not by any one symptom that the diagnosis of hereditary syphilis can ever be supported, but by the careful estimation of the entire group. They must be taken together in their relative bearings upon each other. By too great a reliance on single ones, however well marked, mistakes of the most egregious character would often occur, while I feel confident, that by the opposite course a very trustworthy conclusion many often be arrived at." (Hutchinson 265). I might add, in a reverse direction, that I was trained as a medical student to avoid the sin of "diagnostic greed," in which diagnosis is withheld until all the known features of a disease process have become manifest, since it can result in delay in appropriate diagnosis and treatment. Diseases do not manifest themselves in all individuals in the same way with all the known features of the illness. A subtle indication that Galdós was writing as a medical enthusiast, rather than as an experienced physician, lies in the fact that some of his representations of disease, such as those of Maxi's syphilis and Alejandro's pulmonary tuberculosis in *El doctor Centeno*, seem to include almost all the described features of their respective diseases.

⁴⁵³ author's peril: the explicit novel *La prostituta* by Eduardo López Bago resulted in the author being prosecuted in 1884 (Pura Fernández, *Bago* 37 ff.).

⁴⁵⁴ pathological perversion: "the psychological, psychiatric, medical category of homosexuality was constituted from the moment it was characterized---Westphal's famous article of 1870 [...] can stand as the date of its birth." (Foucault, *Sexuality* 43)

4) Syphilis as Degeneration

Some of the reactions of Spanish hygienists to the perceived epidemic of syphilis in the 1870s and 1880s have been described in Chapter 2. Echoing the opinion of Alfred Fournier, the eminent Madrid hygienist Philip Hauser referred to the disease in 1884 as, “uno de los agentes debilitantes y degenerativos de la raza humana” (Hauser, *siglo* 214), affecting not only individuals and families but also society at large. Hauser was already aware of the many, “enfermedades del sistema nervioso” associated with the disease, but still preferred to refer to it in hereditary, degenerationist terms as a, “diátesis sifilítica.” His contemporary, Viñeta-Bellaserra, like many of his generation, sees syphilis as the, “imagen sensible y semi-materialista del pecado original; llega á los hijos las llagas y los padecimientos de los padres” (Viñeta-Bellaserra 31) echoing Morel’s moralistic interpretation of the disease. He describes the inherited condition as one producing widespread weakness and underdevelopment, “la talla es baja, el esqueleto delgado, los resortes del organismo pierden su elasticidad, y la vida degenera en una sucesión de actos médico-morbosos” (Viñeta-Bellaserra 32). Such would be an accurate description of Maxi Rubín. In addition, Pedro Monlau, one of the most influential hygienists of the day, lists in his much-reprinted *Higiene del matrimonio* (1881) the sources of degeneration from which observance of the rules of hygiene could be expected to achieve recovery and regeneration. They include, “los gérmenes de la sífilis, de las escrófulas, de la tísis y del cáncer, de la gota [...] de la locura y de la epilepsía” (Monlau, *matrimonio* 572), all threatening conditions thought to be due to inherited, degenerative predispositions.

The distinguished French physician Étienne Lancereaux,⁴⁵⁵ the second edition of whose *Traité historique et pratique de la syphilis* (1873) was translated into Spanish in 1875,⁴⁵⁶ summarizes much contemporary belief about degeneration associated with syphilitic infection when he writes that the affected individual became a profoundly deviant kind of person,

L'individu malade a acquis la constitution syphilitique, il n'est plus un être normal, mais un individu dévié du type, il a subi une sorte de dégénérescence, car il éprouve les plus grandes difficultés à rentrer dans sa vie physiologique. (Lancereaux, *Traité* 472)

and notes, furthermore, its devastating effects upon individuals and families, “Effectivement, il y a des raisons sérieuses pour regarder la syphilis comme l'une des causes de l'amoindrissement des forces, de la diminution de la taille et de la dégénérescence de certaines familles” (Lancereaux, *Traité* 465), confirming the generalized loss of physical strength and well-being in suffers whose minds and bodies become abnormal.

5) Galdós's Representation of Maximiliano Rubin

Given his sharp eye, emulating that of the physician, and his interest in human pathology, it is not surprising that degeneration theory, inevitably including its deterministic and hereditarian features, should figure prominently in one of the most

⁴⁵⁵ Étienne Lancereaux (1829-1910): Paris physician and author who made major contributions to the understanding of alcoholism, syphilis and diabetes.

⁴⁵⁶ translated into Spanish in 1875: lacking access to this Spanish translation, I quote from the French original.

sustained clinical representations of Galdós's literary *oeuvre*. From the perspective of hereditary determinism, he gives us clues about Maxi's parentage telling us that his mother was, "una mujer bella y deseosa de agradar" who lived beyond the means of her husband's business and was of, "mala conducta [...] mujer desarreglada y escandalosa, que vivía con un lujo impropio de su clase, y dio mucho que hablar por sus devaneos y trapisondas" (*Fortunata I* 448), which incited Maxi's father to extremes of, "violencias más bárbaras y las tolerancias más vergonzosas." This suggests both the *locura crematística* of Isidora Rufete and Rosalía de Bringas⁴⁵⁷ as well as the sexual transgression necessary to maintain an inappropriately luxurious lifestyle, which was the downfall of both heroines. Such an interpretation is reinforced by the "shameful tolerance" of her husband implying that he accepted her infidelities and, even more so, by the striking differences between the three Rubín brothers, which Galdós characteristically refers to indirectly, giving rise to the, "maliciosa versión de que los tales eran hijos de diferentes padres" (*Fortunata I* 449). We have then, a picture of a beautiful, luxury-loving woman, anxious to please, who lived beyond her husband's means partly from the proceeds of extramarital relationships. The moral and physical degenerative influences, likely to be passed on to offspring according to contemporary received wisdom, would have been recognized by Galdós's readers. Those influences are focused upon her tragic youngest son.

From the first sentence, Galdós's evocation of Maximiliano is of a pathetically underdeveloped being, "raqúitico,⁴⁵⁸ de naturaleza pobre y linfática,⁴⁵⁹ absolutamente

⁴⁵⁷ Rosalía de Bringas: the principal character of Galdós's earlier Naturalist novel *La de Bringas* (1884) not otherwise part of this study.

⁴⁵⁸ raquíitico: this word has two main meanings. It can be equivalent to simply *endeble*, *enfermizo* (Moliner), or can mean suffering from childhood rickets due to vitamin D deficiency. As a young adult, Maxi would be beyond the age of dietary deficiency rickets of

privado de gracias personales” (*Fortunata I* 449). His older brother, Juan Pablo, chooses a career in pharmacy for him, to which he acquiesces without enthusiasm, being sick for one reason or another for the most of the year (*Fortunata I* 455), consistent with the assigned characteristics of his temperament in which, “no muestran grande afición a las ciencias, ni a las letras, ni a las artes” (Monlau, *privada* 5^a 542). There follows a picture of Maxi that is clinical in detail. We learn that his body is small and weak such that the wind might almost blow him over, that his hair is lank and sparse, that his skin is thin and transparent and that he has continuous nasal obstruction forcing him to breathe through the mouth. This obstruction is partly attributed to his sunken and flattened nasal bridge that looks as if it is the result of a blow. He suffers from severe and chronic nasal catarrh, his teeth are markedly irregular and misplaced and he is plagued with toothache. His bones hurt and the onset of his adolescence delayed until his mid-twenties when he is still unable to grow a moustache (*Fortunata I* 455-7). He also suffers from severe, recurring headaches (*Fortunata I* 449).

The above paragraphs show us that Galdós is signaling at least ten clinical features to suggest a diagnosis of delayed congenital syphilis. Such enthusiasm for

childhood whose cause, in any case, was not known at the time. The review of 346 cases of rickets by Lannelongue in 1881 found few cases above 5 years and none above the age of 12 (Lannelongue 378). This suggests that Galdós must have been using the word in the sense of “puny” or “sickly.” The use of the term to indicate pain in deformed bones in an adult, however, would strengthen the suspicion that *raquítico* in the context of Maxi resulted from the contemporary confusion with osseous syphilis. For the confusion rickets with syphilis, see Parrot (1881) and the footnote above.

⁴⁵⁹ naturaleza [...] linfática: this classification of temperaments goes back to classical times and was popular in the Middle Ages. Monlau describes them as, “destemperamentos o desequilibrados: son, en el fondo, verdaderas predisposiciones morbosas” (Monlau, *Elementos* 5^a 529), and goes on to specify the linfático as including, “carnes blandas y abotagadas; piel fina, descoloradas, sin velo [...] cabellos lisos [...] pulso lento, blando, fácil de deprimir [...] movimientos tardíos, lentos y penosos; sueño largo y profundo” (Monlau, *Elementos* 5^a 542). Fournier’s linking of congenital syphilis with *lymphatisme* is quoted above. The temperaments were widely considered to determine an individual’s fate and health.

clinical detail may well have surpassed the knowledge of many of his readers.⁴⁶⁰ One feature, however, was accepted in common knowledge as a sign of congenital syphilis at the time, the collapsed or “saddle” nose. According to Sander Gilman in his *The Phantom of the Opera’s Nose*, this deformity was considered diagnostic of syphilis in the 1880s, the era in which Gaston Leroux’s 1911 novel *The Phantom of the Opera* was set. Gilman describes the unfortunate hero of that story, Erik, whose nose is collapsed like Maxi’s,

The missing nose (at least in the popular mind of the turn of the century) [is an] indicator (s) of the social disease that marks him, [...] He is a product of individuals whose sexuality was polluted and whose pollution is proven by the deformity of their child [...] In the 1880s no medicine could cure Erik, and his very visage evoked a specific world of horror and disease. (Gilman, *Phantom* 68-70)

In my mind, there is doubt as to the message that Galdós was sending his readers about Maxi, and that the more experienced among them would have had little difficulty in understanding that message.

⁴⁶⁰ surpassed the knowledge of many of his readers: not to mention many of his subsequent commentators. Haddad (1953), Holmberg (1978), Iglesias (2006), Krauel (1999), Randolph (1968), Rodríguez Baltanás (1993), McKinney (2010) and Tsuchiya (1988) devote considerable space to the psychological and philosophical features of Maxi’s illness while disregarding the underlying cause that Galdós indicates so repeatedly and in such detail. Ribbans (*Fortunata* 102) and Ullman and Allison (11, 22) mention Maxi’s syphilis in the most cursory way, as does Boix Martínez (120, 226). Garma writes, “El aspecto físico de Maximiliano hace pensar en heredosífilis” (Garma 85) but offers no explanation for this opinion. The most detailed identification of the representation of Maxi’s delayed hereditary syphilis I have found is that of Pérez Bautista (192-4), though, again, the author does not detail the reasons for his attribution.

Some of the clues that Galdós provides suggest an interest in the details of medicine that are included for their own sake, since they would have been obscure for many readers. As an example, Maxi, at the age of 23, has an interesting episode of ill-health,

tuvo una fiebre nerviosa que se puso en peligro su vida; pero cuando salió de ella parecía un poco más fuerte; ya no era su respiración tan fatigosa ni sus corizas tan tenaces, y hasta los condenados raigones de sus muelas parecían más civilizados. (*Fortunata I* 458)

The improvement in general health, with simultaneous reduction in coryza, nasal obstruction and toothache, of one described as having congenital syphilis suggests a veiled reference to the contemporary work of Wagner-Jauregg on pyrotherapy (see above), suggesting a decidedly scholarly interest on the part of the author of the novel. Galdós's construction of a literary image of congenital syphilis does not stop here for, in addition, he intends us to understand that Maxi is aware of the nature of his disease. As Maxi begins his apprenticeship in pharmacy and has access to drugs, "se administraba el ioduro de potasio en todas las formas posibles" (*Fortunata I* 456), but when he feels better after the beneficial effects of his high fever, "no usaba ya el ioduro tan a pasto" (*Fortunata I* 458). Possibly only Galdós's medical and pharmaceutical readers would have known that the only indication for potassium iodide described in the *Farmacopea Oficial Española* of 1884 was, "De uso especial en el tratamiento de los fenómenos terciarios de la sífilis" (*Farmacopea* 414). In contrast with mercury-containing drugs that had been used in the treatment of syphilis since the beginning of the sixteenth century (O'Shea 392), the introduction of potassium iodide as late as

1822 has been attributed to Antonio Brea (Crissey & Parish, 363), but the chemical salt only became standard treatment following the paper of William Wallace in 1835⁴⁶¹ and was described in Spain by Payan in 1847. Mercury and iodine compounds are mentioned often in the pharmaceutical practice where Maxi is apprenticed and provide a veiled commentary on the frequency of syphilitic infection in the fictional world of *Fortunata y Jacinta*, and hence on its frequency in contemporary Madrid.⁴⁶² The hygienists' concerns were not without foundation.

We may take it, then, that Galdós intends us to believe that Maxi knows that he has syphilis and that he has been medicating himself intensively in an attempt to control the condition. Later Galdós hints that syphilis is still on his mind, for when Maxi is in a state of mental confusion that has caused him to make a potentially fatal mistake at the pharmacy, his hypochondria gets the better of him and, ignoring Fortunata's warnings about frightening himself with medical texts, "Si no leyeras librotos de Medicina no se te ocurrarían esos disparates," he has looked up his condition and its complications in a textbook. He complains, "En cuanto muevo un brazo---decía con terror---, me aumenta de tal modo las palpitaciones que no puedo respirar...que esto es más grave. Es la aorta...Yo tengo una aneurisma, y el mejor día,

⁴⁶¹ William Wallace and the introduction of iodine: see also the paper "The Introduction of Iodine in the Treatment of Syphilis: The Writings of William Wallace, MD, of Dublin." (Kampmeier 26-28)

⁴⁶² frequency [of syphilitic infection] in contemporary Madrid: The study of Thomas Franz lists the uses of the many drugs mentioned by Galdós in parte IV of *Fortunata*. According to Franz's article, arsenic and hashish were also used treat syphilis. Many other medications he cites were also used to treat sexual malfunction. A catalogue of medications cited in all of Galdós's novels is to be found in the dissertation submitted to the *Facultad de Farmacia de Universidad Complutense* by María Luisa Vozmediano Hidalgo in 1981. Some idea of the frequency of congenital syphilis is to be had from the report of 1833 of the Wellesley Female Institution in Dublin in 1832 where of 431 births, 10% were stillborn, "a considerable proportion of these children were premature, and either themselves manifestly syphilitic, or the offspring of parents who had previously aborted, or had premature labours in consequence of a syphilitic taint" (Maunsell 296). In his private practice, the distinguished *alienista* Luís Simarro, "always assumed that male patients had a history of syphilis." (Kaplan 156)

plaf...reventa.” He later dreams that the aneurysm has, in fact, burst with catastrophic loss of blood (*Fortunata II* 220-1). This represents another nod to readers with medical knowledge since Galdós refers here to the aneurysmal dilatation of the aorta in late syphilis that, though first described in 1728 by Giovanni Lancisi, only became widely appreciated after its thorough documentation by Francis Welch in 1875 (Welch 769, Crissey & Parish 220). Writing only 10 years after this rediscovery, Galdós indicates that not only did Maxi know of a serious complication of his debilitating disease, but also knew of its fatal termination, that of rupture. Galdós provides a hint that not only Maxi knows the nature of his condition but that his oldest brother, Juan Pablo, is also aware of it. In a last-ditch effort to keep his brother out of a lunatic asylum, Juan Pablo reviews with doña Lupe the therapeutic resources still open to them,

No se habían probado las duchas, ni el sacarle de paseo al campo, ni el bromuro de sodio que estaba dando tan buen resultado contra la peri-encephalitis, difusa y contra la meningo-encephalitis, y siguió echando términos de medicina por aquella boca, pues entonces le daba por leer libros de esta ciencia. (*Fortunata II* 399)

Why, might one ask, should Juan Pablo be considering for his mad brother a medication reputed to be effective in the treatment of a syphilitic condition of the brain ⁴⁶³ if he was not also aware of his brother’s tragic condition? In the 1870s,

⁴⁶³ medication [...] syphilitic condition of the brain: it is possible that Galdós intends us to understand that Ballester is also in the know, since he counsels Maxi, “tenemos que volver a las duchas y al bromuro de sodio. Es lo mejor para echar virtud y filosofía” (*Fortunata II* 537). Much earlier, doña Lupe tells us, “me ha dicho esta mañana Ballester que [Maxi] tiene algo de reblandecimiento cerebral” (*Fortunata II* 259), which suggests that the knowledgeable

diffuse encephalitis (inflammation of the brain) was considered synonymous with General Paralysis of the Insane (“Encéphalite diffuse”). It seems that Galdós is giving us yet another veiled reference to Maxi’s underlying disease and that Juan Pablo was not the only one to, “daba por leer libros de esta ciencia.”

Before considering the madness that dominates Maxi’s life in the second half of the novel, it is abundantly clear what Galdós wanted his readers to believe about the tragic and pathetic physical ill-health of his character. He presents it as a hereditarily determined condition due to moral degeneracy in at least one of Maxi’s parents that would condemn their younger son’s life to one of sickness and sterility, just as degeneration theory would predict. At the same time, the portrait of Maxi was meant to reflect some of the realities of contemporary Madrid society. Galdós, after all, had not only committed himself to study all aspects of contemporary middle-class life,⁴⁶⁴ but had also taken the trouble to study brothels,⁴⁶⁵ where the middle-classes were entertained, and had inevitably been brought face to face with venereal disease.⁴⁶⁶ Given the frequent family history and ignorance of the infectious cause, it

pharmacist may have suspected in Maxi the cerebral softening associated with General Paralysis of the Insane the, “ramollissement de la substance corticale” associated with the, “mningo-périencéphalite chronique” and, “encéphalite interstitielle diffuse” seen in, “la paralysie générale” (Foville 131-33). Franz comments that sodium bromide was used to counteract cerebral excitement and that its chronic use led to, “symptoms of greater mental and physical decline” (Franz 41-2). It would, however, have had no effect upon the eventual outcome of Maxi’s disease.

⁴⁶⁴ all aspects of contemporary middle-class life: “la novela moderna de costumbres ha de ser la expresión de cuanto bueno y malo existe en el fondo de esa clase [media].” (Pérez Galdós, *Observaciones* 122)

⁴⁶⁵ study the brothels: The usually, highly discrete Galdós made this admission in his *Prefacio del autor* to the third edition of *Misericordia* (1913) p.6, “para penetrar en las repugnantes viviendas donde celebran sus ritos nauseabundos los más rebajados prosélitos de Baco y Venus, tuve que disfrazarme de médico de la Higiene Municipal.”

⁴⁶⁶ face to face with venereal disease: this may be more than a figure of speech, since there are indications that Galdós himself was suffering from tertiary syphilis. One medical author has suggested that the early visual problems and chronic iritis (inflammation of the iris of the eye) that Galdós suffered and which may have contributed to the failure of the operations for his

is natural that he would view syphilis in the terms of many of the experts of his day, that is, as a degenerative condition.

6) Maxi's Madness

It is clear from Galdós's description of his character that he was never normal. In the conceptual terms of the time, to quote the English translation of Lancereaux's first edition, having endured the syphilitic constitution since birth, "he is no longer a normal being, but an individual deviating from the type, having undergone a kind of degeneration" (Lancereaux, *Treatise* 214). He is physically and emotionally retarded and compensates for his disability by dreaming of being like the strapping military recruits he can see drilling from his window (*Fortunata I* 457). The reality of his imaginative life challenges that of the everyday world such that the narrator comments, "Vivía dos existencias, la de pan y la de las quimeras [...] se iba calentando

cataracts were due to chronic syphilitic infection. While there have been several articles about Galdós's eye troubles, which started before he was 40, such as those of Cortezo-Collantes (1946) and Zapatero Ballesteros (1975), the more recent study of Herrera Hernández (2007a) comments that, in comparison with early photographs, the eyes seem to have become rather small by the time of Sorolla's portrait, which was executed in 1894 (Campos-Bueno 15). A later transitory hemiplegia was followed by an ataxia that prevented Galdós from standing unaided once he had lost his sight in 1912. Such ataxia was often due to spinal cord disease and Herrera posits tertiary syphilitic infection of the cord (*tabes dorsalis*) as a cause. In a second article, Herrera Hernández quotes an account of Galdós's death in *El Figaro* of 4th January 1920 which reports that a relative, on being asked the cause of death, said that, "no era sólo la arteriosclerosis, sino un reblandecimiento medular" (Herrera Hernández, 2007b 105). This raises the question as to what exactly was understood by *reblandecimiento medular* (softening of the spinal cord) in 1920. An answer is provided by Galdós's secretary, friend and Canarian compatriot, the journalist Rafael Mesa y López, who Ortiz Armengol describes as, "incuestionable autoridad como biógrafo en estos años finales" (Ortiz Armengol 806). In a short biography of Galdós written by Mesa y López in 1919 and published on Galdós's death, he writes of the author's blindness, "Lo que cegó a D. Benito no fueron los cataratas de sus ojos, sino la enfermedad llamado *tabes dorsal*, que en recio castellano llamamos reblandecimiento" (Mesa 48 author's italics). This diagnosis was repeated in 1930 by César E. Arroyo, Ecuadorian writer, literary editor and consul in Cádiz, whose biography records that Galdós, on returning from the inauguration of his statue in the Retiro Park in February 1919, was exhausted, "Parece que las fuertes emociones de aquel día le fueron físicamente fatales a Galdós, de cuya médula había hecho presa la terrible *tabes dorsalis*, desgarrando con sus uñas aceradas todo el cordaje nervioso." (Arroyo 75 author's italics)

de tal modo los sesos, que se lo llegaba a creer [...] Y si aquello le durara, sería tan loco como cualquiera de los que están en Leganés”⁴⁶⁷ (*Fortunata I* 461). Even before his encounter with Fortunata, therefore, his hold on reality was sufficiently tenuous to make reference to an asylum appropriate.

His reaction to meeting Fortunata for the first time is extreme and overwhelming, and ever afterwards he finds himself compared to her overt sexuality in terms that are cruelly wounding. Galdós summarizes his perceived sexual inadequacy by having Olmedo call him a, “Niño del mérito, papos-castos” and a *silfidón* (*Fortunata I* 467), combining the insults of calling him a child, an impotent homosexual ⁴⁶⁸ and an effeminate. Other comments on the obvious contrast in sexuality between Maxi and Fortunata from friends, family and from the glances of strangers in the street follow throughout the novel. He sees in the eyes of passers-by the opinion, “no era él hombre para tal hembra” (*Fortunata I* 697). Such imprecations would be difficult for the strongest of personalities to endure and cannot but have been destabilizing for as vulnerable a subject as Maxi.

Galdós as narrator cleverly indicates Maxi’s severe difficulty in distinguishing reality from imagination when he describes how Maxi perceives Fortunata, “Dos Fortunatas existían entonces, una de carne y hueso, otra la que Maximiliano llevaba

⁴⁶⁷ Leganés: one of the many hints of Maxi’s eventual destination, which is tragically fore-ordained, with or without encountering Fortuanta.

⁴⁶⁸ impotent homosexual: there seems to be some difficulty in deciding exactly what is implied by the term *papos-castos*. I follow the editor, Francisco Caudet’s suggestion (*Fortunata I* 467 n. 18). The word *silfidón* (*silfo*, *ninfa* or other female spirit) specifically impugnes Maxi’s masculinity.

estampada en su mente [...] su loco entusiasmo ⁴⁶⁹ le impulsaba a la salvación social y moral de su ídolo, y a poner en esta obra grandiosa todas la energías que alborotaban su alma [...] la había de sacar pura o purificada” (*Fortunata I* 481). Maxi appears to remain on an even keel while Fortunata is in her supposedly regenerating confinement in *Las Micaelas*, but is soon overwhelmed by the stresses and the reality of marriage. He is overcome by migraine on his wedding night and, sensing that Fortunata’s subsequent coldness is the result of a resumed affair, endures despair that makes him suggest murder-suicide.

Following their first separation, Maxi immerses himself in work and the reading of philosophy without any reported aberrant behavior. By the time Feijoo meets him in a café three months later, however, Maxi is imbued with the idea that the forces of nature are equivalent to, “espíritu, el Verbo, el querer universal” (*Fortunata II* 134), and with the idea of pure thought, *pensamiento puro*. After Fortunata’s return, Maxi complains of deteriorating mental acuity that alternates with periods in which he enjoys supreme wisdom, “Figúrate que a ratos me siento tan estúpido [...] otros ratos parece que me vuelvo el hombre de más seso del mundo” (*Fortunata II* 134), in which Galdós appears to be suggesting alternating periods of hallucinating exultation and depression. The author indicates the development of paranoia, when he has Maxi complaining that Fortunata and Lupe are trying to undermine his health by poisoning his chocolate.

⁴⁶⁹ su loco entusiasmo: in Tsuchiya’s semiotic analysis, “Maxi has become caught in the conflict between the language of society and that of his own desires” (Tsuchiya 57). Caudet writes of the characters of the novel that they, “aferrarse desesperadamente a unas ideas, producto de una ‘imaginación exaltada,’ para [...] evitar el círculo de unas realidades sociales que los mantenían aprisionados.” (Caudet, *naturalismo* 98)

Soon Maxi becomes erratic and disturbed in a way that cannot be kept within the family. The perspicacious Ballester suspects an organic cause such as cerebral atrophy and talks to Lupe about Maxi's *reblandecimiento cerebral* (*Fortunata II* 259), while observing that Maxi is beginning to make dangerous mistakes in the pharmacy. Maxi starts to rave about the desirability of death as liberation from the beastliness, *bestia*, of his corporeal state, leading Ballester to bring bromide and morphine to try and sedate him. Maxi alarms Fortunata with his intuition that she is pregnant with *pensamiento puro*, and he hallucinates the sound of footsteps of an adulterous lover in the night (*Fortunata II* 277). He later announces that he has discovered where the soul comes from and, as his religious manias continue, claims, "El gran misterio de la revelación se ha renovado en mí" (*Fortunata II* 306) and, "Yo no soy más que el precursor de esta doctrina; el verdadero Mesias." He again proposes joint suicide to Fortunata and brings out a dagger, and an assortment of lethal drugs stolen from the pharmacy. When he reveals to his aunt the exclusive nature of his understanding, "se nos han revelado [...] los misterios inefables, digo [...] nos llevan a un éxtasis delicioso, de que no pueden participar las personas vulgares" (*Fortunata II* 383), Fortunata begins to think that the hashish being given to soothe Maxi is doing more harm than good.

After Fortunata leaves to deliver her child at the *Cava de San Miguel*, Maxi seems to become more rational and confesses to his surprised oldest brother that he never actually believed what he was saying about the *Mesias*, the *bestia* and *puro pensamiento* (*Fortunata II* 402-3). He enters a more coldly rational phase that makes Lupe and Ballester wonder if he is recovering his sanity, but beneath this mask he deduces Fortunata's whereabouts and determines to see her, believing that he has

regained his judgement. He surprises Fortunata with talk about the right to prevent life or to kill, which makes Fortunata uncertain whether he is insane or not, asking herself, “que a mi marido le ha entrado en gran talento, o estas cosas que dice son farsa para tapar una mala idea” (*Fortunata II* 465). The “evil idea” soon emerges, however, when Maxi maliciously reveals that Juanito is having an affair with another woman, Aurora, to which Fortunata prophetically responds that he is trying to kill her with the news. In what is, effectively, a scene of continuing psychological torture, Maxi predicts that Juanito and Aurora will have a lasting relationship and that, “Tu víctima y tu verdugo serán felices y tendrán muchos hijos” (*Fortunata II* 496), raising for her the nightmarish prospect that her son might not be the only *hijo de la casa* of the house of Santa Cruz. She begs him to shoot the adulterous couple and, when he accepts her commission, he has to be hunted down and disarmed by friends before he can do so. Maxi then abandons any pretence of sanity and has to be locked up at home, howling and banging his head against a wall. At the very end of the novel, he is taken by Ballester to see Fortunata’s grave and is finally convinced of her death. He acknowledges his madness and determines to devote himself to the image of Fortunata’s perfection, admitting his mistakes and realizing that Nature, “que es la gran madre y maestra que rectifica los errores de sus hijos extraviados” (*Fortunata II* 539). He continues with this idealist, ecstatic rhetoric, “vivo con mi ídolo en mi idea, y nos adoramos con pureza y santidad sublimes en el tálamo incorruptible de mi pensamiento.” Recognizing that he is being taken to the asylum of Leganés he declaims, “vivo en la pura idea [...] Resido en las estrellas” (*Fortunata II* 541-2), a palace or a pigsty is equally acceptable to him.

7) Commentary on Galdós’s Construction of Maxi’s Madness

It is difficult not to be overawed by the complexity and poetry of Galdós's portrayal of Maximiliano Rubín. On the one hand, it can be considered as a clinical representation of syphilitic encephalitis⁴⁷⁰ that gives rise to the clinical picture of *parálisis general progresiva* (general paralysis of the insane), which was described as accounting for 20-25% of patients found in the asylums of Europe and, "aún más in América" (Hauser, *siglo 205-6*).⁴⁷¹ On the other hand, it can be considered as the existential struggle of an anguished soul to come to terms with the realities of life and of his cruelly crippling, chronic illness. Clearly both perspectives are valid though the majority of literary commentators have tended to emphasize the latter (Ribbans (1977), Tsuchiya (1988), Ullman and Allison 1974). Either view must take account of the ambiguous phases in Maxi's mental state, when he appears obsessed by religious idealism, in a manner sometimes seen in those not ordinarily considered to be mad, and expresses ideas about, "espíritu, el Verbo, el querer universal [...] pensamiento puro" (*Fortunata II* 134,137), and also manifests periods of cool and calculating rationality that seem so ordered that Fortunata, Ballester and Guillermina cannot be quite sure whether he is in a mad phase or not, especially as he is apparently able to talk objectively about his experience of madness.⁴⁷²

⁴⁷⁰ syphilitic encephalitis: I lean toward the interpretation of Pérez Bautista who refers to the, "trastornos mentales de Rubín [...] estado psíquico que tiene perfecta cabida en cualquier forma de sífilis cerebral" (Pérez Bautista, *Tema* 193). Cerebral syphilis is the cause of general paralysis.

⁴⁷¹ parálisis general: "el predominio en nuestro siglo de una forma de enfermedad mental que se caracteriza por grandes accesos de excitación cerebral y concluye por el aniquilamiento completo de las fuerzas psíquicas y físicas, conocida bajo el nombre de demencia paralítica ó parálisis general de los dementes, que se considera fatal en su marcha progresiva é incurable, y es padecida por la cuarta ó quinta parte de los acogidos en los asilos de enajenados de todos los países de Europa, y aún más en América" (Hauser, *siglo 205-6*). One of Esquerdo's protégés, Jaime Vera, wrote a monograph *Estudio clínico de la parálisis general de los enajenados* (1880).

⁴⁷² talk objectively about his experience of madness: In the context of the coexistence of madness and rationality, Galdós may have been influenced by the ongoing contemporary

As has been outlined in previous chapters, madness was viewed an inherited form of degeneration by many authorities of Galdós's day and syphilis was also seen to run in families and to be responsible for degeneration at an individual and a societal level. Both diseases were related to a degenerative process in preceding generations which would lead to eventual extinction of the line of descendants. To this extent it is not necessary to assume that Galdós and his medical friends were aware of Fournier's early writings (1879) that indicated that syphilis and Maxi's possible madness, *parálisis general progresiva*, were causally related. The features of that madness had been described 64 years earlier by Antoine Bayle,⁴⁷³ when it was the most prevalent mental disease then identified (Ackernecht, *Short* 51).⁴⁷⁴ While uniformly and inevitably progressing to dementia and death, it is known to be characterized in its early stages by violent mood swings from exultation bordering on mania to deep depression and withdrawal. Delusions are characteristic with ideas of supreme wisdom or religious revelation and visual or auditory hallucinations. Paranoia is common and deteriorating mental acuity heralds descent into exhaustion, apathetic dementia, paralysis and death. Galdós describes the psychiatric features of the disease comprehensively.⁴⁷⁵

campaign among forensic alienistas to have recognized in the law courts apparently rational madness without mania, *locura moral*. His friend Jose María Esquerdo was a leading proponent in this campaign and the author of two versions of *Locos que no lo parecen* in 1880 and 1881 (see above).

⁴⁷³ Antoine Laurent Bayle (1799-1859): briefly an assistant at the asylum of Charenton in France, he described general paralysis in his thesis of 1822. When his mentor Royer-Collard died, he was ousted from his clinical appointment by the latter's rival, Esquirol, and retired from clinical medicine to a career in medical librarianship (Goldstein, *Console* 146-7).

⁴⁷⁴ *parálisis general*: A exhaustive compilation of the range of possible features seen in *parálisis general* are listed in chapter 29 of the *Tratado teórico-práctico de frenopatología ó estudio de las enfermedades mentales* (1876) by Juan Giné y Partagas. Giné was considered by Laín Entralgo to be, "nuestro primer psiquiatra del XIX." (Laín Entralgo, *Prólogo* XIII)

⁴⁷⁵ Galdós describes the psychiatric features of the disease comprehensively: The article of Ullman and Allison, "Galdós as Psychiatrist in *Fortunata y Jacinta*," is cited frequently in the

Two further degenerationist concepts that Maxi embodies relate to his sexuality. Ever since Morel's exposition of his version of degeneration theory in 1857, diminished fertility leading to extinction of the family line had been seen as an endpoint of the degenerative process. Many family members and friends believe Maxi to be impotent and he is cruelly reminded of their opinions. Fortunata sees no prospect of children by him, while Juanito repeats to Jacinta the description of Maxi as, "hombre que no es hombre," something we can assume that he would have learned from Fortunata herself.⁴⁷⁶ Galdós adds another layer of sexually-related degeneration when he has characters in the novel repeatedly refer to Maxi as one either of no

literature on Fortunata but is full of errors, and statements without supporting citations. They state that Galdós believed that Maxi had the capacity for recovery (Ullman and Allison 21, hereafter given as page numbers only), based on his experience of the Galeote trial of 1886, whereas Galdós clearly states in a newspaper article that after the evidence of Simarro and Escuder, "no queda duda de que Galeote [...] es un ser degenerado. Su demencia es hereditaria" (Pérez Galdós, *crimen* 87), assessments associated with incurable disease. Ullman and Allison will only concede Maxi, "possible congenital syphilis" (22), but follow their psychoanalytic inclinations to claim that Galdós, "draws on a deeper level of consciousness to show the compelling non-organic forces at work, and the functional nature of the psychosis" (22). To my mind, this refusal to acknowledge a physical description of Maxi that is saturated (almost excessively) with features of congenital syphilis is little less than perverse. They claim that Maxi's migraine headaches, respiratory difficulties and aching bones (all described in congenital syphilis) were "psychosomatic illnesses" (11), and go on to maintain that congenital syphilis at the time was, "the most commonly ascribed origin of schizophrenia" (11) omitting to add that schizophrenia as a nosological entity was not defined until 18 years later (1910) by Eugen Bleuler (see below). They are convinced that Maxi was not impotent (22), contrary to opinion of most critics and the unequivocal reference to impotence in Galdós's earlier drafts of the novel (see following note). They quote Ángel Garma's theory that Maxi was psychotic because he had not been breast-fed (17) and afford an unsupported statement about, "José Ido's pellagra-induced psychosis" (15). I have sought precedents for Ido's *borrachera de carne* in the pellagra literature of Galdós's time, in Huertas' "Hambre, enfermedad y locura: La aportación de Bartolomé Llopis al conocimiento de la psicosis pelagrosa" (2006) and in Llopis' original monograph *La psicosis pelagrosa* (1946) without being able to find any descriptions of psychotic episodes precipitated by the consumption of meat, which Galdós describes in José Ido de Sagrario so memorably. Kevin Larsen devotes a book chapter to a discussion of the possible causes of Ido's *mona de carne*, without being able to arrive at any firm conclusion (Larsen 151 ff.).

⁴⁷⁶ Maxi's impotence: Ribbans summarizes the literary debate about Maxi's virility and notes that not only does Fortunata deny that there is any chance of his fathering a child, but also that, "an early draft of the manuscript speaks unequivocally of his impotence." (Ribbans, *Fortunata* 94)

sexuality, *casto*, of feminine sexuality, *sifildón* (*Fortunata I* 467), or of homosexuality *marica* (*Fortunata I* 708).⁴⁷⁷ In contrast with the beginning of the nineteenth century when informed opinion saw unorthodox sexuality as a form of *monomanía erótica* and a social and religious infringement, in the latter half of the century it was medicalized as degeneration, a regression of inherited instincts and therefore as a perversion (Vázquez García, *homosexual* 144, 153-4).⁴⁷⁸

The acute episodes of Maxi's madness all seem to be related to contact with his idolized Fortunata, suggesting that his awareness of his sexual inadequacy is a precipitating agent (Ribbans, *Fortunata* 103). In contrast, when she is confined to *Las Micaelas* or when she leaves him for the first time, he appears to become more stable as he immerses himself in his pharmaceutical work and in his philosophical reading. Fortunata's final offer to become a loving and faithful wife, in exchange for his agreement to murder Juanito and Aurora, attractive as it might sound to others, is for Maxi a repeat challenge to his sexual capacity and leads to his final decompensation. In this, the soaring and poetic reflections that Galdós gives Maxi before the grave of Fortunata are ironic in the extreme,

Hice de ella el objeto capital de mi vida [...] no me quería [...] no me podía querer. Yo me equivoqué, y ella se equivocó [...] los dos estafamos

⁴⁷⁷ homosexual orientation: the medicalization and criminalization of variations in sexual orientation developed in the nineteenth century following Tardieu's *Étude médico-légale sur les attentats aux mœurs* (1857), (Huertas García-Alejo, *Perversión* 91; Vázquez García, *homosexual* 149).

⁴⁷⁸ perversion: Monlau, in the fifth edition of his very popular *Higiene del matrimonio* (1881), refers to, "algunos maricas, ú hombres de textura floja, de facciones mujeriles, voz afeminada, carácter tímido, y aparato genital poco desarrollado [...] son algunos monstruosidades" (Monlau, *matrimonio* 158). These externally visible characteristics are strikingly like those that Galdós gives Maxi. The cruel reactions of others to Maxi, which Galdós describes, imply that they subscribe to Monlau's interpretation.

recíprocamente. No contamos con la Naturaleza, que es la gran madre y maestra que rectifica los errores de sus hijos extraviados. Nosotros hacemos mil disparates, y la Naturaleza nos los corrige. (*Fortunata II* 540)

While Maxi calls Nature, “la gran madre y maestra” that, “nos los corrige,” Nature seems to have been less than maternal with her correction since it involves the death of Fortunata and Maxi’s descent into terminal madness. This is less Nature as a Great Mother and teacher than a Darwinian Nature that corrects indifferently by destroying those who do not conform to her rules.⁴⁷⁹ Maxi’s final existential triumph in retreating to the, “tálamo incorruptible de mi pensamiento” as he resigns himself to, “un palacio o en un muladar” is, at one level, transcendently poetic. At another level, however, many of Galdós’s readers would have appreciated this ironic confirmation of just how mad and detached from reality Maxi is, given the evil reputation of the asylum of Leganés at that time and the short survival time of many who entered it. They would have known that Maxi was headed for a *muladar* rather than a *palacio*, and would have wondered how long his other-worldliness would survive when surrounded by the grim reality that Galdós described in *La desheredada*.⁴⁸⁰

8) Mauricia La Dura: A Victim of Many Forms of Degeneration

⁴⁷⁹ indifferent Darwinian Nature: only four years after the publication of *Fortunata y Jacinta*, Thomas Hardy would publish his *Tess of the D’Urbervilles* with its similarly bleak view of Nature’s intentions. While Galdós’s epic novel has more richness and humor, Hardy’s final verdict that the, “gods had finished their sport with Tess” might equally apply to Fortunata or to Maxi since he seems to be one of, “those whom the gods wish to destroy.” I find that I am not the first to perceive links between Fortunata and Tess as Peter Goldman stresses a different one (Goldman, *trabajo* 187 n.16). V.S.Pritchett also links the representations of the two doomed heroines through their emotional power (Pritchett 154).

⁴⁸⁰ grim reality of Leganés: the dissemination of that notoriety was enhanced when Galdós’s close medical friend, Manuel Tolosa Latour, published part of the first chapter of *La desheredada* in *El Diario Médico* in 1882 (Schmidt 29).

Galdós's other great illustration of many forms of degeneration seen in Madrid society is Fortunata's friend and confidant Mauricia. We first read her name when Jacinta meets her daughter, the appropriately adorable Adoración, on her visit to the *cuarto estado* of the *corral* and learn that her mother is, "una mujer muy mala [...] la pusieron en las *Arrecogidas*, y se escapó" (*Fortunata I* 364). Caudet's editorial note tells us that the institution from which Mauricia escaped was *Santa María Magdalena*, specifically devoted to the confinement of prostitutes. Galdós goes on to have Mauricia's sister, Severiana, tell us that she has more recently been confined in another convent of *Las Micaelas*, but has also escaped from there by climbing over a wall.

We meet Mauricia after her return to *Las Micaelas*, where they are building the wall higher, after an episode of public drunkenness. She reminds her old friend Fortunata, recently admitted to be reformed in preparation for marriage to Maxi, of their earlier meeting at the "casa de la Paca" where they had both worked, clearly a brothel (*Fortunata I* 607). Galdós then describes Mauricia's most unusual physiognomy, "exactamente el mismo de Napoleón Bonaparte antes de ser Primer Consul [...] mujer singulísima, bella y varonil tenía el pelo corto." Her features exercise an, "indecible fascinación sobre el observador." She has an unusual voice, "bronca, más de hombre que de mujer y su lenguaje vulgarísimo, revelando una naturaleza desordenada, con alternativas misteriosas de depravación y de afabilidad" (*Fortunata I* 608), not the feminine type at all.

Galdós goes on to tell us that the nuns of *Las Micaelas*, clearly no strangers to the vagaries of social outcasts, considered her *lunática* for her alternating episodes of tranquility and uncontrollable fury, “como una locura” (*Fortunata I* 611). This is further confirmed when Fortunata has a chance to witness one of these terrifying episodes for herself and sees Mauricia calmed only by the experienced Sor Marcela, who interprets Mauricia’s rage in religious terms, “no eres tú la que hablas sino el demonio que anda dentro de la boca” (*Fortunata I* 614). Mauricia’s rage later reverts to the most abject wheedling as she begs a drop of Sor Marcela’s secret cache of cognac. At another time, Fortunata witnesses Mauricia’s transition from tearful grief to satanic laughter. Galdós represents Mauricia in a further episode of psychiatric disturbance when, in a passage of free indirect speech, he has her sleepwalking ⁴⁸¹ to the sanctuary where she tries to unite Christ as Host with the Virgin Mary and hears the Host speak to her. After this episode, she is found on the following morning in the convent garden, having drunk all Marcela’s cognac, “descalzada, las melenas sueltas, la mirada ardiente y extraviada, y todas las apariencias, en fin, de una loca” (*Fortunata I* 652). After a violent struggle, with a face which, “expresaba aún ferocidad y desorden mental,” she is thrown out of the convent only to cause another scandal when, drunk again, she collapses in the middle of a street.

We finally encounter Mauricia as she is dying in the house of her sister. Her death is described in great detail by Galdós, who appears to have been fascinated by the process of dying, as he accords to it the same kind of attention that he gives to the

⁴⁸¹ sleepwalking: this is one of the medical topics where Galdós’s acquisition of information from his medical friends is well documented. In a letter from his closest medical friend, Manuel Tolosa Latour, Galdós is invited to see, “un caso notable de sonambulismo” at the Hospital del Niño Jesús. Galdós replies with thanks, having missed the invitation, and begs, “Para otro día cítame con más anticipación.” (Schmidt, *Cartas* 35)

demise of Pepe Carrillo in *Lo prohibido* and to that of Alejandro Miquis in *El doctor Centeno*. His accumulated medical knowledge enables him to give his readers many indications of the cause of Mauricia's death. He gives her a tremor of the hands and breathlessness (*Fortunata II* 176), reduced level of consciousness (*Fortunata II* 194), and swollen abdomen and legs (*Fortunata II* 205). Soon afterwards, Lupe returns from the sick bed with the news that Mauricia has died with *más, más* on her lips, which, she is sure, was a call for *más Jerez* (*Fortunata II* 225).⁴⁸² There can be little doubt that Galdós intends us to understand that Mauricia dies in *delirium tremens*⁴⁸³ as a result of chronic alcoholism.

Mauricia is a figure of truly Galdosean ambiguity. She is dearly attached to Fortunata and, in some ways, a good friend. Having the same hard background of the *pueblo*, she knows the world that Fortunata has experienced but remains idealistic in affairs of the heart sharing Fortunata's distrust of bourgeois conventions that get in the way of genuine passion. On the other hand, she exacerbates Fortunata's infatuation with Juanito when she reveals that he is looking for her while she is in *Las Micaelas* and that he has prepared a seduction suite for her next to Maxi's house, "Te ha armado una trampa en la cual vas a caer" (*Fortunata I* 665). There is almost the

⁴⁸² *más Jerez*: Knowing that Galdós read and adored Shakespeare (Berkowitz 182), it is difficult not to relate Mauricia's death to that of another hero who died with a call for sherry on his lips, Falstaff, *Hostess*: "...then I felt to his knees, and so upward, and upward, and all was as cold as stone." *Nym*: "They say he cried out of sack [sherry]." *Hostess*: "Ay, that a' did." (*Henry V* II iii 25). The descriptions of both deaths are indirect.

⁴⁸³ *delirium tremens*: the original description is attributed to Thomas Sutton in 1813. More recently, Giné y Partagas paid considerable attention to its psychiatric aspects in his *Tratado teórico-práctico de frenopatología ó estudio de las enfermedades mentales* (1876) pp. 235, 471-3 where he lists, "las formas crónicas de alcoholismo se reducen á tres: la *demencia*, la *parálisis general progresiva* y la *pseudo-pelagra alcohólica*" (471, author's italics). In common with his contemporaries, Giné was not to know that the second of the three, a common condition and no doubt frequently associated with alcohol abuse, was in fact a late phase of syphilitic infection. Given the lifestyle of Mauricia that Galdós portrays, she could well, like many of Giné's patients, represent both.

malicious pleasure of the procuress in the way she savors the inevitability of Fortunata's future adultery. Even on her deathbed, she counsels Fortunata to be true to her heart, *caiga el que caiga*, knowing full well where Fortunata's affections lie (*Fortunata II* 180). Galdós seems to represent Mauricia's friendship as one alternating between the roles of bosom friend and *Celestina*.

In the terms of the hygienists of Galdós's day, Mauricia was morally and physically degenerate. Her episodes of violent mania and repentant depression leave little doubt that, as he keeps reminding us with the word *loca*, that he intends us to understand that Mauricia is mentally disturbed. Madness, as we have seen, was widely considered to be due to hereditary degeneration, though her sister, Severiana, is a model of sanity and her daughter, Adoración, appears spotlessly virtuous, at the age that Galdós portrays her.⁴⁸⁴ Given Mauricia's history as a prostitute, it is even possible that she suffers from early stages of the acquired form of syphilitic *parálisis general progresiva* that Maxi inherits from one or both of his parents.

Accepted medical opinion was that prostitution was not only responsible for the dissemination of serious degenerative diseases,⁴⁸⁵ above all syphilis, that threatened the fabric of society (Hauser, *siglo 215*; Viñeta-Bellaserra 52), but that it was also associated with moral degeneration (Lancereaux, *alcoolisme* 37). Many

⁴⁸⁴ at the age that Galdós portrays her: this is important. For all we know, Mauricia might once have been an adorable child herself. A degenerationist might argue that though the idealized Adoración appears to be developing according to the best bourgeois values, it is too early to claim that she suffers from no hereditary taint. Her childhood perfections do not necessarily exclude the development of vice in adult life. Isidora and Eloísa might well have appeared equally perfect at the same age. For *homocronia* (Haeckel) and *inheritance at corresponding periods of life* (Darwin), see above.

⁴⁸⁵ serious degenerative diseases: the transition, in a progressively laical, positivist society, in which prostitution passed from being considered primarily as a moral offense to a medical and anthropological problem is reviewed by Rivère Gómez (21 ff.).

studies of European prostitution in the nineteenth century from Parent-Duchatelet (1836) onward had struggled to recognize the roots of the problem and how to control it. Characteristically they identify women as responsible for the problem and tend to disregard male responsibility, if only because it was even more difficult to control. Monlau recognized years earlier the relation between poverty and physical degeneration and that the latter was also associated with *degradación moral* (Monlau, *Remedios* 25). Poverty and prostitution, in the common view of the time, were linked with the problem of alcoholism (Campos Marín & Huertas, *social* 274). Alcohol is described by Morel as an example of an environmental cause of degenerative mental disturbance (Morel, *dégénérescences* 109), and Lunier links it with madness and suicide (Lunier, *boissons* 321 ff.). Alcoholism became the special study of Morel's most prominent pupil, Valentin Magnan (Magnan, *l'alcoolisme*), and later became the central paradigm of his reformulated, post-evolutionary version of degeneration theory (Campos Marín, *Alcoholismo* 60). In 1878 Lancereaux attributes much alcoholism to hereditary influences and associates it with crime and with physical and moral degeneration, citing Magnus Huss (1849) as an authority (Lancereaux, *alcoholisme* 36-37). Hauser labeled it in 1884 as, "una de las enfermedades sociales degenerativas" and correlated its increase with the availability of cheap, distilled liquors (Hauser, *siglo* 210-11). Illustrating this, Galdós reveals that Mauricia's craving is not for wine but for *aguardiente* and cognac. The relation of alcoholism to degeneration is further emphasized in 1877 when the anarchist-physician García Viñas quotes Morel that, "la embriaguez, á más de la locura y el suicidio, produce [...] séres completamente degenerados" and goes on to adduce in support the work of a certain, "profesor Torinese" (García Viñas 134-5), an early

reference in Spain to the investigations of the Italian criminologist, Cesare Lombroso of Turin.

In her study of the novel, Puentes Feris emphasizes how shameful public drunkenness was considered at the time and how reticent Juanito, Ido de Sagrario and Estupiña were about admitting any incapacity related to alcohol. This is reflected in Guillermina's profound contempt for the frequently inebriated condition of José Izquierdo (Puentes Feris 97-99). There was, furthermore, a double standard in public drunkenness (Puentes Feris 99-101) reflected by Galdós's portrayal of Izquierdo's unobtrusive alcoholic stupors as implicitly unexceptional, while Mauricia, as a drunken woman, he shows to be scandalous within *las Micaelas* and even more disturbing, as a threat to public order in a scene such as that of Mauricia in the *calle de la Comadre (Fortunata II 67)*. Alcoholism was widely believed to be passed on from mother to future generations as a progressive degeneration that included not only alcoholism but also a host of other conditions including idiocy, epilepsy, insanity and general paralysis (Giné y Partagás 463). In addition, alcoholic women were considered incompetent to look after their children and had to be separated from them, as Mauricia was from Adoración. The alcoholic transgression of the woman was considered a much graver offence than that of the man (Arenal 1885).⁴⁸⁶

To the degenerations of prostitution, alcoholism and madness may be added a fourth, that of sexual ambiguity, seen at the time as a perversion. In describing

⁴⁸⁶ greater offence in the woman: The pioneer social activist, Concepción Arenal, writes in *El Pauperismo* (1885), "El daño es todavía mayor cuando la mujer da el mal ejemplo ó le sigue, y hollando deber y honor, acompaña á su marido á las inmundas orgías, y en la borrasca de tantos excesos ni aun deja a los hijos aquella tabla de la salvación que se llama *la virtud de mi madre*." (Arenal, *obras completas* 292, author's italics)

Mauricia as a, “mujer singulísima, bella y varonil. Rostro [...] el mismo de Napoleón Bonaparte antes de ser Primer Consul” such that her, “voz era bronca, más de hombre que de mujer” (*Fortunata I* 607), there can be little doubt that he was portraying a woman at the masculine end of the spectrum. Galdós echoes the contemporary hygienist descriptions of, “algunas *marimachos* ó mujeres hombrunas (*viragines*) de costumbres masculinas, voz ronca” (Monlau, *matrimonio* 158), from which, a medical historian notes, “nacerán los futuros personajes de (la) [...] ”lesbiana” conceptualizad(a) como individuo(s) con cuerpo de varón y alma de mujer o viceversa” (Vázquez García, *homosexual* 151). Both were considered, at the time, to be perversions for which degeneration was postulated as a cause.⁴⁸⁷ According to opinions prevalent in Galdós’s time, therefore, the character of Mauricia that he creates, for all her honesty, directness and loyalty to Fortunata,⁴⁸⁸ can be considered as a compilation of degenerative processes. She represents many of the transgressional features that the middle-class tended to see in the more threatening aspects of the *pueblo* (Campos Marín & Huertas García-Alejo, *social* 281). It is characteristic of Galdós as an artist, however, that despite all this, he should give her an appealing character of, “indecible fascinación” that invites the reader’s interest and sympathy.

9) The Degeneration of Juanito

⁴⁸⁷ degenerative perversion: Magnan refers to, “les perversions sexuelles qui se montrent dans cette catégorie d’aliénés que l’on désigne sous le nom de dégénérés” (Magnan, *perversions* 4).

⁴⁸⁸ loyalty to Fortunata: Mauricia is devoted to Fortunata to the extent of wanting them to die together so that they could keep company in heaven. Fortunata, in turn, experiences deep feelings for Mauricia, especially on her expulsion from Las Micaelas and at her deathbed. Such attraction between a very feminine woman and a very masculine might suggest a lesbian emotional tension, at least on Mauricia’s part.

The above illustrations of what was understood as biological forms of degeneration were very much considered from the perspective of the professional middle classes, especially the *alienistas* and *higienistas* of the medical profession. As the increasingly organized *pueblo*⁴⁸⁹ theorized its critique of the *alta burguesía*, by which it felt itself exploited, degenerationist discourse also began to appear in the rhetoric of working class anarchists.^{490,491} At the 1881 congress of the F.T.R.E. (*Federación de Trabajadores de la Región Española*), they wondered if, “las condiciones morales y materiales en que vivimos los obreros [...] llegaría a la degeneración física, intelectual y moral de la raza humana” (A.I.T.-F.R.E. (*Asociación Internacional de Trabajadores-Federación Regional de España*), 62-63) and further blamed the, “pasividad culpable de la burguesía” (Redacción 1-2). An unnamed reviewer in 1887 of excerpts of *Sensación y movimiento* of Charles Feré that year claimed that, “el problema pasa de la fisiología a la sociología” and asked, “¿Por qué el Dr Feré no cita a las clases privilegiadas sin distinción de ningún género?” (Review 292-3). In the same year Anselmo Lorenzo⁴⁹² attacked the inadequacies of bourgeois hygienic measures and their preference for individual attention rather than a more sociological, group approach. He criticized the middle-class for not paying attention

⁴⁸⁹ increasingly organized pueblo: The First International (A.I.T.) held its congress in Barcelona in 1871, to be followed by the foundation of the P.S.O.E. (*Partido Socialista Obrero Español*) in 1879, the F.T.E. (*Federación de Trabajadores de la Región Española*), an anarchist confederation, after its first congress in Barcelona in 1881, and the U.G.T. (*Unión General de Trabajadores*) in 1882. In the latter year, “the union staged the first effective strike in Restoration Spain.” (Carr, *Spain* 447)

⁴⁹⁰ anarchists: though primarily constituted by the working classes, physicians like José García Viñas (1848-1931), author of *Apuntes para el estudio médico-higiénico de la miseria* (1877), were among their members.

⁴⁹¹ degenerationist discourse also began to appear in the rhetoric of [...] anarchists: this reaction is well summarized in the context of political ideology by Aldaraca, “All ideologies function in the service of political and economic goals, either to maintain and reinforce power of one class or group or, in the opposite case, to combat the status quo of the dominant class or group.” (Aldaraca 18)

⁴⁹² Anselmo Lorenzo Asperilla (1841-1914): one of the first Spanish anarchists. He participated in the Spanish section of the First International in 1871 and was editor in 1886-88 of the anarchist periodical *Acracia*.

to what he saw as fundamentally social problems whose solution, “la burguesía ha dejado de ser un sujeto histórico capaz de llevarla a efecto” (Girón, *Metáfora* 255-6). In the same vein, an anonymous essay in 1885 in *La Bandera Social* accused the *alta burguesía*, “vosotros sois ya la enervada raza, la degenerada especie, envilecida por la molición, corrompida y gangrenada por vuestro estúpido egoísmo” (*La lucha* 338). Galdós must have been well aware of this rhetoric and the justified resentments that lay behind it.⁴⁹³ Not only had he written the chapter *Una visita al cuarto estado* in *Fortunata y Jacinta*, that betrays first-hand knowledge of the living conditions of the *pueblo*,⁴⁹⁴ but he also placed, somewhat humorously perhaps, much anarchist rhetoric into the mouth of Juan Bou, the printer in *La desheredada*.

Given this background, we can see that the character that Galdós creates in Juanito is precisely the type on whom the attacks of the anarchists are focused.⁴⁹⁵ He is wealthy, privileged and intelligent but scrupulously avoids any useful leadership or productive labor⁴⁹⁶ in society, in a life devoted to the pursuit of a woman of the *pueblo*, who he is prepared to abandon on a whim. In sociological terms, he is truly,

⁴⁹³ justified resentments that lay behind it: Galdós fulminated in 1893 against those among Madrid’s society, “rodeados de injusticias, de desigualdades, de monstruosas aberraciones del sentido moral” in which, “la forma del Gobierno no resuelve nada” (Pérez Galdós, *Confusiones* 187), for the widespread injustices he saw and the indifference of the governing classes.

⁴⁹⁴ living conditions of the *pueblo*: the eminent historian of the nineteenth century, Manuel Tuñón de Lara, describes chapter IX of *Fortunata I*, *Una visita al cuarto estado* as, “un documento irremplazable para conocer las condiciones de la vivienda obrera en Madrid de aquellos tiempos” (Rodríguez-Puertolas 43). Details of the terrible living conditions in the *casas de vecindad*, which resembled the conditions we have come to associate with concentration camps, are reviewed by Huertas in his “Vivir y morir en Madrid: la vivienda como factor determinante del estado de salud de la población madrileña (1874-1923).” A vivid contemporary account, “Las guardillas y las casas de vecindad” appeared in *La Voz de la Caridad* in 1875.

⁴⁹⁵ attacks of the anarchists are focused: mindful, no doubt, of Marx & Engels’ exhortation in 1848 that, “the *bourgeoisie* is unfit any longer to be the ruling class in society, and to impose its conditions of existence upon society as an over-riding law.” (Marx & Engels 20-21)

⁴⁹⁶ scrupulously avoids any useful leadership or productive labor: Juanito’s over-indulgent parents, don Baldomero II and Barbarita, share responsibility for allowing him to grow up as such an idle good-for-nothing.

“degenerado [...] envilecido por la molice” with an *amor propio* that corresponds very well with his *estúpido egoísmo*. It may not be fortuitous that another feature of terminal degeneration, that of sterility, affects his inbred family.⁴⁹⁷ The degenerate Maxi and Mauricia have little control over their conditions; that of Juanito is chosen.

10) Conclusions

A detailed examination of aspects of *Fortunata y Jacinta*, therefore, shows that the novel includes several characters in whom the representation of social vice owes much to degeneration theory. I do not suggest that Galdós was only a degenerationist, for his interests were far too broad and his sympathies too wide to be encompassed by any particular medical theory. What I do maintain, however, is that Galdós, was influenced by prevailing medical conceptions of degeneration in the interpretation of social ills. Assuming the clinical detachment of the physician in his representations of the *vicios sociales* of tuberculosis, syphilis and alcoholism, and of the madness that forms a recurring theme in his novels, he assumed the medical metanarrative with which these vices were interpreted. With his keen interest in medicine and in diseases, mostly those that impinged on social life, and enjoying a circle of friends that included physicians, who were leaders their fields, he inevitably incorporated degenerationist ideas in his novels since they were part of the received

⁴⁹⁷ sterility [...] inbred family: with all her sweetness and delicacy, Jacinta cannot avoid involvement in the unresolved *conflicto dialéctico* of *Naturaleza/Sociedad, Pueblo/Burguesía*. She can be seen as, “representate de la burguesía y convencionalismo social, de lo artificial.” (Rodríguez-Puertolas 55)

medical wisdom of his time. The metanarrative of degeneration and the ethic of the physician were intrinsic to his aesthetic of the Naturalist novel.

Maxi and Mauricia share the tragic affliction of madness. Galdós provides a host of indications that he intends the reader to understand that the adult form of congenital syphilis is the cause of Maxi's degenerative state, and that the outcome is a predetermined one.⁴⁹⁸ Mauricia is a compendium of degenerations commonly attributed to the *pueblo* by a middle-class that saw its *buenas costumbres* threatened by her transgressions of prostitution, public drunkenness and sexual ambiguity. In the interests of social stability, these *vicios* had to be defined, confined and controlled. As a result of Galdós's sympathetic characterization, however, the reader learns to admire Mauricia's humanity and to sympathize with her plight. The *señorito* Juanito Santa Cruz, by contrast, has every advantage of nature and circumstances but is a charming, worthless drone, for whom the reader's sympathy is impossible. To the extent that they are representative of their three separate classes within society, Galdós the bourgeois, draws attention to the failings of his own class while implicitly enjoining understanding for the lives of the lower middle-class and the *pueblo*. He has transcended his original intention as a novelist in this great novel and extends his vision from the *clase media* to encompass and critique all levels of society. He creates fictional representations of the social vices of the *pueblo* and of the irresponsible follies of the privileged *alta burguesía* and shows them all threatening Spanish

⁴⁹⁸ outcome is a predetermined one: Whiston similarly avers, "Maxi's final act of removal from the everyday world [...] is in fact the last link of a chain which has formed the circular pattern of his life: his 'development' is illusory, since his committal to Leganés is only the formal social recognition of a madness that to some degree was always with him" (Whiston, *Determinism* 121) and that, "his situation is to that extent 'determined' by his physical and psychological condition" (Whiston, *Determinism* 117). Galdós's degenerationist contemporaries would have concurred.

society and its future. These follies and vices, in the view of many of Galdós's day, were seen as fundamentally degenerative in nature.

Chapter 7: Conclusions

Degeneration, as it was understood in the theory of the 1880s, is inherent in the four novels of this study. It first appeared in *La desheredada* as a feature of Galdós's *segunda manera* novels as a result of the influence of the Naturalism of Zola, epitomized by his *L'Assommoir* (1877), the preface to the second edition of *Thérèse*

Raquín (1868) and, as something of an afterthought, *Le Roman experimental* (1880). It should not be thought, however, that the importation of degeneration theory into Spain was a purely literary phenomenon, but rather that the literary was part of a larger intellectual influence emanating from France that included thinking in medicine and the social sciences. Galdós was influenced, therefore, not only by Zola's new vision of the Realist novel but also by currents of medical thought that had been circulating in Spain for over 30 years. Galdós's enthusiasm for the Hippocratic art led him to acquire from reading and from his many medical friends, the clinical metanarrative that he would need in order to represent some of the seamier sides of Madrid society, as the Naturalist vision demanded.

The evolution of degeneration theory, as has been made clear in the course of this dissertation, was a long one. Its arrival in Spain coincided with other ideas that affected the interpretation of the theory and that culminated in a fleeting nexus of concepts that would last for much of the 1880s, to be replaced later by others that would produce a strikingly different milieu. The decade was a unique event; Galdós's greatest novels could not have been written, as we now have them, either earlier or later.⁴⁹⁹ It was a decade in which Darwin's view of the human condition provoked acrimonious debate and became a marker of the ideological fault-line between religious conservatives and liberal positivists, which would widen with time. It was a period after the studies of heredity of Prosper Lucas of 1850 but before the rediscovery of Mendelian genetics in 1900, during which the mechanism of inheritance remained ill-understood and continued to be thought of purely in terms of

⁴⁹⁹ could not have been written [...] earlier or later: Baguley writes of literary genres that they, "are now generally recognized to be historical phenomena, subject to constant modification and amplification within the evolving processes of literary systems or combinations with their definite phases of inception, canonization, and renewal." (Baguley, *Nature* 18)

outward manifestations rather than as a result of hidden, underlying, genetic currents. It was years before Weismann's discovery (1883) of the barrier between somatic and germ cell lines was accepted, a discovery that would signal the beginning of the end for the Lamarckian concept of inheritance of acquired characteristics that was intrinsic to degeneration theory. Though degenerationist interpretations of society and reactions to social change would reach almost hysterical extremes in the later 1890s, exemplified by Max Nordau's *Degeneration* (1895), the scientific basis for them had been invalidated. It was a period after positivism had been widely accepted at the Restoration (Aranguren 164) but before disenchantment with its promises of endless human progress set in, accompanied by an increasing interest in more spiritual aspects of man. It occurred after the germ theory of disease had been propounded but before it was widely assimilated, after the foundation of the socialist and anarchist associations but before they had developed political momentum. It was after the recognition of delayed congenital syphilis, but before the responsible organism was recognized in 1905 and before that diagnosis could be reliably confirmed by the Wassermann reaction (1906).

The decade of the 1880s also saw the end of the domination of Continental psychiatry by French hereditary determinism and its degeneration theory. By the 1890s, the epicenter of psychiatry had moved to the German-speaking world as a result of the work of men such as Wundt,⁵⁰⁰ Kraepelin,⁵⁰¹ Bleuler,⁵⁰² Freud and Jung

⁵⁰⁰ Wilhelm Wundt (1832-1920): German physician, psychologist and philosopher, widely regarded as the father of experimental psychology.

⁵⁰¹ Emil Kraepelin (1856-1926): German psychiatrist regarded as the founder of modern scientific psychiatry, psychopharmacology and psychiatric genetics. A disciple of Wundt, he believed in the biological and genetic origins of much mental disease. He is credited with the unitary concept of the psychoses.

who were propounding entirely new classifications and psychological theories of the genesis of mental disease. Though Galdós's characters can and have been illuminated by the insights of psychoanalysis, this approach played no part in the positivist mental world in which Galdós wrote.⁵⁰³ On a personal plane, Galdós's faith in the promise and potential of the middle-class to create a better Spain dissolved in the face of his awareness of its self-interested dedication to the *status quo*.

Such, then, was the unique intellectual milieu of the 1880s in which Galdós composed his greatest works. It was paralleled by what was, in many ways, a unique combination of literary currents peculiarly combined in Galdós. Grafted on to the Realist tradition of Spanish literature with all its richness and sense of humor, of which he was proud, was the Naturalism of Zola, with its deterministic degeneration theory, and its challenging new Darwinian view of the human condition, shorn of any comforting anthropocentrism. Galdós saw himself as a moralist, who sought to teach by example in his novels,⁵⁰⁴ as well as to entertain. Though less judgmental in his novels than the views expressed in the writings of the hygienists and social thinkers of

⁵⁰² Eugen Bleuler (1857-1939): Swiss psychiatrist known for coining the terms schizophrenia and autism. At first a supporter of Freud's functional theories of the origin of mental disease, he later (1911) withdrew his support for psychoanalysis.

⁵⁰³ insights of psychoanalysis: Galdós's doctor and friend, Gregorio Marañón, later wrote that Galdós would have nothing to do with the Freudian approach to mental disease. (Marañón, *Elogio* 171)

⁵⁰⁴ Galdós as moralist: Antón del Olmet and García Carrafa in 1912 recorded the author's self-analysis, "Creo que la literatura debe ser enseñanza, ejemplo. Yo escribí siempre, excepto en algunos momentos de liricismo, con el propósito de marcar huella. *Doña Perfecta*, *Electra*, *La loca de la casa*, son buena prueba de ello. Mis *Episodios Nacionales* indican un prurito histórico de enseñanza" (Antón and García 93). In comparing novel writing with medicine in his self-analysis as a novelist, Galdós writes of, "fijándonos en la naturaleza moral antes que en la física" and confesses his envy of medicine such that he admitted, "considero [la ciencia hipocrática] llave del mundo moral" (Pérez Galdós, *Niñerías* vii-viii). Galdós's status as a moralist was very well appreciated by Menéndez y Pelayo, "Ha estudiado más en los libros vivos que en las bibliotecas [...] Sin ser historiador de profesión, ha reunido el más copioso archivo de documentos sobre la vida moral de España en el siglo XIX." (Menéndez y Pelayo, *Galdós* 125)

his day, he was no less concerned about the problems of the expanding urban underclass, the *vicios sociales degenerativos* of alcoholism, tuberculosis and syphilis, which threatened the fabric of the society he knew. As the chapter of *Fortunata y Jacinta*, *Visita al cuarto estado* shows, he had studied urban poverty at first hand and could appreciate the potential for civil unrest when the *masa obrera* became more organized and began to test its strength. He saw society from the perspective of the middle-class to which he belonged and, as in *Lo prohibido* and *Fortunata y Jacinta*, showed that degenerative processes both moral and organic were no strangers to its ranks. Combined with all this, Galdós gravitated to increasing ambiguity⁵⁰⁵ as he progressed from the confident assertions that frame *La desheredada* to the uncertainty that surrounds the conclusion of *Fortunata y Jacinta*, where the moral for society and the prospects for the future are much more in question. He thus presents us with a unique fusion of talents and influences at an equally unique juncture in the nineteenth century.

I do not see Galdós as a specifically degenerationist writer, but as one sensitive to the many ideas in the consciousness of the professional middle-classes in the 1880s, of which degenerationism was one.⁵⁰⁶ The idea was very unevenly assimilated in Spain and much less universally accepted than it was in France. Many physicians like José María Esquerdo and José García Viñas would use the hereditary deterministic aspects of the theory without necessarily acknowledging their origin in degeneration discourse. Esquerdo was the most prominent Madrid *alienista* of his

⁵⁰⁵ increasing ambiguity: Goldman has commented on the progressive *aesthetic of ambiguity*, which he sees in Galdós's more frustrated and disillusioned journalism, "in the last 15 years of the 19th century." (Goldman, *aesthetic* 99; Goldman, *Galdós* 9)

⁵⁰⁶ many ideas: liberalism (Clara Lida), positivism (Núñez Ruiz, *positivismo*) and Krausism (Denah Lida) were others.

day and studiously avoided the use of the term in his private clinical practice, though he let it drop in an article about a deceased patient in the later 1880s. In his forensic practice, however, his study of the family history and environment of those he defended in court owes everything to the degeneration theory of Morel and was quite explicit. His enthusiastic disciples José María Escuder, Luís Simarro and Jaime Vera expounded degenerationism in the courts even more openly. Degeneration theory was “in the air” in the 1880s and was a prevailing theoretical tool among intellectuals and medical men ⁵⁰⁷ for articulating views on the alcoholism/ tuberculosis/syphilis-prostitution /madness complex of social problems, all seen as a feature of urban poverty and the *cuestión social*. When these distasteful aspects of human behavior had to be considered, be it by hygienist or novelist, the concept of degeneration was a prevailing metanarrative that was at hand to be employed. Galdós, as part of his identification with the medical profession, adopted its ethic of caring detachment, in the face of what were considered the more scandalous forms of human misery, without which he could have been accused of being a mere *voyeur*. Physicians at their best, through their ethical demeanor, humanitarian ethic ⁵⁰⁸ and their grasp of the most up-to-date theories of the time such as degeneration theory, thus gave Galdós vital models for the poetics of his Naturalist novels in a way that no other profession could.

⁵⁰⁷ theoretical tool among intellectuals and medical men: Huertas describes, “the doctrine of degeneration, which arose through the definitive consolidation of bourgeois values in society.” (Huertas, *Madness I* 409)

⁵⁰⁸ humanitarian ethic: “Estos médicos son hombres maduros no solo por la ciencia en sí, sino por su contacto con la tragedia humana; saben de sus calamidades y, conociendo estas, saben también las causas de sus lacras. Son grandes observadores y conocedores del hombre por dentro y por fuera y, por ende, su filosofía de la vida está valorada bajo un aspecto más realista que el de otras profesiones.” (Rubin 69)

In the context of Galdós's sensitivity to, and interest in, the currents of medical thought ⁵⁰⁹ of his time, his confessed passion for medicine and for medical friends has been noted (Marañón, *Elogio* 171-2; Gordon, *medical*; Turner 442; Ullman & Allison 23). I believe that its extent has still not been fully appreciated, however, possibly because the majority of writers about Galdós lack the medical training that is helpful in recognizing the medical references, and partly because they may be unaware of the medical thinking of the 1870s and 1880s that was available to inform Galdós as he wrote. Galdós's enthusiasm for medicine was such that combined with his prodigious memory, he packed many descriptive details into his novels well beyond the minimal requirements of the narrative.⁵¹⁰ His love of detail is revealed by the extensive pharmacopea ⁵¹¹ quoted in *Fortunata y Jacinta*, his super-abundantly detailed account of financial speculation in *Lo prohibido*, his account of the evolution of the textile trade in Madrid in the 1840-1870s and in his bewilderingly complex genealogy of the Santa Cruz, Arnaiz, Trujillo and Cordero families in *Fortunata y Jacinta*. It also

⁵⁰⁹ interest in, the currents of medical thought: this is also apparent in Galdós's journalism where, "La ciencia más comentada por Galdós en estas cartas [to "La Prensa" of Buenos Aires 1883-1894] es la medicina." (Shoemaker, *cartas* 23).

⁵¹⁰ descriptive details: I am thinking particularly of the gratuitous information about the fluid withdrawn from the *barriga del zapatero* (*Fortunata II* 205) and of the fleeting, but arresting, description of post-stroke prosopagnosia (pathological inability to recognize faces) in José María Bueno de Guzmán at the end of *Lo prohibido* (*prohibido* 591). Also unapparent to many readers would be the hint of syphilitic infection to account for the aphasia of Raimundo, already referred to, and the combination of kleptomania with senile *locura faldamentaria* of Serafín also in *Lo prohibido*. The latter two features seen in (syphilitic) general paralysis of the insane are listed in Jaime Vera's monograph in which he describes GPI patients, "los enfermos se convierten en urracas; todo lo esconden" (Vera, *parálisis* 60) and, "la degradación moral también suele alcanzarlos" (Vera, *parálisis* 61). Whether or not these fictional representations can be considered to be of syphilis is debatable, of course, but the text does suggest the kind of sources from which Galdós, as medical enthusiast, may have culled these unusual clinical pictures. Vera's monograph on general paralysis of the insane was published in 1880, well before *Lo prohibido*. Almost 40 years after the publication of the novel, Bravo Moreno, on analysing mental pathology in Galdós's fictional characters, suggested epilepsy or early GPI to account for Serafín's kleptomania, without even mentioning the character's *locura faldamentaria* (Bravo Moreno 38).

⁵¹¹ extensive pharmacopea: more than 60 different drugs and preparations have been listed (Pérez Bautista 210 n.373). The thesis-catalogue of Vozmediano (1981) has already been mentioned.

appears in his clinical representations of the death from tuberculosis of Alejandro Miquis, the mania and *delirium tremens* of Mauricia la Dura and the congenital syphilis and general paralysis of the insane of Maxi Rubín. For all the broad sweep and vision of his writing, Galdós loved the detail that added to the sense of authenticity that characterizes his narratives and he appears driven to include many medical details beyond the knowledge of many laymen.⁵¹²

Reflecting his enormous creativity, Galdós's use of the degeneration theory *motif* varies greatly in the four novels of this study. In the first, *La desheredada*, the theme of inherited madness and detachment from reality forms the axis of the entire work, from the raving insanity of Tomás Rufete in the first chapter to the all-or-nothing self-destruction of Isidora in the last. There seems to be no relief from Isidora's obsession with nobility and she can be seen as being doomed from the very beginning. This sense of hereditary determinism, amplified by the presence in the family of the gullible-eccentric *canónigo*, the weak-minded brother Pecado and the abnormal child Riquín seem directly inherited from Zola, Morel and from Prosper Lucas. Familial madness is more subtly represented in *El doctor Centeno*, where the frank but mostly harmless madness of the Isabel de Godoy, with her conviction of transmigration to her of the soul⁵¹³ of her dead sister Piedad, is confirmed by the opinion of that same *canónigo* who appears in the preceding novel. In Alejandro Miquis, familial madness takes the form of detachment from reality and *locura crematística* such that Alejandro, as with Isidora and her bequest from her uncle,

⁵¹² beyond the knowledge of many laymen: this may be part of the explanation for the astonishing reluctance among so many commentators to identify Maxi Rubín's delayed congenital syphilis, which Galdós goes to almost excessive lengths to suggest to the reader.

⁵¹³ transmigration [...] of the soul: the theory of *metempsychosis* is found in Plato (Archer-Hind, 285)

rapidly squanders the inheritance from his aunt and descends into the abject poverty that kills him.

In *Lo prohibido*, Galdós indulges in an analysis of a pathological family history clearly derived from the concept of hereditary determinism that is the hallmark of degeneration theory. The entire Bueno de Guzman family is flawed by a range of physical and psychiatric disturbances from which only the idealized Camila contrives to escape. Rafael's account of the family history, with its lunatics confined in asylums, its *diátesis neuropática* and its, "singularidad constitutiva que viene reproduciéndose de generación en generación" is reminiscent of the medical genealogy that was presented by degenerationist medical expert witnesses at contemporary criminal trials such as those of Otero in 1880 and Garayo in 1880 (Conseglieri and Villasante 219). The *locura crematística* of Eloisa leads her to a more gentrified form of the prostitution to which Isidora descends. José María's neurotic obsession causes him to degenerate physically as well as morally, as he declines to his early death. The chronic health problems of Rafael and Raimundo also appear to have elements of degeneration, and the apparently eccentric kleptomania of Serafín may have a more sinister interpretation, as noted above.

In the last of the four novels, *Fortunata y Jacinta*, Galdós creates a picture of Maxi almost certainly intended to represent delayed congenital syphilis and he combines it with the paranoid, hallucinating psychosis known to be associated with its cerebral involvement, general paralysis of the insane. This is a most vivid example of hereditary determinism and, for all the drama and aspirations of his life, Maxi's fate is sealed from the very beginning; his degeneration to permanent madness is

inevitable.⁵¹⁴ Maxi also suffers from detachment from reality, as he ruefully realizes at Fortunata's grave, reflecting, "la tragedia básica de España" (Zahareas 30).⁵¹⁵ Mauricia's fate seems almost as certain as she succumbs to chronic alcoholism and the madness linked with it.

The four novels have different social ranges.⁵¹⁶ While *La desheredada* and *El doctor Centeno* focus on the lower middle-class, *Lo prohibido* focus is on the moneyed upper middle-class, and *Fortunata y Jacinta* seems to span almost all stations of Madrid society. It may be questioned how useful Galdós's expression of *la clase media* really was. While he seemed to have had the vigorous *media burguesía* in mind in 1870 when he wrote his manifesto in the *Observaciones sobre la novela contemporánea en España*, by the time he came to write his Naturalist novels, his social range had widened considerably. Galdós included in his novels the poor, like Ido de Sagrario and Felipe Centeno in *El doctor Centeno*, who were forced to beg in the streets, and Moreno-Isla in *Fortunata y Jacinta*, who was on terms of familiar conversation with the king. Apart from the *marquesa* de Aransis in *La desheredada*, however, there are no characters from the old aristocracy, but with the exception of that disappearing class,⁵¹⁷ almost all other levels in society are represented. One is

⁵¹⁴ inevitable degeneration: In the recently published *Mapping the Social Body. Urbanization, the Gaze and the Novels of Galdós* (2010), Collin McKinney devotes several pages (124-8) to Maxi's degenerative condition, while avoiding mention of syphilis altogether.

⁵¹⁵ tragedia básica de España: "En la novela [*Fortunata*] hay muchos que sufren o que parecen ridículos precisamente porque no pueden o no saben aceptar la realidad. Además, era ésta, para Galdós, la tragedia básica de España. Partiendo de un fuerte sentido histórico, Galdós frecuentemente señalaba la necesidad de una visión realista de la vida." (Zahareas 30)

⁵¹⁶ range: Carr quotes David Cecil on the concept of range of social class that a novelist chooses to depict. He asserts that attempts by writers such as Dickens and Forster to portray characters from outside the social range of their experience are doomed to failure. (Carr, *view* 187)

⁵¹⁷ with the exception of that disappearing class: Menéndez y Pelayo noted this characteristic of Galdós's novelistic world in 1897, "La mayor parte de las novelas de este grupo [la segunda fase] [...] son peculiarmente madrileñas, y reproducen [...] la vida del pueblo bajo y de la clase

inclined to sympathize with Unamuno's comment ⁵¹⁸ that the category of the *clase media* in Galdós is so diffuse that, "ni es media ni es apenas clase" (Unamuno 353), and that, "nos refleja la muchedumbre, más que la sociedad española, y más que española, madrileña" (Unamuno 357). It would appear that Galdós's interest in virtually all levels of Madrid society outran his initial intention to focus on a more narrowly-defined middle-class.

The evolution from the novel of 1881 to that of 1886-7 seems to be associated with a greater space for ambiguity. In contrast with the confident pleas for the value of education in *La desheredada* and, its illustration in a negative sense in *El doctor Centeno*, there is an increasing willingness to leave questions unresolved, like the veracity of José María's memoirs following the *deus ex machina* appearance of the notorious *fabulista* amanuensis, José Ido de Sagrario, as editor at the end of *Lo prohibido*. Even more, in *Fortunata y Jacinta*, any increased *rapprochement* between the *masa obrera* and the *burguesía* at the end of the novel is doubtful.⁵¹⁹ The Santa Cruz have an heir, it is true, but given the obsessive and overprotective love of Jacinta, and the probable distance of a less-than-adequate father, it is more than likely that the *Delfinito* will grow up to be as spoiled and self indulgent as Juanito.⁵²⁰ By the end of the novel, it is an open question as to whether life for most of the

media de la capital; puesto que de las costumbres aristocráticas ha prescindido Galdós hasta ahora." (Menéndez y Pelayo, *Galdós* 118)

⁵¹⁸ Unamuno's comment: one must be cautious about taking Unamuno's criticism entirely at face value, as his text implicitly criticizes Galdós for not subscribing to his (Unamuno's) agenda. Baroja records that Unamuno disliked Galdós, "Unamuno no quería a nadie, como de costumbre, pues bastante tenía con atender a su gigantesca estimación de sí mismo [...] hablaba mal de Pérez Galdós," while admitting that he himself [Baroja], detested Unamuno. (Baroja, *I* 238)

⁵¹⁹ *rapprochement* [...] is doubtful: "la burguesía y el pueblo, tras unos breves períodos de acercamiento, habían roto, bajo el pretexto burgués de defender unos principios de orden y moralidad, toda posibilidad de convivencia." (Caudet, *introducción* 63)

⁵²⁰ spoiled and self indulgent: this point is also well made by John Sinnigen.

characters has really changed apart from Maxi whose admission to Leganés has been hastened, from Juanito who has lost the respect of his family and from Ballester who has lost his job at the Samaniego pharmacy.⁵²¹

The extension of the degenerative process in the four novels, from the lower middle-class/lower classes in *La desheredada* and *El doctor Centeno* to include the *alta burguesía* in *Lo prohibido* and *Fortunata y Jacinta* may be correlated with Galdós's failing faith in the capacity of the middle-class for the leadership necessary to solve society's problems. In his *Episodio nacional, Los apostólicos* (1879), Galdós was able to write a paean to the enterprise of the Madrid merchant class represented by Benigno Cordero (grandfather of Jacinta), "La formidable clase media, que hoy es el poder omnimodo que todo lo hace y deshace, llamándose política, magistratura, administración, ciencia, ejército nació en Cádiz [...] que brotado había como un sentimiento [...] incontrastable del espíritu nacional." (Pérez Galdós, *Obras completas* 111). By the end of *Fortunata y Jacinta*, however, the delicate and self-serving generation of the Santa Cruz is compared unfavorably with the vigorous and fertile good health of the *pueblo*, represented by Fortunata. Even later, when Galdós gave his *Discurso Académico* in 1897, his view of the middle-class, "enorme masa sin carácter propio," was bitter,

la llamada clase media, que no tiene aún existencia positiva,⁵²² es tan sólo
informe aglomeración de individuos procedentes de las categorías superior e

⁵²¹ Maxi [...] Juanito [...] Ballester: Goldman notes that every one who comes into contact with Fortunata suffers for it since, "sembraba tantos males como bienes; porque detrás de sí dejó un rastro por el cual encontramos esparcidos los despojos de sus víctimas [...] Si era de veras un ángel, era también un ángel exterminador" (Goldman, *trabajo* 184). This would certainly hold true for Feijoo.

inferior, el producto [...] de la descomposición de ambas familias: de la plebeya que sube; de la aristocracia que baja. (Pérez Galdós, *sociedad* 178)

It is tempting to see a widening application of degenerationist discourse, whether conscious or not on his part, as Galdós's manner of articulating what he perceived as the decline (or perhaps even degeneration) of his class.⁵²³

It has been observed that little in Galdós's novels is coincidental and that events in the lives of individuals are mirrored, to some extent, in the life of society and the history of the nation.⁵²⁴ With this in mind a review of the main examples of degeneration in the four novels of this study shows many parallels with society at large, and with contemporary history. The raving madman in *Leganés*, Tomás Rufete, parodies the lunacies of government bureaucracy with the uncomfortable implication that much insanity lies outside the asylum, within the ruling classes. Isidora's entrenched social pretensions and detachment from reality are mirrored by the improvident luxury of the carriage-folk in the *Castellana*, who she takes at face value and so admires. Her *querer y no poder* is theirs and it makes her incapable of accepting Miquis's more-down-to-earth assessment of their, "trampas, fanatismo, ignorancia, presunción." Her pathetically immature brother, *Pecado*, is a reflection of

⁵²² no tiene aún existencia positiva: Galdós's disillusionment with the middle-class begins to make his sound strikingly like his critic, Unamuno (see above).

⁵²³ decline of his class: Clara Lida finds an eloquent account of Galdós's growing disillusionment with the *clase media* in her "Galdós y los *Episodios Nacionales*: una historia del liberalismo español." She describes the series as, "una historia del liberalismo español y una crónica de la *clase media*." (Clara Lida 61)

⁵²⁴ lives of individuals are mirrored [...] in the life of society and the history of the nation: this point is eloquently made by Glendinning, "All individuals inevitably contribute to the life of the society in which they find themselves and can 'influir personalmente en la suerte de la sociedad' [Pérez Galdós, *Observaciones* 128]. The portrayal of the virtues and vices of individuals is therefore an important element in the portrayal of society as a whole. A study of the psychology of an individual may help to explain collective as well as individual behaviour." (Glendinning 41)

poverty-related criminality and an emblem of future civil revolt. His placement of terrorist *petardos* and his ineffectual attempt to assassinate the king mirror contemporary historical events. On a larger historical scale, Isidora's moral fall as she gives herself to Joaquín Pez in the *calle del Turco* recalls the fall from the ideals of the 1868 Revolution, as her fall occurs at the site of Prim's assassination and the consequent demise of any hope for a new liberal monarchy (Ruíz Salvador 56-7).

The mad improvidence of Alejandro Miquis, with his preference for imaginative fantasy over reality may be partly a reflection of Galdós himself as a student in Madrid in the 1860s, "un personaje insoslayablemente autobiográfico" (Rodríguez, *Estudios* 90). Correa insists, however, that the novel is in the tradition of the picaresque tradition of satire of contemporary society (Correa 254). Similar failings in Madrid society are represented in *Lo prohibido* where the febrile *locura crematística* of the Bueno de Guzman, and the financial speculation required to underwrite it, are reflections of the follies of *la Corte*. In *Fortunata y Jacinta*, as Ribbans has observed, the main historical parallels are with the moral degenerate Juanito, whose, "fickleness, superficiality, glibness and egocentricity in his private life reflect attitudes which derive from a specific historical situation and which pervade Spanish politics" (Ribbans, *Contemporary* 112). In addition, the psychologically and physically degenerate Mauricia reflects part of the grim social reality of the time. In contrast with these characters, only Maxi "falls completely outside the scope of this particular socio-political parallelism" (Ribbans, *Contemporary* 113).

What, then, is the function of degeneration theory in the unique combination of influences that encouraged Galdós to write these Naturalist novels? I believe it to

be an intellectual tool, an explanatory metanarrative, acquired through Zola and from medical professionals in Spain and France, to come to terms with the most urgent and frightening social problems of Galdós's day.⁵²⁵ If it be the function of culture to impose meaning on the world and make it understandable, as Clifford Geertz asserts, then degeneration theory can be regarded as a meaning imposed on nineteenth century urban society to help its intellectuals come to terms with new and threatening phenomena. As a, "schematic world view upon which an individual's experiences and perceptions may be ordered" ("metanarrative"), degeneration theory clearly has the explanatory power that metanarrative provides, with its underlying motive, in the first instance, of intellectual control. The growing and uncomfortable awareness of the *pueblo* on the part of the middle-class, which had to be interpreted with accompanying guilt and fear is well described by Peter Goldman,

with the rise of positivism and social theory in the last half of the nineteenth century, a new consciousness beset the upper classes. In Madrid, they came to realize that beyond their shops and salons, beyond the fringes of their tree-lined neighborhoods, behind the Royal Opera and the Price Circus, there existed another world with values and lifestyles wholly different from theirs, a world characterized by crime and disease and deprivation. Its monuments were not palace and theatre but *casa de vecindad* and *taberna* where the hungry could kill their appetite with a glass of adulterated *aguardiente*.

⁵²⁵ frightening social problems of Galdós's day: Menéndez y Pelayo pays tribute to Galdós's novels as social documents, "Tienen estos cuadros [las novelas de la segunda fase] valor sociológico muy grande, que ha de ser apreciado rectamente por los historiadores futuros" (Menéndez y Pelayo, *Galdós* 119). Much of the impact of the Naturalist novel derives from its representations as social documents.

And so a new tension developed in Spanish society generated by guilt and later, as socialism and anarchism entered Spain, exacerbated by fear [...] Now it is not our contention that Galdós sat down and with conscious intent began to write about the grave problems threatening Spain. Rather, he wanted to write about Spain, and therefore was driven also to analyze her troubles.⁵²⁶ (Goldman, *Galdós* 11)

In the view of middle-class professionals and thinkers alike, urban Spain's most pressing and threatening troubles, attributed largely to the *masa obrera* or *pueblo*, formed the fearsome complex of alcoholism, tuberculosis and syphilis-prostitution (the latter an inseparable association). The *clase media's* intellectualization of its fear⁵²⁷ at this, "point in history, [after 1848 and 1871] when bourgeois society felt a structural threat for the first time" (Huertas, *Madness IV* 303) was expressed in the theory of degeneration. This, "ideological production, a complex process of conceptualizing a felt crisis in history" (Pick 54), is aptly summarized as, "the [intellectual] institutionalization of fear" (Chamberlin & Gilman xiv). The latter continue, "hope was looked after by the idea of progress, and seemed to be the tenor of the times. But fear-fear was contagious. It infected the air, and poisoned the wells."

⁵²⁶ Spain's troubles: Barja describes the mood of the Spain of Galdós's novels between *La desheredada* (1881) and *Misericordia* (1897), "Son años característicos. En ellos agonizaba una España vieja, ya desquiciada en la serie de luchas y de crisis por que había venido pasando a través de todo el siglo XIX, y una España más nueva [...] va formándose con dificultades y confusamente. Las novelas de Galdós acusan este estado de transición y de inseguridad." (Barja 349)

⁵²⁷ *clase media's* [...] fear: fear of the intentions of the *masa obrera* was being expressed as early as the late 1860s. In his article "Algunas consideraciones generales con motivo del proyecto de la ley sobre vagancia," Juan de Lorenzana wrote, "Ese cuarto estado [...] aspira al aniquilamiento de la bourgeoisie, como ésta procuró el de la aristocracia después de haber sido reducida a la impotencia por la monarquía absoluta." (Lorenzana 76)

The destabilizing influence of the poor and the mad and their threat to social order was one that had to be controlled,

Los pilares básicos sobre los que se apoyaba la estrategia común de sometimiento del loco y del pobre eran dos: la peligrosidad social y la moralización como proyecto pedagógico. El temor a las masas obreras, a las clases populares, es una constante de la literatura burguesa decimonónica sobre la cuestión social. En el imaginario burgués éstas aparecen como peligrosas, inmorales y predispuestas a la sublevación. El loco, por su parte [...] es ante todo un ser peligroso. (Campos Marín, *Psiquiatría* 55)

The theme of madness, which forms a common thread in the four novels studied, is also a social problem eliciting fear. Madness was associated with alcoholism (Lunier, *boissons* 321 ff.) and its link with neurosyphilis was beginning to be appreciated. The incidence of madness was seen to have increased greatly during the nineteenth century and was attributed to the increased stresses of “civilization,” which meant life in the expanding cities. Hauser’s analysis of the rates of insanity in various Western European countries and the facilities available for their care concludes that the facilities for treatment and custody of the mentally disturbed in Spain were so inadequate that most mad Spaniards were on the streets. They would thus have been more obvious in the public sphere and, in the light of their supposed danger, would have provided another motive for bourgeois apprehension.

From their frequency in his novels, the insane appear to have been of great interest to Galdós.⁵²⁸ He was doubtless aware of the theories of writers like Moreau de Tours, Morel and Lombroso that linked degenerative madness with genius and imagination.⁵²⁹ As a supremely imaginative man himself, who admitted to being more at home in the world of the imagination than in the real one, *la loca de la casa*⁵³⁰ was not only a familiar expression for the imagination in the Galdós household, but was also the title of his play of 1893. It crops up in a book of Ángel Pulido, as the title of chapter six, in which he warns, “[hoy] abundan esos monomaniacos de escuela, víctimas de un delirio, de una calentura de su imaginación [...] Con estas preocupaciones, la inteligencia padece hasta degenerar en la monomanía, cuando no en la manía misma” (Pulido, *Bosquejos* 198). Whether as a personal preoccupation, an aspect of his enthusiasm for medicine, or as a result of his perception of insanity in both the mad and in the supposedly sane, or any combination of these, madness, and the degenerationist interpretation that went with it, are some of his recurring themes.

⁵²⁸ the insane [...] great interest to Galdós: Menéndez y Pelayo observes, “Quien intente caracterizar su talento, notará [...] la atención que concede [...] en la pintura de los estados excepcionales de conciencia, locos, sonámbulos, místicos, iluminados y fanáticos.” (Menéndez y Pelayo, *Galdós* 125-6)

⁵²⁹ imagination and madness: this theme, and the authors quoted, are discussed by Huertas in “Madness and Degeneration, IV. The Man of Genius,” and by Milton Gold, “The Early Psychiatrists on Degeneracy and Genius.”

⁵³⁰ *la loca de la casa*: Robert Ricard has attempted, without success, to trace the origin of this common locution for the imagination. He finds the conjunction *imaginación-loco* and *imaginación-casa* in the writings of XVI century religious writers and mystics but not the full *imaginación-loca-casa* combination. He notes that the *loco-casa* pair is common in proverbial sayings in Spanish, while observing the rarity of the feminine form *loca*. He concludes that, “Tous les renseignements rassemblés ici ne permettent évidemment pas de préciser comment est née l’expression la loca de la casa pour désigner l’imagination. Mais ils définissent, au moins en partie, le contexte psychologique et littéraire au milieu duquel cette expression a pu surgir et se développer [...] si le féminin loca a fini par prévaloir, c’est sans doute simplement parce que le mot imagination lui-même est féminin, en espagnol comme en français.” (Ricard, 487-491)

As an imaginative writer of the first rank, Galdós was subject to innumerable influences and incorporated them in his work in a manner that changed dramatically in the course of his writing career. In the 1880s, the powerful new vision of Naturalism from France, fused with the Spanish tradition of Realism, incorporated three strands of degenerationist thought. The first was the medical thought that had filtered into Spain for many years while the second was transmitted in the works of Zola and his contemporaries, and the third was associated with early anarchism. Medical thinkers had been struggling with the threats of a radically changing urban society and had developed the metanarrative of degeneration in an attempt to make sense of it. Naturalism, the Realist literature of the primarily urban context, represents a response to these same social changes and the threatening health problems they brought with them. Physicians were intimately involved in the development of the degenerationist vision of society, for it was a narrative that was scarcely avoidable by any author who wished to address social problems. Both physicians and Naturalists set themselves the task of describing and interpreting the society of their day and their endeavors were interactive.⁵³¹ Illustrative of this interaction, Pardo Bazán wrote enthusiastically in 1883 about the application of science to literature in Naturalism, “una idea admirable con la cual soñé siempre: la unidad de método en la ciencia y el arte [...] la observación y experimentación se

⁵³¹ endeavors were interactive: a prime example would be the publication of part of the first chapter of *La desheredada* by Tolosa Latour in *El Diario Médico* in 1882 (Schmidt 29 n.2). Tolosa Latour's, “Siluetas contemporáneas. Pérez Galdós” in *La Época* of 26th March 1883 would be an illustration of influence in the reverse direction. Tolosa adds, “entre sus más entusiastas [lectores], cuenta á no pocos médicos de mucha fama.” The interchange, of course, goes well beyond the reciprocal relationship of literature with medicine since, “literary production is itself a form of social practice; texts do not merely reflect social reality but create it.” (Patterson 25)

aplican lo mismo a la novela que a los estudios anatómicos.”⁵³² (Bravo Villasante, *Vida* 91). Description is associated with conceptualization and this is a first step in the process of control,⁵³³ desire for control being an understandable response to the threat of destabilizing change.

Galdós’s connection with the medical profession has been referred to in the critical literature but has lacked analysis adequate to record the depth of Galdós’s identification with clinical medicine.⁵³⁴ His use of the metanarrative of degeneration theory has been referred to superficially, and sometimes erroneously, by others. The intention of this study has been to trace the evolution of the theory of degeneration in the nineteenth century and to make clearer the extent of Galdós’s use of the theory in his fictional representations. The aim has also been to relate his use of the theory to the degenerationist ideas prevalent in his time and to the social tensions that provoked them. It is my hope that this study will promote a deeper understanding of a hitherto neglected aspect of some of Galdós’s finest work.

⁵³² application of science to literature in Naturalism: the citation is from the letter to Marcelino Menéndez y Pelayo, 5 May 1883 (Bravo Villasante, *vida* 91). Bravo Villasante perceptively observes of Pardo Bazán, however, as Zola did, that, “La Pardo Bazán será positivista por el método, pero no por las creencias.” (Bravo Villasante, *vida* 89)

⁵³³ the process of control: Following the insights of Foucault, Jo Labanyi comments that, “the medical case study and the realist novel are similar in their biographical approach and in their anthropological illusion that knowledge (the archive) is control” (Labanyi, *Gender* 81). She continues, “in subjecting the everyday life of the family to scrutiny, the novelist also contributes to its pathologization as part of a surveillance programme based on the assumption that the key to social control is to make society describable” (Labanyi, *Gender* 87). The case study and the novel can be seen as, “discursive formations, which are seen as organized according to structures of dominance and subordination that replicate the structures of society as a whole and so allow for no external purchase that might make possible a reformation or even reversal of power relations.” (Patterson 261)

⁵³⁴ Galdós’s identification with clinical medicine: the strength of this identification is suggested by Tolosa Latour’s newspaper tribute, “tiene afecto hacia la medicina y los médicos [...] las escenas del *crup* en *León Roch* y la operación de *Teodoro Golfín*, el oculista, están estudiadas con exquisito cuidado y descritas de un modo sorprendente.” (Tolosa Latour, author’s italics)

Works Cited

a) Primary Sources

- A.I.T.-F.R.E. *Congreso obrero de la región española celebrado en Barcelona*.
Barcelona: 1882, in Álvaro Girón Sierra. "Metáforas finiseculares del declive biológico: Degeneracionismo y revolución en el anarquismo español (1872-1914)." *Asclepio* 51.1 (1999): 247-273. p. 253.

- Alas "Clarín," Leopoldo. "La desheredada. primera parte." *Los lunes de El Imparcial* 9 May 1881 in Leopoldo Alas "Clarín" *Galdós novelista*. Ed. y intro. Adolfo Sotelo Vázquez, Barcelona: Promociones y Publicaciones Universitarias S.A., 1991. 85-91.
- . "Lo prohibido (1)" *El Globo* 30 jun. 1885 in Leopoldo Alas "Clarín" *Galdós novelista*. ed. y intro. Adolfo Sotelo Vázquez, Barcelona: Promociones y Publicaciones Universitarias S.A., 1991. 139-147.
- Alfonso, Luís. "Crónica del lunes: La desheredada." *La Época* 7 Nov. 1881, p. 3.
- 3rd *Annual Report of the Poor Law Board*. Parliamentary Paper 1871, XXVIII p. 207 in Gareth Stedman Jones. *Outcast London: A Study in the Relationship between Classes in Victorian Society*. Oxford: Clarendon Press, 1971, p. 129.
- Antón del Olmet, Luís and Arturo García Carrafa. *Los grandes españoles: Galdós*. Madrid: Alrededor del Mundo, 1912.
- Arenal, Concepción. *El pauperismo*. (1885) collected in *Obras completas de D^a Concepción Arenal*. tomo décimoquinto, *El pauperismo*. vol. I, Madrid: Victoriano Suárez, 1897.
- Armangué y Tuset, José. *Estudios clínicos de neuropatología*. Barcelona: Sucs. de Ramírez y Cía. 1884.
- Arroyo, César E. *Galdós*. Madrid: Sociedad General Española de Librería, 1930.
- Artaud de Montor, Alexis-François. *Encyclopedie des gens du monde*. Paris: Treuttel et Würtz, 1833-1844.
- Baroja y Nessi, Pío. *Desde la última vuelta del camino*. 2 vols Madrid: Biblioteca Nueva, 1944.
- Barrier, François-Marguerite. *Tratado practico de las enfermedades de los niños arreglado á las lecciones del Dr. D. Antonio Mayner*. trad. Luis Oms y Garrigolas and José Oriol Ferreras, Barcelona: Imp. Ramón Indar, 1843.
- Beard, George M. "Neurasthenia, or nervous exhaustion." *The Boston Medical and Surgical Journal* 1869: 217-221.
- Begue de Presle, Mr. *El conservador de la salud ó aviso a todas las gentes acerca de los peligros...* trans. Felix Galisto y Xiorro, Madrid: Pedro Marin, 1776.
- Bendyshe, T. "On the Extinction of Races." (with following discussion) *Journal of the Anthropological Society of London* 2 (1864): xcix-cxiii.
- Bergier, Nicolas S. *Diccionario de teología IV*. 2^a ed. en castellano, trad. Antolin Monescillo, Madrid: Primitivo Fuentes, 1846.

- Bernard, Claude. *Introduction à l'étude de médecine expérimentale*. Paris: J.B.Ballière, 1865.
- Bertulus, Josephe-Évariste-Laurant, "Considérations sur les causes de la dégénération physique et morale du peuple des grandes villes, et sur les moyens d'y remédier." *Gazette Médicale de Paris*. 3. s., ii, (1847): 799-803, 819-824.
- . Observations et réflexions sur l'intoxication miasmatique considerée en général dans les différents états pathologiques que en résultent. Montpellier: Martel Ainé, 1843.
- Bigot, Charles. "Correspondencia de Paris." *Revista Contemporánea* 30 Apr. 1976: 236-243.
- . "Resumen de *L'Assommoir*." *Revista Contemporánea* Feb. 1877:408-409.
- Billiet, Alexis. *Influence de la constitution géologique du sol sur la production du crétinisme*. Paris, Masson, 1855.
- Boeckel, Eugène. "Dégénérescence." *Nouveau Dictionnaire de médecine et de chirurgie pratiques*. X, Ed. Sigismond Jaccoud, Paris: J.B.Ballière, 1872, 755-765.
- Bona, F.J. "Estadística de la enajenación mental." *El Siglo Médico* 17 (1870): 519-522, 596-600, p. 597, in Javier Plumed. "La etiología de la locura en el siglo XIX a través de la psiquiatría española." *Frenia* 4.2 (2004): 69-91, p. 80.
- Bouchut, Eugène y Armand Després. *Diccionario de medicina y de terapéutica médica y quirúrgica: comprendiendo el resumen de toda la Medicina y de toda la Cirugía*. trans. A. Pedro Espina de la 3ª ed. francesa, Madrid: [s.n.], Bailly-Baillière, 1878.
- Bravo Moreno, F. *Síntomas de la patología mental que se hallan en las obras literarias de D Benito Pérez Galdós. discurso leído en la sesión inaugural del curso de 1922-1923 en la Sociedad de Psiquiatría y Neurología*. Barcelona: Imprenta particular del Instituto Mental de la Santa Cruz, 1923.
- Brierre de Boismont, Alexandre-Jacques-François. "Directions for the Establishment and Government of a Lunatic Asylum." (1836) trans. E. Quincey Sewell, *Transactions of the Medical Society of the State of New York* 3 (1837): 238-298.
- Brockett, Linus P. "Cretins and Idiots." *The Atlantic Monthly* Feb 1858.
- Buchez, Philippe-J-B. *Introduction à la science de l'histoire*. 2 vols., 2^{ième} ed., Paris: Guillaumin, 1842.

- . "Rapport fait á la Societ e m dico-psychologique sur le Trait e de d g n rescences physiques, intellectuelles et morales de l'esp ce humaine et des causes qui les produisent, par le docteur B.-A. Morel..." *Annales m dico-psychologiques* 3.3 (1857): 455-467.
- . and Ulysse Tr elat. *Pr cis  l mentaire d'hygi ne*. Paris: Raymond, 1825.
- Buffon, Georges-Louis L. *Histoire naturelle, g n rale et particuli re*. 36 vols. Paris: L'Imprimerie Royale, 1749-1778.
- Burton, Richard. *The Anatomy of Melancholy*. (1621): London, available at Project Gutenberg 26 Sep. 2010 at <http://www.gutenberg.org/files/10800/10800-h/ampart1.html>
- Cantlie, James. *Degeneration among Londoners*. (lecture delivered at the Parkes Museum of Hygiene 27th January 1885), London: Leadenhall Press, 1885.
- Cas l, Gaspar *Mal de la Rosa* (1762). Masnou, Barcelona: Tip. Laboratorios del Norte de Espa a S.A., 1936.
- Charcot, Jean-M. *Le ons sur les maladies de syst me nerveux faites   la Salp tri re. vol. III* eds. Babinski, Bernard, F r , Ginon, Marie & Gilles de la Tourette. Paris: Delahaye et Lecrosnie, 1887
- Chinchilla, Anastasio. *Anales hist ricos de la medicina en general y biogr fico IV*. Valencia: Jose Mateu Cervera, 1846.
- Corbet, K. Reply to letter of S. Anderson Smith. *The Lancet* 17 Aug. 1861, 170.
- Croquis. "Correo de la Semana." *El Pabell n M dico* 21 Aug. 1863: 361-364.
- Cuvier, Fr d ric. "D g n ration." *Encyclopedie des gens du monde*. Paris: Treuttel et W rtz, 1833-1844.
- Darwin, Charles. *The Descent of Man*. 2nd ed. (1874) intro. H. James Birx, New York: Prometheus Books, 1998.
- . *On the Origin of Species*. London: J. Murray, 1859.
- . *The Variation of Animals and Plants under Domestication*. 2 vols. London: John Murray, 1868.
- Darwin, Erasmus. *Zoonomia or, the Laws of Organic Life*. London: J. Johnson, 1794.
- D chambre, Am d e. *Dictionnaire encyclop dique des sciences m dicales*. 100 vols. Paris: G. Masson Libraire de l'Acad mie de M decine, 1864-1889.
- "The Degeneration of Race." *The Lancet* 22 Dec. 1860, 619-620.

- “Dégénérescence.” *Nouveau dictionnaire classique d’histoire naturelle*. Paris: A.Royer, 1846.
- “Dégénération.” *Cours complet d’agriculture ou Dictionnaire universel d’agriculture*. Ed. Abbé Rozier, Paris: Libraires Associés, 1734-1792.
- “Dégénérer Jardinage” *Encyclopédie. Dictionnaire raisonné des sciences, des arts et des métiers*. 28 vols, Ed. Denis Diderot and Jean d’Alembert. Paris: Briasson, 1751-1776.
- Donadío y Puignau, Delfín. *Diccionario de la lengua castellana...* Barcelona: Espasa y compañía, 1890-1895.
- Doutrebente, Gabriel. “Études généalogiques sur les aliénés héréditaires.” *Annales médico-psychologiques* 2 (1869): 197-237, 369-394.
- Down, John Langdon Haydon. “Observations on an Ethnic Classification of Idiots.” *London Hospital Reports*. 3 (1866): 259-262. reprinted in *Archives of Neurology* 25 (1971): 89-90.
- Engels, Friedrich. *The Condition of the Working-Class in England in 1844*. trans. Florence Kelly Wischnewetzky, London: Swan Sonnenschein & Co, 1892.
- . “The Part Played by Labour in the Transition from Ape to Man” (1876) in Friedrich Engels *The Origin of the Family, Private Property and the State*. intro. Evelyn Reed, New York, Pathfinder Press, 1972.
- Escartín y Lartiga, Eduardo. *El triunfo de la anarquía*. Madrid: Bruno del Amo, 1922
- Escuder, José María. “Autopsia de Garayo (a) Sacamantecas.” *La Vanguardia* 21 May 1881, pp. 3-4.
- . “Locos lúcidos.” *Revista General de Legislación y Jurisprudencia* 63 (1883): 5-349.
- . *Locos y anómalos*. Madrid: Sucesores de Rivadeneyra, 1895 in Assumpció Vidal Parellada *Luís Simarro y su Tiempo*. Madrid: Consejo Superior de Investigaciones Científicas, 2007, p. 49. (Also quoted by Villasante *Leganés* 14)
- . *Plus ultra*. Madrid: Est. Tip. G. Pedraza, 1890.
- . *Quemas y crímenes*. Valencia: imp.de E. Pascual, 1881.
- Esquerdo y Zaragoza, José María. “Locos que no lo parecen.” *El Anfiteatro Anatómico Español* 8.173 (1880): 69-72 (31 mar 1880), subsequently published in *Frenia* 8 (2007): 229-241.

- . *Locos que no lo parecen. Garayo el Sacamantecas*. Madrid: Imprenta del Hospicio, 1881.
- . "De la locura histérica." *Revista Clínica de los Hospitales* 1 (1889): 1-9, 274-281, 337-340.
- . "Preocupaciones reinantes acerca de la locura. Conferencia dada en el Ateneo de Internos de la Facultad de Medicina de Madrid el día 5 de diciembre de 1878.." reprinted in *Revista Española de Investigaciones Sociológicas* 47 (1989): 301-317.
- . "Prólogo." in Jaime Vera. *Estudio clínico de la parálisis general de los enajenados*. Madrid, Moya y Plaza, 1880.
- . "Prólogo." in Victoriano Garrido y Escuin. *La cárcel ó el manicomio. Estudio médico-legal sobre la locura*. Madrid: José María Faquineto, 1888.
- Eulenburg, Albert. *Diccionario enciclopédico de Medicina y Cirugía prácticas*. Madrid: Est. Tip. Sucesores de Rivadeneyra, 1889-1891.
- Fabre, Antoine-François. *Diccionario de los diccionarios de medicina franceses y extranjeros*. Madrid : [s.n.], Imp. española, 1859-1871.
- Farmacopea Oficial Española. 6ª Ed. Madrid: Tip. Gregorio Estrada, 1884.
- Fernández Caro, Ángel. *Los deberes de la sociedad ante los intereses de la Higiene. Discurso leído en la sesión inaugural del año académico de 1886-1887 en la Sociedad Española de Higiene, celebrada el 27 de noviembre de 1886*. Madrid: Enrique Teodoro, 1886 in Ricardo Campos Marín, José Martínez Pérez & Rafael Huertas García-Alejo. *Los ilegales de la naturaleza. Medicina y degeneracionismo en la España de la Restauración (1876-1923)*. Madrid: Consejo Superior de Investigaciones Científicas, 2000. p. 159.
- Fodéré, François-Emmanuel. *Traité de médecine légale et d'hygiène publique ou de police de santé*. 2^{ième} ed., Paris: Mame, 1813
- Fournier, Alfred J. *La syphilis du cerveau. Leçons cliniques recueillies par E. Brissard*. Paris: G. Masson, 1879.
- . *La syphilis héréditaire tardive*. Paris: G. Masson, 1886.
- Foville, Achille-Louis-François (fils). "Paralyse Générale." *Nouveau Dictionnaire de médecine et de chirurgie pratiques*. vol. XXVI, Ed. Sigismond Jaccoud, Paris: J.B.Ballière, 1878.
- Fraser, Donald. "Spanish Asylums." *The Journal of Mental Science* 25 (1879): 347-358.

- Frégier, Honoré Antoine. *Des classes dangereuses de la population dans les grandes villes, et des moyens de les rendre meilleures*. Paris: J-B Ballière, 1840.
- García Guerra, Delfín and Victor Álvarez Antuña. "Del 'mal de la rosa' a la 'enfermedad de la miseria': La etiología social de la pelagra en la bibliografía médica asturiana de los siglos XVIII y XIX." *Dynamis. Acta Hispanica ad Medicinae Scientiarumque Historiam Illustrandam* 11 (1991): 197-238.
- García Viñas, José. *Apuntes para el estudio médico-higiénico de la miseria. Discurso leído para optar al grado de doctor en medicina y cirugía el 30 de octubre de 1876*. Málaga: Hijos de J. García Taboada, 1877
- Garrido y Escuin, Victoriano. *La cárcel o el manicomio. estudio médico legal sobre la locura*. prólogo José María Esquerdo, Madrid: José María Faquineto, 1888.
- Gelabert, Enrique. *De la prostitución, en sus relaciones con la Higiene, en el doble concepto de la profilaxis de la sífilis y de la reglamentación. Discurso leído en la sesión inaugural...en 14 de enero de 1886...Academia y Laboratorio de Ciencias Médicas de Cataluña*. Barcelona: Tip. N. Ramirez y C. in Ramón Castejón Bolea. "Las enfermedades venéreas: Moral y sexualidad en la Medicina Social española." in J. Atenza Fernández and J. Martínez Pérez *El Centro Secundario de Higiene Rural de Talavera de la Reina y la Sanidad española de su tiempo*. Toledo: Junta de Comunidades de Castilla-La Mancha. p. 151
- Gil Maestre, Manuel. *Los malhechores de Madrid*. Gerona: [s.n.], Paciano Torres, 1889.
- Giné y Partagas, Juan. *Tratado teórico-práctico de frenopatología ò estudio de las enfermedades mentales*. Madrid: Moya y Plaza, 1876.
- Gómez Ferrer, Ramón. *La herencia orgánica considerada principalmente bajo el punto de vista de la higiene*. MD diss. 1884 Ms. Ca 2538 (819) Biblioteca de Medicina, Universidade Complutense, Madrid 1884. Also published in installments in *Crónica médica (Valencia)* 8, (1884-5): no. 173, 146-149; no. 174, 173-178; no. 175 (missing from U.C. library); no. 176, 238-243; no. 177, 271-275; no. 178, 303-306; no. 179, 340-344; no. 180, 362-365; no. 182, 427-430; no. 183, 459-464; no. 184, 490-492.
- Goyanes, J. "Las Hurdes, foco de degeneración redimido (Degeneración racial)." *Genética, eugenesia y pedagogía sexual* 1 (1934): 411-423.
- "(Las) guardillas y las casas de vecindad." *La Voz de la Caridad* 1 Dec. 1875: 281-282.
- Guillemin, Jean B. A. "Dégénérescences des organes." *Dictionnaire classique d'histoire naturelle*. Paris: Rey et Gravier, 1824.

- Guislain, Joseph. *Lecciones orales sobre las frenopatías ó tratado teórico y practico de las enfermedades mentales*. (1852) trad. M. Carreras Sanchis and J. Torres Fabregat, Madrid: Imp. Enrique Teodoro, 1881.
- Gutiérrez Jiménez, Federico. *Profilaxis de la tuberculosis*. Madrid: Imp. J. Aguado, 1875 in Jorge Molero Mesa. *Estudios medicosociales sobre la tuberculosis en la España de la Restauración*. Madrid: Ministerio de Sanidad y Consumo, 1987, pp. 179-205.
- Hardy, Thomas. *Tess of the D'Urbervilles*. London. MacMillan, 1891.
- Hauptert, Joelle, Yves De Smet & Jean-Marie Spautz. "La théorie de la dégénérescence de Bénédic-Augustin Morel (1809-1873): inspireurs et thuriféraires" *L'information Psychiatrique* 80 no. 1 (2004): 43-49.
- Hauser, Philip. "La casa y el suelo en relación con las enfermedades." *Revista de España* 103 (1885): 237-253.
- . *Madrid bajo el punto de vista médico-social*. 2 vols., Madrid: Rivadeneyra, 1902.
- . *Memorias autobiográficas*. (1924) Ed. Juan L. Carillo, Sevilla: Universidad de Sevilla, 1990.
- . "El siglo XIX considerado bajo el punto de vista médico-social" *Revista de España* 101 no. 402-3 (1884): 202-24, 333-58.
- Hegel, Georg W.F. "The philosophical history of the world." (1830) in Georg W.F.Hegel *Lectures on the philosophy of world history. introduction: reason in history*. trans.H.B.Nisbet, intro. Duncan Forbes, Cambridge: Cambridge University Press, 1975.
- Hesiod: *Works and Days* trans. Hugh G. Evelyn-White, 14 mar 2009. http://ancienthistory.about.com/library/bl/bl_text_hesiod_worksanddays.htm.
- "Historia de los trabajos de la sociedad de antropología." *El Pabellón Médico* 3 no. 106, 21 agosto 1863, pp. 386, 390.
- Horace. *Odes* III, vi, 46-48 trans. Patrick Brantlinger in *Bread and Circuses. Theories of Mass Culture as Social Decay*. Ithaca: Cornell University Press, 1983, p.69.
- Hospital, M. le Dr. "Souvenirs retrospectifs de 1871." *Annales médico-psychologiques* 33 5.3 (1875): 11-18.
- Humphreys, Noel A. "A Biographical Sketch of William Farr." in William Farr. *Vital Statistics: A Memorial Volume of Selections from the Reports and Writings of William Farr, M.D., D.C.L., C.B., F.R.S.* ed. Noel A. Humphreys, London: Offices of the Sanitary Institute, 1885.

- Huss, Magnus. *Alcoholismus Cronicos, eller Chronisk Alkolsjukdom; ett bidrag till dyskrasiernas Kännedom, enligt egen och andras erfarenhet*. Stockholm, 1849 in Ricardo Campos Marin. *Alcoholismo, medicina y sociedad en España (1876-1923)*. Madrid: Consejo Superior de Investigaciones Científicas, 1997, p. 32.
- Hutchinson, Jonathan. "On the Means of Recognizing the Subjects of Inherited Syphilis in Adult Life." *Medical Times and Gazette* 11 Sep. (1858): 264-5.
- "Hydrotherapy in Insanity" editorial *Chicago Clinic Pure Water Journal* 19.11 (1906) p. 349. 15 Mar 2010 <http://books.google.com/books?pg=PA345&lpg=PA349&dq=Hydrotherapy+insanity&id=qxugAAAAMAAJ&hl=es&ots=f4GLLcLMJO#v=onepage&q=Hydrotherapy%20insanity&f=false>
- Iglesias, Pablo, Jaime Vera and García Quejido. *La clase obrera española a finales del siglo XIX*. Madrid: Comisión de Reformas Sociales, 1883, reissued Madrid: Edita ZERO, S.A. 1970, 1973.
- Ireland, William. "The History of the Hereditary Neurosis of the Royal Family of Spain." *The Journal of Mental Science* 25 (1879): 184-194.
- Jaccoud, Sigismond. "Encéphalite diffuse." *Nouveau Dictionnaire de médecine et de chirurgie pratiques*. vol. XIII, Ed. Sigismond Jaccoud, Paris: J.B.Baillière, 1870, p.190
- . ed. *Nouveau Dictionnaire de médecine et de chirurgie pratiques*. 40 vols., Paris: J.B.Baillière, 1864-86.
- Jacoby, Paul. *Études sur la sélection dans ses rapports avec l'hérédité chez l'Homme* Paris: Germer Baillière, 1881.
- Jimeno Agius, José. "Población de España." *Revista de España*. 18.415, 18.416 (1885): 333-368, 551-591.
- Laennec, René. "dégénération." *Dictionnaire des sciences médicales*. Ed. C.L.F. Panckoucke, Paris: Panckoucke, 1780-1884.né,
- Lancereaux, Étienne. *De l'alcoolisme et de ses conséquences au point de vue de l'état physique, intellectuel et moral des populations*. Paris: E. Donnard, 1878.
- . *A Treatise on Syphilis Historical and Practical*. 2 vols. trad. G. Whitley, London: The New Sydenham Society, 1869.
- . *Traité historique et pratique de la syphilis*. 2^{me} ed., Paris: Germer Baillière, 1875.
- . *Tratado histórico y práctico de la sífilis*. Madrid: R. Labajos, 1875.
- Lankester, Edwin Ray. *Degeneration: A Chapter in Darwinism*. London: Macmillan and Co., 1880.

- Lannelongue, Odilon. "Rachitisme." in *Nouveau Dictionnaire de médecine et de chirurgie pratiques*. vol. XXX, Ed. Sigismond Jaccoud, Paris: J.B.Baillière, 1881.
- Laorden y López, Andrés de. *Del hombre: su estado social y causas de la alteración de su salud con relación a la degeneración de la especie. Discurso inaugural que en la solemne apertura del curso académico de 1867 a 1868 leyó ante el Claustro de la Universidad de Valladolid el Dr. D. Andrés de Laóorden y López*. Valladolid: s.n., Imp. Garrido, 1867.
- Lee, Richard. "The Extinction of Races." *Journal of the Anthropological Society of London* 2 (1964): xcv-xcix.
- Legrain, Paul Maurice. *Hérédité et alcoolisme*. Paris, 1889 in Rafael Campos y Rafael Huertas, R. "Alcoholismo y degeneración en la medicina positivista española" *Revista de la Asociación Española de Neuropsicología* 12.41 (1992): p. 125.
- Long, Edward. *The History of Jamaica, Or, General Survey of the Antient and Modern State of that Island: With Reflections on Its Situation, Settlements, Inhabitants, Climate, Products, Commerce, Laws, and Government*. London: T. Lowndes, 1774.
- Lorenzana, Juan. "Algunas consideraciones generales con motivo del proyecto de la ley sobre vagancia." *Revista de España* I 1868: 76, in Francisco Caudet in Benito Pérez Galdós, *Fortuna y Jacinta*. 7ª ed. vol I, Ed. Francisco Caudet, Madrid, Cátedra, 2002, p. 315 n. 225.
- Lucas, Prosper. *On the Heredity of Mental Illness* (1885). ed. Charles D. Mellon, trans. Linda Forge Mellon, New Mexico: Genetics Heritage Press, 1996.
- . *Traité de l'hérédité naturelle dans les états de santé et de maladie du système nerveux avec l'application méthodique des lois de la procréation au traitement général des affections dont elle est le principe*. 2 vols., Paris: Baillière, 1847-1850.
- "La lucha por la vida." *Bandera Social* 13 Sep. 1885 qtd. Diego Núñez ed. *El darwinismo en España*. Madrid: Editorial Castalia, 1969, p. 338.
- Lunier, Jules Joseph Ludger. "De l'Augmentation progressive du chiffre des aliénés et ses causes." *Annales médico-psychiatriques* 3 (1870): 20-33.
- . *De l'Influence des grandes commotions politiques y sociales sur le developpement des maladies mentales*. Paris: Savy, 1874.
- . "Du rôle que jouent les boissons alcooliques dans l'augmentation de nombre de cas de folie et de suicide." *Annales médico-psychiatriques* 5.7 (1872): 321-358.

- Magnan, Valentin. *De l'alcoolisme, des diverses formes du délire alcoolique et de leur traitement*. Paris, 1874 in Rafael Campos y Rafael Huertas, R. "Alcoholismo y degeneración en la medicina positivista española." *Revista de la Asociación Española de Neuropsicología* 12.41 (1992) p. 125.
- . *Des anomalies, des aberrations et des perversions sexuelles*. Paris: Delahaye & Lecroisnier, 1885.
- . "Considerations generales sobre la locura (de los hereditarios ó degenerados)." *El Siglo Médico* 34 (1887): 104-6, 118-120.
- . "Los Manicomios." *El Liberal* 4 Dec.1880, p. 3.
- Marx, Karl & Friedrich Engels. *Manifesto of the Communist Party*. (1848), trans. Samuel Moore & Frederick (sic) Engels (1888) 22 dec 2010 <http://www.marxists.org/archive/marx/works/download/pdf/Manifesto.pdf> p. 25.
- Mata, Pedro. *Tratado de medicina y cirugía legal teórica y práctica*. 2 vols., 3ª ed. Madrid: Bailly-Bailliere, 1857.
- Maudsley, Henry. "Los medios de preservarse de la locura." *Revista Europea* 24 Jan. 1875: 407-415 (part 1).
- Maunsell, Henry. "Report of the Obstetric Practice of the Wellesley Female Institution during the year 1832." *Edinburgh Medical and Surgical Journal*, 40.117 (1833): 295-303.
- Méndez Alvaro, Francisco. *De la actividad humana en sus relaciones con la salud y el gobierno de los pueblos: Discurso leído ante la Real Academia de Medicina de Madrid [...] el año de 1864*. Madrid: M. Rojas, 1864.
- . "La beneficencia como una solución de la cuestión social." *El Siglo Médico* 21 Sep 1856 in Ángel Bahamonde Magro & Julián Toro Mérida. *Burguesía, especulación y cuestión social en el Madrid del siglo XIX*. Madrid: Siglo Veintiuno de España Editores, S.A., 1978, p. 209-12.
- Menéndez Pelayo, Marcelino. "Benito Pérez Galdós considerado como novelista." *Estudios de crítica literaria* 5ª serie, Madrid: Tip. Revista de Archivos (1908): 83-128.
- . *Historia de los heterodoxos españoles*. 3 vols, Madrid: Librería católica de San José, Sancho-Tello, 1880-81, in Hans Hinterhäuser *Los "Episodios Nacionales" de Benito Pérez Galdós*. Madrid: Editorial Gredos, 1963, p. 9.
- Mesa, Rafael de. *Don Benito Pérez Galdós: Su familia.-sus mocedades, su senectud*. Madrid: Juan Pueyo Luna, 1920.
- Monlau, Pedro Felipe. *Elementos de higiene privada*. 3ª ed. Madrid: Lib. Moya y Plaza, 1864.

- . *Elementos de Higiene privada o Arte de Conservar la salud del individuo*. 5ª ed. Madrid: Aribau y Cia., 1875.
- . *Elementos de higiene pública*. 2 vols., Madrid: Imp. Pablo Riera, 1847.
- . *Estudios superiores de higiene pública y epidemiología (curso de 1868 á 1869: lección inaugural)*. Madrid: Imp. Est. Rivandeneira, 1868.
- . *Higiene del matrimonio ó el libro de los casados*. 5ª ed., Madrid: Imp., Est., Galv. Aribau y C.^a, 1881.
- . *Remedios del pauperismo. Memoria para optar al premio ofrecido por la Sociedad Económica Matritenses el 1 de mayo de 1845*. Madrid: Sociedad Económica, 1846.
- Moreau (de Tours), Jacques-Joseph. *Du hachisch et de l'aliénation mentale. Études psychologiques*. Paris: Fortin, Masson, 1845.
- . *Hashish and Mental Illness*. Eds. Hélène Peters and Gabriel G. Nahas, trans. Gordon J. Barnett, intro. Bo Holmstedt, New York: Raven Press, 1973.
- . "De l'identité de l'état de rêve et de la folie." *Annales Médico-psychologiques* 1 (1855): 373-408.
- . *La psychologie morbide dans ses rapports avec la philosophie de l'histoire*. Paris: Victor Masson, 1859.
- Morel, Bénédicte-Augustin. *Considérations sur les causes du gôitre et du cretinisme endémiques*. Nancy: Vagner, 1851.
- . *Du gôitre et du crétinisme, étiologie, prophylaxie, traitement, programme médico-administratif. Précédé d'une lettre de Mgr. Billiet, archevêque de Chambéry*. Paris: Asselin, 1864.
- . *Traité de dégénérescences physiques, intellectuelles et morales de l'espèce humaine et des causes qui produisent ces variétés maldives*. Paris: Balliere, 1857.
- . *Traité de maladies mentales*. Paris: Victor Masson, 1860.
- Moreno Fernández, Jose. "La tisis tuberculosa bajo el concepto social." in *Conferencias científicas leídas por los profesores en la Escuela de Medicina de Sevilla. Curso 1888-1889*. Sevilla: Imp. Díaz y Carbello, 1889, pp. 5-11, 13-20, in Jorge Molero Mesa. *Estudios medicosociales sobre la tuberculosis en la España de la Restauración*. Madrid: Ministerio de Sanidad y Consumo, 1987, pp. 53-67.

- Morgan, John E. *The Danger of Deterioration of Race from too Rapid Increase of Great Cities*. Paper read at the Social Science Congress, Sheffield, Tuesday October 10, 1865. London: Longmans, Green, and Co., 1866.
- Navarro, F.R. "Croquis del natural, por Naciso Oller y Moragas." *Revista de España* Feb. 1879, 571-572.
- Nietzsche, Friedrich W. *The Use and Abuse of History*. (1874) New York: The Liberal Arts Press, 1949.
- . *Ecce Homo*. Ed. Oscar Levy, trans. Anthony M. Ludovici, New York: The Macmillan Company, 1911, 19 Sep. 2009 http://books.google.com.floyd.lib.umn.edu/books?id=RPib_YcrjG4C&pg=PP6&output=text.
- Nordau, Max. *Degeneration*. 2nd ed., intro. George Mosse, Lincoln, University of Nebraska Press, 1993.
- Nysten, P-H. *Dictionnaire de médecine et des sciences accessoires a la médecine*. Paris: J.-A. Brosson, 1814.
- Ortega Munilla, José. *Cartas del Archivo de Galdós*. comp. Sebastián de la Nuez and José Schraibman, Madrid : Taurus, 1967, pp. 198-200.
- Panckoucke, Charles-Louis-Fleury. *Dictionnaire des sciences médicales*. Paris: Charles-Louis-Fleury Panckoucke, 1814.
- Pardo Bazán, Emilia. *La cuestión palpitante*. (1883) Ed. Rosa de Diego, Madrid: Biblioteca Nueva, 1998.
- . "To Marcelino Menéndez Pelayo." 5 May 1883. in Carmen Bravo Villasante *Vida y obra de Emilia Pardo Bazán*. Madrid: Revista de Occidente, 1962, pp. 90-92.
- Parent-Duchatelet, Alexandre-Jean-Baptiste. *De la prostitution dans la ville de Paris considérée sous le rapport de l'hygiène publique, de la morale et de l'administration*. Bruxelles: Hauman, Cattoir ^{et cie.}, 1836.
- Parrot, Joseph M.J. "Le Rachitis et la Syphilis héréditaire." in *Transactions of the Seventh Session of the International Medical Congress London 2nd-9th August 1881*. Vol. IV, Ed. Sir William MacCormac & George H. Makins, London: J.W. Kolckmann, 1881. pp. 35-40, 57.
- Payan, A. *Del empleo del yoduro de potasio en las enfermedades sifilíticas*. trad. José Diaz Oyuelos, Burgos: Imp. Lit. Lib. Azpiazu, 1847.
- Peratoner, Amancio (pseudonym of Gerardo Blanco). *El mal de Venus: estudio medio-popular sobre las enfermedades venéreas y sifilíticas*. Barcelona: Ramirez y Ca. 1881
- . *Los peligros del amor y del libertinaje*. Barcelona: José Miret, 1874.

- Pérez Galdós, Benito. *Los artículos de Galdós en "La Nación," 1865-1866*. ed. y estud. preliminar. William H. Shoemaker, Madrid: Insula, 1972.
- . *Los artículos políticos en la Revista de España, 1871-1872*. Eds. Brian J. Dendle and Joseph Schraibman, intro. Brian J. Dendle, Lexington: Dendle y Schraibman 1982.
- . "Carta a *La Prensa*." 18 Dec.1893. in William H. Shoemaker *Las cartas desconocidas de Galdós en "La Prensa" de Buenos Aires*. Madrid: Ediciones Cultura Hispánica, 1973, pp. 503-510.
- . "Conferencias de Emilia Pardo Bazán en el *Ateneo*." 15 Apr. 1887 in Benito Pérez Galdós *Obras Inéditas vol. II*. ed. and prólog. Alberto Ghirardo, Madrid: Renacimiento, 1923, 203-208.
- . "Confusiones y paradojas." 12 Jul. 1893. in Benito Pérez Galdós *Obras Inéditas vol. II*. ed. and prólog. Alberto Ghirardo, Madrid: Renacimiento, 1923, 183-195.
- . "*El crimen de la calle de Fuencarral, El crimen del Cura Galeote*." Ed. y prólogo Rafael Reig, Ediciones Lengua de Trapo SL, 2002.
- . "La cuestión social." 17 Feb.1885 in Benito Pérez Galdós. *Obras Inéditas vol. VI Crónica (1883-1885)*. ed. and prólog. Alberto Ghirardo. Madrid: Renacimiento, 1924, 147-156.
- . *La desheredada*. 2ª ed., Ed. Germán Guillón, Madrid, Cátedra, 2003.
- . *El doctor Centeno*. Ed. Isabel Ramón Ramón, Cáceres: Universidad de Extremadura, 2008.
- . *Ensayos de crítica literaria*. comp. & intro. Laureano Bonet, Barcelona: Ediciones Península, 1972.
- . *Fortuna y Jacinta*. 7ª ed., Ed. Francisco Caudet, Madrid, Cátedra, 2002.
- . *Memorias de un desmemoriado seguido de Crónica de Madrid*. prólogo Juan Van-Halen, Madrid: Visor Libros, 2004.
- . *Obras completas vol II*, Madrid: Aguilar, 1963 in Julio Rodríguez-Puertolas. "*Fortunata y Jacinta: Anatomía de una sociedad burguesa*." in Julio Rodríguez-Puertolas, *Galdós, burguesía y revolución*. Madrid: Ediciones Turner, S.A., 1975, 13-59. p. 20.
- . *Obras Inéditas: Crónica (1883-1886)*. vol. IV, ord. y prólog. Alberto Ghirardo, Madrid: Renacimiento, 1924.
- . "Observaciones sobre la novela contemporánea en España." *Revista de España* 15.57 1870, 162-193 in Benito Pérez Galdós. *Ensayos de crítica literaria*.

- comp. & intro. Laureano Bonet, Barcelona: Ediciones Península, 1972, 115-132.
- . "Prefacio del Autor" Benito Pérez Galdós *Misericordia*. 3^a ed. Paris: Thomas Nelson and Sons, 1913.
- . *Lo prohibido*. Ed. James Whiston, Madrid, Cátedra, 2001.
- . "Prólogo." in Manuel Tolosa Latour. *Niñerías*. Madrid: Tipografía Manuel Ginés Hernández, 1889.
- . "Un Rey póstumo." 22 May 1885, Benito Pérez Galdós *Obras inéditas III. Política Española* ord. y prolog. Alberto Ghirardo, Madrid: Renacimiento, 1923, 135-146.
- . "Señor don Francisco Giner." 14th Apr. 1882. in "In memorium Galdós y Giner: una Carta de Galdós." Ed. Bartolomé Cossío. *Boletín de la Institución Libre de Enseñanza* 719 (1920): 60-62.
- . *La sociedad presente como materia novelable. Discurso leído ante la Real Academia Española, con motivo de su recepción*. Madrid: Tip. Viuda e Hijos de Tello, 1897 in Benito Pérez Galdós. *Ensayos de crítica literaria*. comp. & intro. Laureano Bonet, Barcelona: Ediciones Península, 1972, pp. 173-182.
- . *Torquemada en el purgatorio*. in Benito Pérez Galdós *La novelas de Torquemada*. Madrid: Alianza Editorial, 1970.
- Pidoux, H. *Estudios generales y prácticos sobre la tisis*. trans. Pablo León y Luque, Madrid: Carlos Bailley-Bailliere, 1873.
- Prichard, James Cowles. *A Treatise on Insanity and Other Disorders affecting the Mind*. London: Sherwood Gilbert and Piper, 1835.
- Pulido Fernández, Ángel. *Bosquejos médico-sociales para la mujer*. Madrid: Víctor Saiz, 1876.
- . *Estado actual de la Ciencia Frenopática y sus relaciones con el Derecho Penal*. Madrid: Imp. de Revista de Legislación, 1883 p. 20, in Luís Maristany. "Lombroso y España: Nuevas consideraciones." *Anales de Literatura Española* 2 (1983): 361-381, 8 Feb. 2010, http://rua.ua.es/dspace/bitstream/10045/7392/1/ALE_02_15.pdf, p. 371.
- . and Manuel Tolosa Latour. "De Carabanchel al Paraíso." *El Siglo Médico* 29 (1882): 336-67, 433-34, 448-49, 466-67, 497-99, 514-15, 529-30.
- Redacción. "Pasado, presente y porvenir de las clases proletarias." *La Federación Igualadina* 1883 4 1-2, in Álvaro Girón. "Metáforas finiseculares del declive biológico: Degeneracionismo y revolución en el anarquismo español (1872-1914)." *Asclepio* 51.1 (1999): 247-273. p. 253.

- Régis, Emmanuel. *La Folie à Deux ou Folie Simultanée avec observations Recueillies à la Clinique de Pathologie Mentale (Asile Sainte-Anne)*. Paris: J-B Ballière et Fils, 1880.
- Review. "Sensación y movimiento." *Acracia* 20 (1887): 292-5 in Álvaro Girón. "Metáforas finiseculares del declive biológico: Degeneracionismo y revolución en el anarquismo español (1872-1914)." *Asclepio* 51.1 (1999): 247-273. p. 253.
- Rey, Maximien. *Dégénération de l'espece humaine et sa régénération*. Paris: Germer-Baillière, (1863).
- Rousseau, Jean-Jaques., *Discours sur l'Origine et les Fondements de l'Inégalité Parmi les Hommes*. (1754) Ed. F.C.Green. Cambridge: Cambridge University Press, 1941.
- . "Préface" *Narcisse*. [s.l.] (1753).
- Rozier, Jean-Baptiste François (Abbé). *Cours complet d'agriculture théorique, pratique, économique*. 10 vols. Paris: Libraires Associés, 1793.
- Sáez de Melgar, Faustina. *La cruz del olivar*. (1867) *Anales galdosianos anejo* Madrid: Ediciones cátedra, 1980.
- Salillas, Rafael. "Los locos delincuentes en España." *Revista General de Legislación y Jurisprudencia* 94 (1899): 117-142.
- Salmerón y García, Nicolás. "Mal de raza." *Los Lunes de El Imparcial* 9 Aug. 1886 in Cecilio Alonso Alonso. "Aspectos literarios del primer regeneracionismo (1890-1901)." *Alazet* 9 (1997): 9-33, p. 19.
- Savoyen, L. *Nouvelles études philosophiques sur la dégénération physique et morale de l'homme*. Paris: J. Hamel, 1854.
- Schopenhauer, Arthur. *The World as Will and Representation*. vol. I, trans. E.F.J. Payne, Mineola, New York: Dover Publications Inc., 1969. 19 Sep. 2009. <http://books.google.com/floyd.lib.umn.edu/books?id=pvnALfReokC&dq=The+world+as+will+and+representation>.
- Sereñana y Partagás, Prudencio. *La prostitución en la ciudad de Barcelona estudiada como enfermedad social y considerada como origen de otras enfermedades dinámicas, orgánicas y morales de la población barcelonesa*. Barcelona: Imp. Sucesores de Ramírez y Cía. 1882. 6 Feb. 2010. <http://www.ub.es/geocrit/pspingen.htm>.
- Shakespeare, William. *Henry V*. ed. J.H.Walter, London: Methuen & Co., 1960.
- Sinués de Marco, María del Pilar. *La mujer en nuestros días: Obra dedicada a las madres y a las hijas de familia*. Madrid: Jubera, 1878.

- Spencer, Herbert. "A Theory of Population Deduced from the General Law of Animal Fertility." *Westminster Review* 57, April (1852): 250-268.
- Sutton, Thomas. *Tracts on Delerium Tremens*. London, 1813 in Ricardo Campos Marín. *Alcoholismo, medicina y sociedad en España (1876-1923)*. Madrid: Consejo Superior de Investigaciones Científicas, 1997, p. 30.
- Taine, Hyppolyte. *Nouveaux essais de critique et d'histoire*. Paris: L. Hachette et Cie, 1865 in Leo Weinstein, *Hippolyte Taine*. New York: Twayne Publishers, Inc., 1972, p. 59.
- Tardieu, Ambroise. *Diccionario de higiene pública y salubridad*. Madrid: [s.n.], Imp. de F. Maroto é hijos, 1882-1885.
- . *Étude médico-légale sur les attentats aux mœurs*. 5^{ième} ed. Paris: J.B. Baillière (1867).
- Thompson, William (Lord Kelvin). "On the age of the Sun's Heat." *Macmillan's Magazine* 5, 5 Mar. 1862: 388-393.
- Tissot, Samuel Auguste André David. *L'onanisme. Dissertation sur les maladies produites par la masturbation* [S.l]: [s.n.], Lausanne: Antoine Chapius 1760. trans. *El onanismo. Tratado de las enfermedades mentales producidas por la masturbación y su tratamiento*. Barcelona: Ignacio Estivill 1814, 1828, 1845, 1877 in Javier Plumed. "La etiología de la locura en el siglo XIX a través de la psiquiatría española." *Frenia* 4.2 (2004) p. 83 n. 56.
- . *Enfermedades de nervios producidas por el abuso de los placeres del amor y exceso de onanismo*. trad. José Ramón Senra y Parada, Madrid: Imp. Calle de la Greda, 1807.
- Tolosa Latour, Manuel. "Siluetas contemporáneas. Pérez Galdós." *La Época* 26 Mar. 1883, p. 3.
- Trotter, Thomas. *An Essay, Medical, Philosophical, and Chemical, on Drunkenness and its Effects on the Human Body*. London: Longman, Hurst, Rees and Orme, 1804.
- Valera, Juan. *Apuntes sobre el nuevo arte de escribir novelas*. Madrid: M. Tello, 1887.
- Vallejo-Nágera, Antonio. *Eugenesia de la hispanidad y regeneración de la raza*. Burgos: Editorial Española, 1937.
- Vera, Jaime. *Estudio clínico de la parálisis general de los enajenados*. prólog. José María Esquerdo, Madrid, Moya y Plaza, 1880.
- . "Locos que no lo parecen." *El Liberal* 16 May 1880: 3-4.

- Verdé-Delisle, "Dr." *De la degeneración física y moral de la especie humana, ocasionada por la vacuna.* trans. Félix Guerro Vidal, Madrid : Bailly-Baillière, 1855.
- Viñeta-Bellaserra, José. *La sífilis como hecho social punible y como una de las causas de la degeneración de la raza humana discurso pronunciado en la Sociedad Económica Graciense de Amigos del País en la sesión del 8 de marzo de 1885 por J. Viñeta-Bellaserra.* Barcelona: Estab.Tip. Edit. La Academia, 1886.
- Voisin, Auguste. "Continuation de la discussion sur la transmission héréditaire de l'épilepsie." *Annales Médico-psychologiques* 26.2 (1868): 114-125.
- . "Hérédité." *Nouveau Dictionnaire de médecine et de chirurgie pratiques.* vol. XVII, Ed. Sigismond Jaccoud, Paris: J.B.Baillière, 1873.
- Wallace, William. "Treatment of the venereal disease by the hydriodate of potash, or iodide of potassium." *Lancet* 36. 2 (1835): 5-11.
- Weismann, August. "On Heredity."(1883) in August Weismann *Essays upon Heredity and Kindred Biological Problems.* vol. I. 2nd ed. Ed. Edward B.Poulton, Selmar Schönland and Arthur E. Shipley, trans. Arthur E. Shipley, Oxford: Clarendon Press, 1891.
- Welch, Francis J. "Aortic Aneurysm in the Army, and the conditions associated with it." *Lancet* 2 (27 Nov.) (1875): 769-71.
- Weyler y Laviña, Fernando. *De la perfección física y moral del hombre ó Defensa de la vacuna contra los principales cargos que le hace en Francia el Dr. Verdé-Delisle considerándola como causa de la supuesta degeneración física y moral del hombre.* Palma: Pedro José Gelabert, 1856.
- Williams-Freeman, John P. "The Effect of Town Life on the General Health, with Especial Reference to London." *The Sanitary Record. a Monthly Journal of Public Health* 11 (New Series) (1889): 49-52, 101-104, 215-217.
- Zola, Émile. *L'Assommoir.* New York: Boni and Liveright, 1924.
- . *Doctor Pascal.* (1893) trans. Ernest A. Vizetelly, Stroud: Sutton Publishing Company, 1989.
- ."Preface." *Thérèse Raquin.* 2^{ième} ed., Paris: Charpentier, 1868.
- .*Le Roman experimental.* Paris: Éditions du Sandre, 2003.

b) Secondary Sources

- Ackerknecht, Erwin H. "Diathesis in Medical History." *Bulletin of the History of Medicine* 36 (1982): 317-325.
- . "Hygiene in France, 1815-1848." *Bulletin of the History of Medicine* 22 (1948): 117-155.
- . *Medicine at the Paris Hospital*. Baltimore: The Johns Hopkins Press, 1967.
- . *A Short History of Psychiatry*. 2nd ed., trans. Sula Wolff, New York: Hafner Publishing Company, 1968.
- Alas "Clarín," Leopoldo. *Galdós, novelista* Ed. Adolfo Sotelo Vázquez, Barcelona: Promociones y Publicaciones Universitarias, S.A., 1991.
- Alberti López, Luís. "La medicina experimental y el Naturalismo literario." *Archivo Iberoamericano de Historia de la Medicina y Antropología Médica* 9 (1957): 3-66
- Aldaraca, Bridget A. *El ángel del hogar*. Chapel Hill, Department of Romance Languages, University of North Carolina at Chapel Hill, 1991.
- Alonso Alonso, Cecilio. "Aspectos literarios del primer regeneracionismo (1890-1901)." *Alazet* 9 (1997): 9-33.
- Álvarez Chamorro, Manuel. *Diccionario de medicina y Cirugía ó Repertorio general de Ciencias médicas*. Madrid: D.S. Compagni, 1851-1855.
- Álvarez González, R. "Tres textos sobre locura y normalidad en el XIX español." *Revista Española de Investigaciones Sociológicas* 47 (1989): 257-261.
- Alvarez-Uría, Fernando. *Miserables y locos: Medicina mental y orden social en la España del siglo XIX*. Barcelona: Clotet-Tusquets, 1983.
- Álvaro, L.C. & A. Martín del Burgo. "Trastornos neurológicos en la obra narrativa de Benito Pérez Galdós." *Neurología* 22.5 (2007): 292-300.
- Andreu, Alicia G. "Un modelo literario en la vida de Isidora Rufete." in Faustina Sáez de Melgar. *La cruz del olivar*. (1867), *Anales galdosianos anejo* Madrid: Ediciones Cátedra, 1980, pp. 7-16.
- Aranguren, José Luís L. *Moral y sociedad: introducción a la moral social española del siglo XIX*. 3^a ed. Madrid: Editorial Cuadernos para el Diálogo, S.A., 1967.
- Archer-Hind, Richard D. in Plato *Timaeus*. trans., intro. and notes Richard D. Archer-Hind, London: Macmillan and Co., 1888.
- Baguley, David. *Naturalist Fiction: the Entropic Vision*. Cambridge: Cambridge University Press, 1990.

- . "The Nature of Naturalism." *Naturalism in the European Novel. New Critical Perspectives*. Ed. Brian Nelson, New York: Berg, 13-26.
- Bahamonde Magro, Ángel. y Julián Toro Mérida. *Burguesía, especulación y cuestión social en el Madrid del siglo XIX*. Madrid: Siglo Veintiuno de España Editores, S.A., 1978.
- Barja, César. *Libros y autores modernos. Siglos XVIII y XIX*. Los Angeles: Campbell's Book Store, 1933.
- Batiles Torres Amat, Mariano. *Dissertatio Medica inauguralis quaedam de mania complesteus [...]*, Diss. University of Edinburgh, Edinburgh: J. Moir, 1827.
- Beck, Earl R. *A Time of Triumph and Sorrow: Spanish Politics during the Reign of Alfonso XII 1874-1885*. Carbondale: Southern Illinois University Press, 1979.
- Beer, Gillian. *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction*. 2nd ed. Cambridge, Cambridge University Press, 2000.
- Bell, T.H. *Galdós and Darwin*. Woodbridge: Tamesis, 2006.
- Bénichou, Claude. "Enquête et réflexions sur l'introduction des termes dégénérere(r), dégénération, dégénérescence dans les dictionnaires et encyclopédies scientifiques françaises a partir du 17^{ème} siècle." in Pierre Louis ed. *Documents Pour l'Histoire du Vocabulaire Scientifique*. No. 5. Paris: Institut national de la Langue Française (C.N.R.S.), 1983.
- Berberis, Daniela S. "In search of an object: organicist sociology and the reality of society in *fin-de-siècle* France." *History of the Human Sciences* 16.3 (2003): 51-72.
- Berkowitz, H. Chonon. "Gleanings from Galdós' Correspondence." *Hispania* 16.3 (1933): 249-290.
- . *Pérez Galdós Spanish Liberal Crusader*. Madison: University of Wisconsin Press, 1948.
- Blanco, Aldo. "Dinero, relaciones sociales y significación en *Lo prohibido*." *Anales Galdosianos* 18 (1983): 61-72.
- Blanco-Aguinaga, Carlos. "On 'The Birth of Fortunata.'" *Anales galdosianos* 3 (1968): 13-24.
- Bly, Peter A. *The Wisdom of Eccentric Old Men: a Study of Type and Secondary Character in Galdós's Social Novels 1870-1897*. Montreal: McGill-Queen's University Press, 2004.

- Boix Martínez, Raquel. "Enfermedad y sociedad en la obra de B. Pérez Galdós." Diss. Universidad Complutense, 1994.
- Bollet, Alfred Jay. "Politics and Pellagra: The Epidemic of Pellagra in the U.S. in the Early Twentieth Century." *Yale Journal of Biology and Medicine* 65 (1992): 211-221.
- Bondeson, Jan. *A Cabinet of Medical Curiosities*. New York, W.W.Norton, 1997.
- Bonwit, Marianne. "Gustave Flaubert et le principe d'impassibilité." *University of California Publications in Modern Philology* 33.4 (1950): 263-419.
- Boring, Phyllis Z. "The Streets of Madrid as a structuring device in *Fortunata y Jacinta*." *Anales galdosianos* 13 (1978): 13-22.
- Bové, Paul A. "Discourse." in *Critical Terms for Literary Study*. Chicago: University of Chicago Press, 50-65.
- Bravo Villasante, Carmen. *Vida y obra de Emilia Pardo Bazán*. Madrid: Revista de Occidente, 1962.
- Brenan, Gerald. "Introduction" *The Spendthrifts*. Benito Pérez Galdós trans. Gamel Woolsey, London: Weidenfeld and Nicholson Ltd., 1951.
- . *The Literature of the Spanish People*. 2nd ed. Cambridge, Cambridge University Press, 1953.
- Brown, Frederick. *Zola: A Life*. New York: Farrar Strauss Giroux, 1995.
- Cacho Viu, Vicente. *La institución libre de enseñanza.1. Orígenes y etapa universitaria (1860-1881)*. Madrid: Rialp. 1962, in Denah Lida. "Sobre el 'krausismo' de Galdós." *Anales galdosianos* 2 (1967): p. 21, n.6.
- Caldwell, Joseph G. "Congenital Syphilis: A Nonvenereal Disease." *American Journal of Nursing* 71.9 (1971): 1768-1772.
- Campos, Ricardo & Rafael Huertas. "Alcoholismo y degeneración en la medicina positivista española." *Revista del la Asociación Española de Neuropsicología* 12.41 (1992): 125-129.
- Campos Marín, Ricardo. *Alcoholismo, medicina y sociedad en España (1876-1923)*. Madrid: Consejo Superior de Investigaciones Científicas, 1997.
- . "Criminalidad y locura en la Restauración. El proceso del cura Galeote (1886-1888)." *Frenia* 3.2 (2003): 111-145.
- . "Psiquiatría e higiene social en la España de la Restauración." *I Congreso de la Sociedad de Historia y Filosofía de la Psiquiatría: Un siglo de psiquiatría en*

- España*. Madrid: Colección Salud Mental: Pensamiento y Práctica, (1994): 53-66.
- . "La sociedad enferma: higiene y moral en España en la segunda mitad del siglo XIX y principios de XX." *Hispania* 55.3 (1995): 1093-1112.
- . "La teoría de la degeneración y la medicina social en España en el cambio de siglo." *Llull* 21 (1998): 333-356.
- . "La teoría de la degeneración y la profesionalización de la psiquiatría en España (1876-1920)." *Asclepio* 51.1 (1999): 185-203.
- & Rafael Huertas. "La teoría de la degeneración en España (1886-1920)" *El darwinismo en España e Iberoamérica*. Ed. Thomas F. Glick, Rosaura Ruíz & Miguel Ángel Puig-Samper, Madrid: Ediciones Doce Calles, S.L., 1999, pp.231-248.
- . & Rafael Huertas García-Alejo. "El alcoholismo como enfermedad social en la España de la Restauración: problemas de definición." *Dynamis. Acta Hispanica ad Medicinae Scientiarumque Historiam Illustrandam* 11 (1991) 263-286.
- , José Martínez Pérez & Rafael Huertas García-Alejo. *Los ilegales de la naturaleza. Medicina y degeneracionismo en la España de la Restauración (1876-1923)*. Madrid: Consejo Superior de Investigaciones Científicas, 2000.
- Campos-Bueno, José J. "Art and Science in Sorolla's Painting *A Research in Dr. Simarro's Lab*." *Psychologia Latina* 1 (2010): 9-26.
- Cardoso Leão, Sylvia & Françoise Portaels."Tuberculosis 2007. Chapter I: History." 14 Mar. 2011, <http://www.tuberculosistextbook.com/tb/history.htm> p.8.
- Cardona, Álvaro. *La salud pública en España durante el trienio liberal (1820-1823)*. Madrid: Consejo Superior de Investigaciones Científicas, 2005.
- Carr, Raymond. "A new view of Galdós." *Anales galdosianos* 3 (1968): 185-189.
- . *Spain 1808-1939*. Oxford: Oxford University Press, 2000.
- Carter, A.E. *The Idea of Decadence in French Literature 1830-1900*. Toronto: University of Toronto Press, 1958.
- Cartron, Laure. "Pathological heredity as a Bid for Greater Recognition of Medical Authority in France, 1800-1830." *A Cultural History of Heredity II: 18th and 19th Centuries*. Berlin, 10-12 January 2003. Berlin: Max-Planck-Institut für Wissenschaftsgeschichte, 2003, 123-130.
- Casalduero, Joaquín. *Vida y obra de Galdós (1843-1920)*. 4^a ed. Madrid: Editorial Gredos, S.A., 1974.

- Castejón Bolea, Ramón. "Enfermedades venéreas en la España del último tercio del siglo XIX. Una aproximación a los fundamentos morales de la higiene pública." *Dynamis. Acta Hispanica ad Medicinæ Scientiarumque Historiam Illustrandam* 11 (1991): 239-261.
- . "Las enfermedades venéreas: Moral y sexualidad en la Medicina Social española." in J. Atenza Fernández & J. Martínez Pérez *El Centro Secundario de Higiene Rural de Talavera de la Reina y la Sanidad española de su tiempo*. Toledo: Junta de Comunidades de Castilla-La Mancha, (2001): 149-172.
- . "Las enfermedades venéreas y la regulación de la sexualidad en la España contemporánea." *Asclepio* 56 (2004): 223-241.
- . "Los médicos de la higiene: medicina y prostitución en la España contemporánea (1847-1918)." in "Prostitución y sociedad en España Siglos XIX y XX." *Bulletin d'Histoire Contemporaine de l'Espagne* 25 (1997): 73-86.
- Caudet, Francisco. "Fortunata y Jacinta: el 'naturalismo espiritual.'" en *Textos y Contextos de Galdós: Actas del Simposio Centenario de Fortunata y Jacinta*. Ed. John W. Kronik and Harriet S. Turner, Madrid: Editorial Castalia, 1994.
- . "Introducción" en Benito Pérez Galdós *Fortunata y Jacinta*. 7ª ed. Ed. Francisco Caudet, Madrid: Cátedra, 2003.
- . "Las grandes novelas." *Madrid en Galdós Galdós en Madrid*. Madrid: Comunidad de Madrid, 1988. pp. 271-88.
- . *Zola, Galdós, Clarín: El naturalismo en Francia y España*. Madrid: Ediciones de la Universidad Autónoma de Madrid, 1995.
- Chamberlin, J. Edward. & Sander L. Gilman. eds. *Degeneration: The Dark Side of Progress*. New York: Columbia University Press, 1985.
- Chamberlin, Vernon A. "The Blind and other Physically Handicapped Characters in the Novels of Benito Pérez Galdós." Diss. University of Kansas, 1957.
- Cleminson, Richard and Teresa Fuentes Peris. "'La mala vida:' Source and Focus of Degeneration, Degeneracy and Decline." *Journal of Spanish Cultural Studies* 10.4 (2009): 385-397.
- Coffin, Jean-Christophe. "Heredity, Milieu and Sin: the works of Bénédict-Augustin Morel (1809-1873)." *A Cultural History of Heredity II: 18th and 19th Centuries*. Berlin, 10-12 January 2003. Berlin: Max-Planck-Institut für Wissenschaftsgeschichte, 2003, 153-164.
- Coleman, William. *Death is a Social Disease: Public Health and Political Economy in Early Industrial France*. Maddison: University of Wisconsin Press, 1982.

- Comelles, Josep M. *La razón de la sinrazón. Asistencia psiquiátrica y desarrollo del Estado en la España contemporánea*. Barcelona: Promociones y Publicaciones Universitarias, 1988 in Rafael Huertas, Ricardo Campos & Raquel Álvarez. "Entre la enfermedad y la exclusión. Reflexiones para el estudio de la locura en el siglo XIX." *Historia Contemporánea* 16 (1997): 47-63, pp. 53-4.
- Conseglieri, Ana & Olga Villasante. "La imbecilidad como extensión de responsabilidad: El peritaje de Esquerdo en el proceso judicial de Otero." *Frenia* 7 (2007): 213-228.
- Copeland, Eva. "Homosocial Desire and Homosexual Panic in *Lo prohibido*." *Anales galdoseanos* 44/45 (2009/10): 11-25.
- Corbin, Alain. "L'hérédosyphilis ou l'impossible rédemption: Contribution à l'histoire de l'hérédité morbide." *Romantisme: Revue de la Société de Études romantiques* 11.31 (1981): 131-149.
- Cordones-Cook, J. "*Lo prohibido*, narrativa narcisista" *Anales galdosianos* 25 (1990): 35-43.
- Correa, Gustavo. "Galdós y la picaresca." *Actas del Primer Congreso Internacional de Estudios Galdosianos* Las Palmas: Cabildo Insular de Gran Canaria, 1977, 253-268.
- Corsi, Pietro. *The Age of Lamarck: Evolutionary Theories in France, 1790-1830*. trans. Jonathan Mandelbaum, Berkeley: University of California Press, 1988.
- Crissey John T. & Lawrence C. Parish. *The Dermatology and Syphilology of the Nineteenth Century*. New York: Praeger Publishers, 1981.
- Cruz, Jesús. *Gentlemen, bourgeois, and revolutionaries: Political change and cultural persistence among the Spanish dominant groups 1750-1850*. Cambridge: Cambridge University Press, 1996.
- Davis, Gifford. "The critical reception of naturalism in Spain before *La cuestión palpitante*." *Hispanic Review* 22 (1954): 97-108.
- "Descartes." Daniel Garber, *Concise Routledge Encyclopedia of Philosophy*. London: Routledge, 2000.
- Dendle, Brian. "Galdós, Zola y el naturalismo de *La desheredada*" en *Realismo y naturalismo en España en la segunda mitad del siglo XIX*. Ed. Yvan Lissorgues. Barcelona: Antropos, 1988. 447-459.
- , "Isidora, the Mantillas blancas, and the Attempted Assassination of Alfonso XII." *Anales galdoseanos* 17 (1982): 51-54.

- Quinn, Edward. "discourse." *A Dictionary of Literay and Thematic Terms*. New York, Checkmark Books, 1999.
- Dowbiggin, Ian R. "Back to the Future: Valentin Magnan, French Psychiatry, and the Classification of Mental Diseases, 1885-1925." *Social History of Medicine* 9.3 (1996): 383-408.
- . "Degeneration and hereditarianism in French mental medicine 1840-90: psychiatric theory as ideological adaptation." in *The Anatomy of Madness: Essays in the History of Psychiatry* vol I: People and Ideas. Eds. W.F.Bynum, Roy Porter & Michael Shepherd, London: Tavistock Publications, 1985.
- . "French Psychiatry and the Search for a Professional Identity: The Société Médico-Psychologique, (1840-1870)." *Bulletin of the History of Medicine* 63. 5 (1989): 331-355.
- . *Inheriting Madness: Professionalization and Psychiatric Knowledge in Nineteenth-century France*. Berkeley: University of California Press, 1991.
- Drachman, Julian M. *Studies in the Literature of Natural Science*. New York: MacMillan, 1930.
- Drinka, George F. *The Birth of Neurosis: Myth, Malady and the Victorians*. New York: Simon and Schuster, 1984.
- Durand, Frank. "The Reality of Illusion: *La desheredada*." *Modern Language Notes* 89.2 (1974): 191-201.
- Elizalde, Ignacio. "El naturalismo de Pérez Galdós" en *Realismo y naturalismo en España en la segunda mitad del siglo XIX*. Ed. Yvan Lissourges, Barcelona: Antropos, (1988): 469-481.
- Eoff, Sherman H. "Galdós in nineteenth.century perspective." *Anales galdosianos* 1 (1966): 3-9.
- . *The Novels of Pérez Galdós: the Concept of Life as a Dynamic Process*. Saint Louis: Washington University, 1954.
- Ernst, Waltraud. "Chapter 25. Personality Disorders: Social Section" in *A History of Clinical Psychiatry: The Origin and History of Psychiatric Disorders*. Ed. German E. Berrios & Roy Porter, New York: New York University Press, 645-655.
- Espinosa Iborra, J. *La asistencia psiquiátrica en la España del siglo XIX*. Valencia: Cátedra e Instituto de Historia de la Medicina, 1966.
- Esteban de Vega, Mariano. "La asistencia liberal española: beneficencia pública y previsión particular." *Historia Social* 13 (1992): 123-138.

- Etreros, Mercedes. "El naturalismo español en la década de 1881-1891." en Mercedes Etreros, María Isabel Montesinos & Leonardo Romero *Estudios sobre la novela española del siglo XIX*. Madrid: Consejo Superior de Investigaciones Científicas, (1977): 49-131.
- Fernández, Pura. *Eduardo López Bago y el naturalismo radical*. Amsterdam: Rodopi, 1995.
- . *Mujer pública y vida privada: del arte eunuco a la novela lupanaria*. Woodbridge: Tamesis, 2008.
- Flegel, Kenneth M. "Changing concepts of the Nosology of Gonorrhea and Syphilis." *Bulletin of the History of Medicine* 48.4 (1974): 571-588.
- Foucault, Michel. *Abnormal: Lectures at the Collège de France 1974-1975*. ed. Arnold I. Davidson, trans. Graham Burchell, New York: Picador, 2003.
- . *Discipline and Punish: The Birth of the Prison*. trans. Alan Sheridan, New York: Vintage Books, 1995.
- . *The History of Sexuality: An Introduction, Volume I*. New York: Vintage Books, 1990.
- Fox, Matthew. *Roman Historical Myths: The Regal Period in Augustan Literature*. Oxford: Oxford University Press, 1996.
- Franz, Thomas R. "Galdós the Pharmacist: Drugs and the Samaniego Pharmacy in *Fortunata y Jacinta*." *Anales galdosianos* 22 (1987): 33-46.
- Friedlander, Ruth. "Bénédict-Augustin Morel and the Development of the Theory of Dégénérescence (The Introduction of Anthropology into Psychiatry)." Diss. University of California, San Francisco, 1973.
- Fuentes Peris, Teresa. *Visions of Filth: Deviancy and Social Control in the Novels of Galdos*. Liverpool: Liverpool University Press, 2003.
- Furst, Lilian R. & Peter N. Skrine. *Naturalism* London: Methuen & Co. Ltd., 1971.
- Galcerán Granés, A. "De la admisión de los alienados y de los asilos de observación." *Gaceta Médica Catalana* I (1978): 297-299 in Javier Plumed, "La etiología de la locura en el siglo XIX a través de la psiquiatría española." *Frenia* 4.2 (2004): p. 81.
- García de Padilla, Pedro. *Andrés de Laorden: medicina y docencia en la España del siglo XIX*. Valladolid: Secretariado de Publicaciones e Intercambio Científico, Universidad de Valladolid, 1998.
- García Guerra, Delfín & Víctor Álvarez Antuña. "Del 'mal de la rosa' a la 'enfermedad de la miseria:' La etiología social de la pelagra en la bibliografía médica

asturiana de los siglos XVIII y XIX.” *Dynamis. Acta Hispanica ad Medicinae Scientiarumque Historiam Illustrandam* 11 (19901): 197-238.

Garma, Ángel. “Jaquica, pseudo-oligofrenia y delirio en un personaje de Pérez Galdós” *Ficción* 14-16 (1958): 84-102.

“Gassendi.” Margaret Osler, *Concise Routledge Encyclopedia of Philosophy*. London: Routledge, 2000.

Geertz, Clifford. *The Interpretation of Cultures*. New York: Basic Books Inc., 1973.

“Genetic.” *Oxford English Dictionary*. 16 Sept. 2009 http://dictionary.oed.com.floyd.lib.umn.edu/cgi/entry/50093615?query_type=word&queryword=genetic&first=1&max_to_show=10&sort_type=alpha&result_place=1&search_id=1145-UczPO5-7894&hilite=50093615

Genil-Perrin, Georges. *L'Idée de Dégénérescence en Medecine Mental*. Paris: Alfred Leclerc, 1913.

Gilman, Sander L. *Difference and Pathology: Stereotypes of Sexuality, Race and Madness*. Ithaca: Cornell University Press, 1985.

---. “The Phantom of the Opera’s Nose.” in Sander L. Gilman *Picturing Health and Disease: Images of Identity and Difference*. Baltimore: The Johns Hopkins University Press, 1995.

---. “Sexology, Psychoanalysis, and Degeneration: From a Theory of Race to a Race to Theory.” in J. Edward Chamberlain & Sander L. Gilman. eds. *Degeneration: The Dark Side of Progress*. New York: Columbia University Press, 1985, pp. 72-96.

Gilman, Stephen. *Galdós and the Art of the European Novel 1867-1887*. Princeton: Princeton University Press, 1981.

Gilman, Stuart C. “Political Theory: Left to Right, Up to Down.” in J. Edward Chamberlain & Sander L. Gilman. eds. *Degeneration: The Dark Side of Progress*. New York: Columbia University Press, 1985, pp. 165-198.

Girón, Álvaro. “Metáforas finiseculares del declive biológico: Degeneracionismo y revolución en el anarquismo español (1872-1914).” *Asclepio* 51.1 (1999): 247-273.

Girón Sierra, Álvaro. *En la mesa con Darwin: Evolución y revolución en el movimiento libertario en España (1869-1914)*. Madrid: Consejo Superior de Investigaciones Científicas, 2005.

---. *Evolucionismo y anarquismo: La incorporación del vocabulario y los conceptos de evolucionismo biológico en el anarquismo español (1882-1914)*. Diss. Univ.

Complutense Madrid: 1996. 4 Oct. 2009, <http://eprints.ucm.es/tesis/19972000/H/o/H0043602.pdf>.

- Glendinning, Nigel. "Psychology and Politics in the First Series of the 'Episodios Nacionales.'" in *Galdós Studies*. Ed. John Varey. London: Tamesis Books, 1990, 36-61.
- Glick, Thomas F. ed. *The Comparative Reception of Darwinism*. Chicago: University of Chicago Press, 1974, 1988.
- . "Spain" in Thomas F. Glick, ed. *The Comparative Reception of Darwinism*. Chicago: University of Chicago Press, 1974, 1988, pp. 307-345.
- Gold, Helen. "Back to the Future: Criticism, the Canon, and the Nineteenth-Century Spanish Novel." *Hispanic Review* 58.2 (1990): 179-204.
- . *The Reframing of Realism: Galdós and the Discourses of the Nineteenth-Century Spanish Novel*. Durham, Duke University Press, 1993.
- Gold, Milton. "The Early Psychiatrists on Degeneracy and Genius." *Psychoanalysis and Psychoanalytic Review* 47.4 (1960): 37-55.
- Goldman, Peter B. "Galdós and the Aesthetic of Ambiguity: Notes on the Thematic Structure of *Nazarín*." *Anales galdosianos* 9 (1974): 99-112.
- . "Galdós and the Nineteenth-Century Novel: The Need for an Interdisciplinary Approach." *Anales galdosianos* 10 (1975): 5-14.
- . "Galdós' Pueblo. A Social and Religious History of the Urban Lower Classes in Madrid 1885-1898." Diss. Harvard University, 1971.
- . "El trabajo de gestivo del espíritu: sobre la estructura de *Fortunata y Jacinta* y la función de Segismundo Ballester." *Kentucky Romance Quarterly* 31.2 (1984): 177-187.
- Goldstein, Jan E. *Console and Classify: The French Psychiatric Profession in the Nineteenth Century*. Chicago: University of Chicago Press, 2001.
- . *French Psychiatry in Social and Political Perspective: The Formation of a New Profession 1820-1860*. Diss. Columbia University, 1976 in Ian R. Dowbiggin *Inheriting Madness: Professionalization and Psychiatric Knowledge in Nineteenth-century France*. Berkeley: University of California Press, 1991, p. 140.
- . "The Hysteria Diagnosis and the Politics of Anticlericalism in Late Nineteenth-Century France." *The Journal of Modern History* 54.2 (1982): 209-239.
- . "'Moral Contagion': A Professional Ideology of Medicine and Psychiatry in Eighteenth- and Nineteenth-Century France." in Gerald L. Geison ed.

- Professions and the French State, 1700-1900*. Philadelphia: University of Philadelphia Press, 1984.
- González Duro, Enrique. *Historia de la locura en España*. 3 vols., Madrid: Ediciones Temas de Hoy, 1995.
- Goode, Joshua. "Corrupting a Good Mix: Race and Crime in Late Nineteenth- and Early Twentieth-century Spain." *European History Quarterly* 35.2 (2005): 241-265.
- Gordon, Michael. "The Medical Background to Galdós' *La Desheredada*." *Anales galdosianos* 7 (1972): 67-77.
- , "Lo que falta a un enfermo le sobra a otro': Galdós' Conception of Humanity in *La desheredada*." *Anales galdosianos* 12 (1977): 29-37.
- Granjel, Luís S. "El médico galdosiano." *Archivo Iberoamericano de Historia de la Medicina y Antropología Médica* 6 (1954): 163-176.
- Granjel, Mercedes. *Pedro Felipe Monlau y la higiene española del siglo XIX*. Salamanca: Universidad de Salamanca, 1983.
- Grant, Elliott M. *Émile Zola*. New York: Twayne Publishers Inc., 1966.
- Greenslade, William. *Degeneration, Culture and the Novel 1880-1940*. Cambridge: Cambridge University Press, 1994.
- Grzybowski, Stefan and Edward A. Allen. "History and importance of scrofula." *The Lancet* 346.8988 (1995):1472-1474.
- Guerra, Francisco. "El exilio de médicos españoles durante el siglo XIX." *Asclepio* 21 (1969): 223-248.
- Gullón, Germán. "Introducción." Benito Pérez Galdós. *La desheredada*. Ed. Germán Gullón. Madrid: Cátedra, 2003.
- . "Unidad de 'El doctor Centeno.'" *Cuadernos Hispanoamericanos* 250-252 (1970-71): 579-585.
- Gutting, Gary. (Ed.) *The Cambridge Companion to Foucault*. Cambridge: Cambridge University Press, 1994.
- Haddad, Elaine. "Maximiliano Rubín." *Archivum (Oviedo)* 7 (1953): 101-114.
- Halliday, Stephen. "Commentary: Dr John Sutherland, *Vibrio cholerae* and 'predisposing causes.'" *International Journal of Epidemiology* 31 (2002):912-914.

- Hampson, Norman. *The Enlightenment: An Evaluation of its Assumptions, Attitudes and Values*. Harmondsworth, England: Penguin Books, 1984.
- Hauptert, Joëlle, Yves De Smet & Jean-Marie Spautz. "La théorie de la dégénérescence de Bénédict-Augustin Morel (1809-1873): inspireurs et thuriféraires." *l'Information Psychiatrique* 80.1 (2004) 43-49.
- Heredia Soriano, Antonio. "El krausismo español." 3 Dec. 2010, <http://www.ensayistas.org/critica/generales/krausismo/introd.htm>.
- Herrera Hernández, Manuel. "Perspectivas de las cataratas de Benito Pérez Galdós." (a) *Anales de la Real Academia Nacional de Medicina* 124.3 (2007): 495-509.
- . "Perspectivas de las cataratas de Benito Pérez Galdós." (b) *Isidora: revista de estudios galdosianos*. 4 (2007): 87-108.
- Hetzel, Basil S. *The Story of Iodine Deficiency*. Oxford, Oxford University Press, 1989.
- Hinterhäuser, Hans. *Los "Episodios Nacionales" de Benito Pérez Galdós*. Madrid: Editorial Gredos, 1963.
- Hoar, Leo J. *Benito Pérez Galdós y la Revista del Movimiento Intelectual de Europa*. Madrid: Insula, 1968.
- Hochmann, Jacques. "La théorie de la dégénérescence de B.-A. Morel, ses origines et son évolution. in *Darwinisme et société*. Ed. Patrick Tort, Paris: Presses Universitaires de France, 1992.
- Hodgen, Margaret T. *Early Anthropology in the Sixteenth and Seventeenth Centuries*. Philadelphia: University of Pennsylvania Press, 1964.
- Holmberg, Arthur C. "Louis Lambert and Maximilino Rubín: The Inner Vision and the Outer Man." *Hispanic Review* 46.2 (1978): 119-136.
- Holmes, King K. et al. *Sexually Transmitted Diseases*. 3rd ed. New York: McGraw-Hill, 1999.
- Holmstedt, Bo. "Introduction" in Jacques-Joseph Moreau *Hashish and Mental Illness*. Eds. Hélène Peters and Gabriel G. Nahas, trans. Gordon J. Barnett, New York: Raven Press, 1973.
- Howes, Oliver D. "Julius Wagner-Jauregg, 1857-1940." *American Journal of Psychiatry* 166.4 (2009): 409.
- Huertas, Rafael. "Darwinismo y darwinismo social en la obra de E.Zola." in *Evolucionismo y cultura: Darwinismo en Europa e Iberoamérica*. Eds. Miguel Ángel Puig-Samper, Rosaura Ruiz & Andrés Galera, Madrid: Doce Calles, 2002, 118-124.

- . "Elaborando doctrina: Teoría y retórica en la obra de José María Esquerdo (1842-1912)." *Frenia* 3.2 (2003): 81-109.
- "Estrategias profesionales y retóricas de legitimación de la medicina mental española del siglo XIX." *Cuadernos de Psiquiatría Comunitaria* 2.2 (2002): 92-106.
- . "Hambre, Enfermedad y locura: La aportación de Bartolomé Llopis al conocimiento de la psicosis pelagrosa." *Frenia* 6 (2006): 79-107.
- . "Madness and Degeneration, I. From 'fallen angel' to mentally ill" *History of Psychiatry* 3 (1993): 391-411.
- . "Madness and Degeneration, II. Alcoholism and Degeneration" *History of Psychiatry* 4 (1993): 1-21.
- . "Madness and Degeneration, III. Degeneration and Criminality" *History of Psychiatry* 4 (1993): 141-158.
- . "Madness and Degeneration, IV. The man of genius" *History of Psychiatry* 4 (1993): 301-319.
- . *Organizar y persuadir. Estrategias profesionales y retóricas de legitimación de la medicina mental española (1875-1936)*. Madrid: Frenia S.C., 2002.
- . Personal interview 24 Jun. 2009.
- . "Vivir y morir en Madrid: la vivienda como factor determinante del estado de salud de la población madrileña (1874-1923)." *Asclepio* 54.2 (2002): 253-276.
- , Ricardo Campos & Raquel Álvarez. "Entre la enfermedad y la exclusión. Reflexiones para el estudio de la locura en el siglo XIX." *Historia Contemporánea* 16 (1997): 47-63.
- . & José Martínez-Pérez. "Disease and crime in Spanish positivist psychiatry." *History of Psychiatry* 4 (1993): 459-481.
- Huertas García-Alejo, Rafael. *Clasificar y educar. Historia natural y social de la deficiencia mental*. Madrid: Departamento de Historia de la Ciencia Consejo Superior de Investigaciones Científicas, 1998.
- . "El concepto de 'perversión' sexual en la medicina positivista." *Asclepio* 42.2 (1990): 89-99.
- . "Herencia y degeneración en la obra literaria de É. Zola" *Asclepio* 37 (1985): 3-37.
- . *Los laboratorios de la norma: Medicina y regulación social en el estado liberal*. Barcelona: Consejo Superior de Investigaciones Científicas y Ediciones Octaedro, S.L., 2008.

- . "La 'novela experimental' y la ciencia positivista." *Lhull* 7 (1984): 29-52.
- . "Valentin Magnan y la teoria de la degeneración." *Revista de la Asociación Española de Neuropsiquiatría* 5.14 (1985): 361-367.
- Iglesias, Yolanda. *Realismo científico en la obra de Benito Pérez Galdós*. Buenos Aires: Elaleph.com S.R.L., 2006.
- Jacobs, Michael. *Philip's Madrid*. London: George Philip Limited, (1992).
- Jagoe, Catherine. *Ambiguous Angels. Gender in the Novels of Galdós*. Berkeley, University of California Press, 1994.
- . "VII. Sexo y género en la medicina del siglo XIX." in Catherine Jagoe, Alda Blanco & Cristina Enríquez de Salamanca. *La mujer en los discursos de género. Textos y contextos en el siglo XIX*. Barcelona, Icaria Editorial, 1998. pp. 305-367.
- Johnson, Horton A. "Gerard de Lairesse: genius among the treponemes." *Journal of the Royal Society of Medicine* 97 (2004): 301-303.
- Kampmeier, Rudolph H. "The Introduction of iodine in the treatment of syphilis: the writings of William Wallace, MD, Dublin." *Sexually Transmitted Diseases* 7 (1980): 26-28.
- Kaplan, Temma. "Luís Simarro and the Development of Science and Politics in Spain 1868-1917." Diss. Harvard University, 1969.
- Kershner, R.B. "Degeneration: The Explanatory Nightmare." *The Georgia Review* 40.2 (1986): 416-448.
- King, Ambrose J. and R.D. Catterall. "Syphilis of Bones." *British Journal of Venereal Diseases* 35 (1959): 116-124.
- Koehler, Peter. "About Medicine and the Arts. Charcot and Franch Literature at the fin-de-siècle." *Journal of the History of the Neurosciences* 10.1 (2001): 27-40.
- Krauel, Ricardo. "Duplicidad significativa de las representaciones de ambigüedad sexual in *Fortunata y Jacinta*." *Bulletin of Hispanic Studies* 76 (1999): 649-672.
- Kraus, Ernst. *Erasmus Darwin*. trans. W.S. Dallas, London: John Murray, 1879.
- Labanyi, Jo. *Gender and Modernization in the Spanish Realist Novel*. Oxford: Oxford University Press, 2000.
- . *Spanish Literature: A Very Short Introduction*. Oxford: Oxford University Press, 2010.

- La Berge, Ann F. "A.J.B. Parent-Duchâtelet: Hygienist of Paris, 1821-1836." *Clio Medica* 12.4 (1977): 279-301.
- . "The Early Nineteenth-Century French Public Health Movement: The Disciplinary Development and Institutionalization of *Hygiène Publique*." *Bulletin of the History of Medicine* 58 (1984): 363-379.
- Lain Entralgo, Pedro. "Prólogo" Trino Peraza de Ayala. *La psiquiatría española en el siglo XIX*. Madrid: Consejo Superior de Investigaciones Científicas, 1947.
- Landa Vaz, Rubén. "Don Francisco Giner como educador." *Cuadernos Americanos* 129.4 (1963): 88-109.
- Larsen, Kevin S. "Ido de Sagrario's Alimentary Madness." *Science, Literature, and Film in the Hispanic World*. Eds. Jerry Hoeg and Kevin S. Larsen, New York: Palgrave Macmillan, 2006.
- Léonard, Jacques. *La médecine entre les savoirs et les pouvoirs*. Paris: Aubier Montaigne, 1981.
- Lessa, Iara. "Discursive Struggles Within Social Welfare: Restaging Teen Motherhood." *British Journal of Social Work* 36 (2006): 283-298.
- Lida, Clara E. "Galdós y los Episodios Nacionales: una historia del liberalismo español." *Anales galdosianos* 3 (1968): 61-72.
- Lida, Denah. "Sobre el 'krausismo' de Galdós." *Anales galdosianos* 2 (1967): 1-27.
- Liégeois, Axel. "Hidden philosophy and theology in Morel's theory of degeneration and nosology." *History of Psychiatry* 2 (1991): 419-427.
- Litvak, Lily. "La sociología criminal y su influencia en los escritores españoles de fin de siglo." *Revue de littérature Comparée* 48.1 (1974): 12-32.
- Llopis, Bartolomé. *La psicosis pelagrosa: Un análisis estructural de los trastornos psicóticos*. Barcelona: Edit. Científico Médico, 1946.
- Llorca Baus, Carlos. *José María Esquerdo: el gran desconocido*. Villajoyoso: Ayuntamiento de Villajoyoso, 1984.
- Llorens, Vicente. "Galdós y la burguesía." *Anales galdosianos* 3 (1968): 51-59.
- López-Baralt, Mercedes. *La gestación de Fortunata y Jacinta: Galdós y la novela como re-escritura*. Río Piedras, Puerto Rico: Ediciones Huracán Inc., 1992.
- López-Beltrán, Carlos. "Heredity old and new: French physicians and *l'hérédité naturelle* in early 19th century." *A Cultural History of Heredity II: 18th and 19th*

- Centuries*. Berlin, 10-12 January 2003. Berlin: Max-Planck-Institut für Wissenschaftsgeschichte, 2003, 7-19.
- . "In the Cradle of Heredity: French Physicians and *L'Hérédité Naturelle* in the Early 19th Century." *Journal of the History of Biology* 37 (2004): 39-72.
- López Piñero, José María. "Las ciencias médicas en la España del siglo XIX." *Ayer* 7 (1992): 193-240.
- . *Clásicos valencianos de la salud pública*. Valencia: Fundación Valenciana de Estudios Avanzados, 2003.
- . "La comunicación con Europa en la medicina española del siglo XIX." *Almena* 2 (1963): 33-64.
- . "Juan Bautista Bru (1740-1799) and the Description of the Genus *Megatherium*." *Journal of the History of Biology* 21 (1) (1988):147- 163.
- . *M. Seoane. La introducción en España del sistema sanitario liberal (1791-1870)*. Madrid: Ministerio de Sanidad y Consumo, 1984.
- . Luís García Ballester & Pilar Faus Sevilla. *Medicina y sociedad en la España del siglo XIX*. Madrid: Sociedad de Estudios y Publicaciones, 1964.
- Losada Malvárez, Juan Carlos. *Ideología del ejército franquista, 1939-1959*. Madrid: Istmo, 1990, in Michael Richards. *A Time of Silence: Civil War and the Culture of Repression in Franco's Spain, 1936-1945*. Cambridge: Cambridge University Press, 1998, p. 298 n.90.
- Lubinsky, Mark S. "Degenerate Heredity: The History of a Doctrine in Medicine and Biology." *Perspectives in Biology and Medicine* 37 (1993): 24-90.
- MacDonald, Mary Besse. *The Influence of Emile Zola in the Novels of Benito Pérez Galdós Produced During the Years 1881-1885*. Diss. U. Minnesota, 1959.
- Marañón, Gregorio. *El bocio y el cretinismo: estudio sobre la epidemiología española y la patogenia de esta enfermedad*. Madrid: Páez, 1927.
- . *Elogio y nostalgia de Toledo*. intro. Gregorio Marañón Moya, Madrid: Espasa-Calpe, 1983.
- Maristany, Luís. *El gabinete del doctor Lombroso (Delincuencia y fin de siglo en España)*. Barcelona: Editorial Anagrama, 1973.
- . "Lombroso y España: nuevas consideraciones." *Anales de Literatura Española* 2 (1983): 361-381.
- Martindale, Colin. "Degeneration, Disinhibition, and Genius." *Journal of the History of the Behavioral Sciences* 7.2 (1971): 177-182.

- Martínez-Pérez, José. "Problemas científicas y socioculturales en la difusión de una doctrina psiquiátrica: la introducción del concepto de monomanía en España (1821-1864)." in *Ciencia en Expansión: Estudios sobre la difusión de las ideas científicas y médicas en España (siglos XVIII-XX)*. Ed. Elvira Arquiola y José Martínez-Pérez, Madrid: Editorial Complutense, 491-520.
- Maurice, Jacques & Carlos Serrano. *Joaquín Costa: crisis de la Restauración y populismo (1875-1911)*. Madrid: Siglo XXI, 1977. in Jo Labanyi. *Gender and Modernization in the Spanish Realist Novel*. Oxford: Oxford University Press, 2000, p. 134.
- "metanarrative." *Oxford English Dictionary*. 2nd ed. 2010, 12 Dec. 2010
<http://www.oed.com.floyd.lib.umn.edu/>
- McKinney, Collin. *Mapping the Social Body. Urbanization, the Gaze and the Novels of Galdós*. Chapel Hill: North Carolina Studies in the Romance Languages and Literatures, 2010.
- McNeil, Maureen. "Under the Banner of Science: Erasmus Darwin and his Age." Manchester, Manchester University Press, 1987 in Phillip K. Wilson, "Erasmus Darwin on Hereditary Disease: Conceptualizing Heredity in Enlightenment English Medical Writings." *A Cultural History of Heredity II: 18th and 19th Centuries*, Berlin, 10-12 January 2003. Berlin: Max-Planck-Institut für Wissenschaftsgeschichte, 2003, p. 119.
- Mellon, Charles D. "Introduction and Discussion" Prosper Lucas, *On the Heredity of Mental Illness* (1850). ed. Charles D. Mellon, trans. Linda Forge Mellon, New Mexico: Genetics Heritage Press, 1996.
- Mitterand, Henri. "Les trois langages du naturalisme." in *Realismo y naturalismo en España en la segunda mitad del siglo XIX*. Ed. Yvan Lissorgues. Barcelona: Antropos, (1988): 21-29.
- . *Zola et le naturalisme*. Paris: Presses Universitaires de France, 1986.
- Molero Mesa, Jorge. *Estudios medicosociales sobre la tuberculosis en la España de la Restauración*. Madrid: Ministerio de Sanidad y Consumo, 1987.
- Moliner, María. *Diccionario de uso del español*. 2 vols, 2^a ed. Madrid: Gredos, 1998.
- Montesinos, José E. *Galdós*. 3 vols. Madrid: Editorial Castalia 1969-73.
- Moreno Castillo, Gloria. "La unidad de tema en 'El doctor Centeno.'" *Actas del primer congreso internacional de estudios galdosianos*. Madrid: Cabildo Insular de Gran Canaria, Editoria Nacional, (1977): 382-396.
- Moro, Ana and Olga Villasante "La etapa de Luís Simarro en el manicomio de Leganés" *Frenia*. 1 (2001): 97-119.

- Morton, R.S. "Dr. William Wallace (1791-1837) of Dublin." *Medical History* 10 (1966): 38-43.
- "myth." *Columbia Dictionary of Modern Literary and Cultural Criticism*. Eds. Joseph Childers and Gary Hentzi, New York: Columbia University Press, 1995.
- Nicolás Lazo, Gemma. *La reglamentación de la prostitución en el Estado español. Genealogía jurídico-feminista de los discursos sobre prostitución y sexualidad*. Diss. Universitat de Barcelona. 2007. 7 Feb. 2010. http://www.tesisenxarxa.net/TESIS UB /AVAILABLE/TDX-0724107- 091858/GNL_TESIS.pdf
- Nimetz, Michael. *Humor in Galdós*. New Haven: Yale University Press, 1968.
- Nuez Caballero de la, Sebastián. *Biblioteca y archivo de la casa museo Pérez Galdós*. Madrid: Excmo. Cabildo Insular de Gran Canaria, 1990.
- Núñez, Diego. *El darwinismo en España*. Madrid: Editorial Castalia, 1969.
- Núñez Ruiz, Diego. *La mentalidad positivista en España: desarrollo y crisis*. Madrid: Tucarc Ediciones, S.A., 1975.
- Olson, Richard G. *Science and Scientism in Nineteenth-Century Europe*. Urbana: University of Illinois Press, 2008.
- Opie, W.H., C.J.B. Muller & H. Kamfer. "The Diagnosis of Vitamin D Deficiency Rickets." *Pediatric Radiology* 3 (1975): 105-110.
- "Original Sin." *The Oxford Dictionary of the Christian Church*. Ed. F. L. Cross 3rd ed. Ed. E.A. Livingstone, New York: Oxford University Press, 1997.
- Ortega y Gasset, José. "El horizonte histórico." in José Ortega y Gasset *Obras completas*. vol. III, 6^a ed., Madrid: Revista de Occidente, 1966, pp. 289-295.
- Ortiz-Armengol, Pedro. *Vida de Galdós*. Barcelona: Crítica, 1996.
- O'Shea, J.G. "'Two minutes with venus, two years with mercury'-mercury as an antisyphilitic chemotherapeutic agent." *Journal of the Royal Society of Medicine* 83 (1990): 392-396.
- Palomo, Pilar. "El periodismo en Galdós." *Madrid en Galdós, Galdós en Madrid*. mayo 1988 Palacio de Cristal del Retiro, Madrid: Comunidad de Madrid, Consejería de Cultura, (1988): 224-230.
- Patterson, Lee. "Literary History." in *Critical Terms for Literary Study*. Eds. Frank Lentricchia and Thomas McLaughlin, Chicago: University of Chicago Press, 1990, pp. 250-262.

- Pattison, Walter. "El amigo Manso and el amigo Galdós." *Anales galdosianos* 2 (1967): 135-153.
- . *Benito Pérez Galdós*. Boston: G.K.Hall & Co., 1975.
- . *Benito Pérez Galdós and the Creative Process*. Minneapolis: University of Minnesota Press, 1954.
- . *El naturalismo español*. Madrid: Editorial Gredos, S.A. 1965.
- . *Emilia Pardo Bazán*. New York: Twayne Publishers Inc., 1971.
- Peraza de Ayala, Trino. *La psiquiatría española en el siglo XIX*. intro. Laín Entralgo, Madrid: Consejo Superior de Investigaciones Científicas, 1947.
- Perdiguero Gil, Enrique & Ángel González de Pablo. "Los valores morales de la higiene. El concepto de onanismo como enfermedad según Tissot y su tardía penetración en España." *Dynamis. Acta Hispanica ad Medicinæ Scientiarumque Historiam Illustrandam* 10 (1990): 131- 162.
- Pérez Bautista, Florencio L. *El tema de la enfermedad en la novela realista española*. Salamanca: Universidad de Salamanca. Ediciones del Instituto de Historia de la Medicina Española, 1972.
- Pérez Galdós, Benito. *Madrid en Galdós, Galdós en Madrid: exposición mayo 1988, Madrid, Palacio de Cristal del Retiro*. Madrid: Comunidad de Madrid, 1988.
- Pérez Vidal, José. "Pérez Galdós y la noche de San Daniel." *Revista Hispánica Moderna* 17, 1/4 (1951): 94-110.
- Peset Reig, José L. & Mariano Peset Reig. *Lombroso y la escuela positivista italiana*. Madrid: Consejo Superior de Investigaciones Científicas, 1975.
- Pick, Daniel. *Faces of Degeneration: A European Disorder c. 1848-c. 1918*. Cambridge: Cambridge University Press, 1989.
- Plumed, Javier. "La etiología de la locura en el siglo XIX a través de la psiquiatría española." *Frenia* 4.2 (2004): 69-91.
- Porter, Roy. "The Body and the Mind, The Doctor and the Patient: Negotiating Hysteria." in Sander Gilman, Helen King, Roy Porter, G.S. Rousseau & Elaine Showalter *Hysteria beyond Freud*. Berkeley: University of California Press, 1993, pp. 225- 285.
- Postel, Jacques and Claude Quézel. *Nouvelle histoire de la psychiatrie*. Toulouse: Privat, 1983.
- Pratt, Dale J. *Signs of Science: Literature, Science and Spanish Modernity since 1868*. West Lafayette: Purdue University Press, 2001.

- Pritchett, V.S. *The Myth Makers. Literary Essays*. New York: Random House, 1979.
- Raju, Tonse N. K. "Hot Brains: Manipulating Body Heat to Save the Brain" *Pediatrics* 117.2 (2006): 320-321.
- Randolph, E. Dale A. "A source for Maxi Rubín in 'Fortunata y Jacinta.'" *Hispania* 51 (1968): 49-56.
- Rauh, G., B. Stiefenhofer, H. Dörfler, G. Lohmöller, D. Hahn & N. Zöllner. "Bone pain in adults as the first symptom of late congenital syphilis." *Deutsche medizinische Wochenschrift* 115 No.14 (1990): 534-8.
- Rey González, Antonio M. "Clásicos de la Psiquiatría española del siglo XIX (IV): José María Esquerdo y Zaragoza (1842-1912)." *Revista de la Asociación Española de Neuropsiquiatría* 3 (1883): 103-115.
- . "La introducción del moderno saber psiquiátrico en la España del siglo XIX." *Revista de la Asociación Española de Neuropsiquiatría* 4 (1882): 4-27.
- Ribbans, Geoffrey. "Contemporary History in the Structure and Characterization of 'Fortunata y Jacinta.'" *Galdós Studies* ed. John Varey. London: Tamesis Books, 1990, 90-113.
- . *Pérez Galdós: Fortunata y Jacinta*. London: Grant and Cutler, 1977.
- Ricard, Robert. "Variété: Mots et Expressions 1. *la loca de la casa*." *Mélanges de la casa de Velázquez* 3 (1967): 487-491.
- Richards, Michael. *A Time of Silence: Civil War and the Culture of Repression in Franco's Spain, 1936-1945*. Cambridge: Cambridge University Press, 1998.
- Rivière Gómez, Aurora. "*Caídas, miserables, degeneradas*." *Estudios sobre la prostitución en el siglo XIX*. Madrid: horas y HORAS, 1994.
- Rodgers, Eamonn J. *From Enlightenment to Realism: The Novels of Galdós 1870-1877*. Dublin: [E. Rodgers], 1987.
- . "Galdós' *La desheredada* and Naturalism." *Bulletin of Hispanic Studies* 45 (1968): 285-298.
- Rodríguez, Alfredo. *Estudios sobre la novela de Galdós*. Madrid: Ediciones José Porrúa Turanzas, 1978.
- Rodríguez, Alfred and Luz María Rodríguez. "*Lo prohibido, ¿una parodia galdosiana?*" *Bulletin of Hispanic Studies* 55 (1983): 51-59.
- Rodríguez Baltanás, Enrique J. "El pesimismo de Galdós en *Fortunata y Jacinta*: Naturalismo versus Realismo en la configuración simbólica de Maximiliano

- Rubín." *Actas del cuarto congreso internacional de estudios galdosianos (1990)*. Las Palmas de Gran Canaria: Cabildo Insular de Gran Canaria, (1993): 511-519.
- Rodríguez Ocaña, Esteban. *La constitución de la medicina social como disciplina en España (1882-1923)*. Madrid: Ministerio de Sanidad y Consumo, 1987.
- Rodríguez-Puertolas, Julio. "La clase dominante y su papel en 'Fortunata y Jacinta.'" *Actas del Quinto Congreso Internacional de Hispanistas, II*, 2-8 Sep. 1974, coords. François Lopez, Joseph Pérez, Noël Salomon & Maxime Chevalier, Université de Bordeaux: Instituto de Estudios Ibéricos e Iberoamericanos (1977): 735-41.
- . "Fortunata y Jacinta: Anatomía de una sociedad burguesa." in Julio Rodríguez-Puertolas, *Galdós, burguesía y revolución*. Madrid: Ediciones Turner, S.A., 1975, 13-59.
- Roger, Jacques. *The life sciences in eighteenth-century French thought*. ed. Keith R. Benson, trans. Robert Ellrich, Stanford: Stanford University Press, 1997.
- Román Román, Isabel. "Galdós y el regeneracionismo." *Actas del VI Congreso Internacional Galdosiano* Las Palmas de Gran Canaria: Ediciones del Cabildo Insular, 2000, pp. 100-114.
- Rouse, Joseph. "Power/Knowledge." in Gary Gutting ed. *The Cambridge Companion to Foucault*. Cambridge: Cambridge University Press, 1994, 92-114.
- Rubin, Walter. "Galdós y la medicina." *Atlántida* 8.43 (1970): 68-80.
- Ruiz Salvador, A. "La función del trasfondo histórico en *La desheredada*." *Anales galdosianos* 1.1 (1966): 53-62.
- Rundorff, Dorothy E. S. "Spaniards' Lack of Contact with Reality as it is Illustrated in the Characters of the Novels of Benito Pérez Galdós." Diss. Univ. Minnesota, 1950.
- Russell, Robert H. "The Structure of *La desheredada*." *Modern Language Notes* 76.8 (1976): 794-800.
- Russett, Cynthia E. *Sexual Science: The Victorian Construction of Womanhood*. Cambridge, Mass.: Harvard University Press, 1989.
- Sancho de San Román, Rafael. *La obra psiquiátrica de Giné y Partagas*. Salamanca: Ediciones del Seminario de Historia de la Medicina Española, 1960.
- Sass, Henning and S. Herpitz. "Chapter 25. Personality Disorders: Clinical Section" in *A History of Clinical Psychiatry: The Origin and History of Psychiatric Disorders*. Eds. German E. Berrios & Roy Porter, New York: New York University Press, 633-644.

- Saussure, R. de. "The Influence of the Concept of Monomania on French Medico-Legal Psychiatry (from 1825-1840)." *Journal of the History of Medicine and Allied Sciences* 1 (1946): 365-397.
- Scanlon, Geraldine M. "El doctor Centeno: A study in obsolescent values." *Bulletin of Hispanic Studies* 55 (1978): 245-253.
- . "Heroism in an Unheroic society: Galdós's *Lo prohibido*." *Modern Language Review* 79 (1984): 831-845.
- Scheider, Frédéric. "Le traitement du crétinisme, entre science et idéologie." *Psychiatries dans l'histoire*, ed. J. Arveiller, Caen, PUC, 2008, p. 223-232. 20 Jan. 2010 http://www.unicaen.fr/services/puc/ecrire/ouvrages/psychiatries_histoire/18psychiatries_histoire.pdf
- Schmidt, Ruth. "Manuel Tolosaa Latour: prototype of Augusto Miquis." *Anales galdosianos* 3 (1968):91-93.
- Schnepf, Michael A. "La Beneficencia: Romero Robledo Versus Galdós in *La desheredada*." *South Atlantic Review* 66.1 (2001): 23-49.
- . "Galdós's *La desheredada* Manuscript: A Note on the Creation of Isadora Rufete." *Romance Notes* 31.3 (1991): 245-250.
- . "A Note on Galdós, Ortega Munilla, and *La desheredada*." *Romance Notes* 39.1 (1998): 3-7.
- . "The Significance of the *petardos* in Galdós's *La desheredada*." *Romance Notes* 30.2 (1989): 107-114.
- . "Scandal and *La Cárcel Modelo*: More Intertextual 'Bouncing' in Galdós's *La desheredada*." *Romance Quarterly* 49.1 (2002): 36-49.
- Shaw, Donald L. *The Generation of 1898 in Spain*. London: Ernest Benn Limited, 1975.
- Shoemaker, William.H. *Las cartas desconocidas de Galdós en "La Prensa" de Buenos Aires*. Madrid: Ediciones Cultura Hispánica, 1973.
- , *The Novelistic Art of Galdós*. 2 vols., Valencia: Albatros Ediciones, 1980.
- Showalter, Elaine. "Hysteria, Feminism and Gender." in Sander Gilman, Helen King, Roy Porter, G.S. Rousseau & Elaine Showalter *Hysteria beyond Freud*. Berkeley: University of California Press, 1993, pp. 286-344.
- Sinnigen, John H. "Individual, Class and Society in *Fortunata y Jacinta*." in Jo Labanyi Ed. and intro. *Galdós* Longman Group Ltd. UK, (1993): 116-139.

- Sloan, Phillip R., "The Idea of Racial Degeneracy in Buffon's 'Histoire Naturelle.'" in Harold E. Pagliaro Ed., *Racism in the Eighteenth Century*. Cleveland: The Press of Case Western Reserve University, 1973.
- Smith, Angel. *Historical Dictionary of Spain*. London: The Scarecrow Press, 1996.
- Sosa-Velasco, Alfredo J. *Médicos escritores en España, 1885-1995. Santiago Ramón y Cajal, Pío Baroja, Gregorio Marañón y Antonio Vallejo Nágera*. Woodbridge: Temesis, 2010.
- Stearns Peter N. "The Middle Class: Toward a Precise Definition." *Comparative Studies in Society and History* 21.3 (1979): 377-396.
- Suy, R. "The Varying Morphology and Aetiology of the Arterial Aneurysm. A Historical Review." *Acta chirurgica Belgica* 106 (2006): 354-360.
- Swart, Koenraad W. *The Sense of Decadence in Nineteenth-Century France*. The Hague: Martinus Nijhoff, 1964.
- Terry, Arthur. "Lo prohibido': Unreliable Narrator and Untruthful Narrative." in *Galdós Studies*. Ed. John E. Varey, London: Tamesis Books Limited, 1970, pp. 62-89.
- Tuñón de Lara, Manuel. *La España del siglo XIX*. 2^a ed. Paris: Librería Española, 1968 in Pura Fernández. *Eduardo López Bago y el naturalismo radical*. Amsterdam: Rodopi, 1995, p. 126.
- Tsuchiya, Akiko. "Maxi and the Signs of Madness: Reading as Creation in *Fortunata y Jacinta*." *Hispanic Review* 56 (1988): 53-71.
- Turner, Harriet S. "Creación galdosiana en el marco de la medicina." *Actas del XIII Congreso de la Asociación Internacional de Hispanistas Madrid 6-11 de julio de 1998*. Madrid: Editorial Castalia, 2000. pp. 441-447.
- Ullman, Joan C. & George H. Allison. "Galdós as Psychiatrist in *Fortunata y Jacinta*." *Anales Galdosianos* 9 (1974): 7-36.
- Unamuno y Jugo, Miguel de. *De esto y de aquello*. vol. I, Buenos Aires: Editorial Suramericano, 1950, p.353.
- "Unraveling the Enigma of Vitamin D." in *Beyond Discovery: The Path from Research to Human Benefit*. National Academy of Sciences 1 May 2009 http://www.beyond_discovery.org/content/view.txt.asp?a=414#_A_Case_of_Mistaken_Identity
- Utt, Roger L. "Galdós' early Journalism in Madrid and the *Las Novedades* (Dis-) Connection." *Anales Galdosianos* 19 (1984): 71-85.

- Valera Candel, Manuel. "Actividad científica realizada por los liberales españoles exiliados en el Reino Unido, 1823-1833." *Asclepio* 59.1 (2007): 131-166.
- Varela, Julia & Fernando Alvarez-Uría. *El cura Galeote asesino del obispo de Madrid-Alcalá*. Madrid: Ediciones de la Piqueta, 1979.
- Vázquez García, Francisco. "El discurso médico y la invención del homosexual (España 1840-1915)." *Asclepio* 53.2 (2001): 143-162.
- . "Sifilofobia y abolicionismo en Sevilla 1880-1936." in "Prostitución y sociedad en España Siglos XIX y XX" *Bulletin d'Histoire Contemporaine de l'Espagne* 25 (1997): 87-99.
- Vidal Parellada, Assumpció. *Luís Simarro y su Tiempo*. Madrid: Consejo Superior de Investigaciones Científicas, 2007.
- Vila, Ann. *Enlightenment and Pathology: Sensibility in the Literature and Medicine of Eighteenth-Century France*. Baltimore: Johns Hopkins University Press, 1998.
- Villasante, Olga. "Las instituciones psiquiáticas madrileñas en el período de entresiglos: Asistencia pública frente a sanatorios privados." *Frenia* 5.1 (2005): 69-99.
- . "La introducción del concepto de Parálisis General Progresiva en la Psiquiatría decimonónica española." *Asclepio* 52.1 (2000): 53-72.
- . "The unfulfilled project of the Model Mental Hospital in Spain: fifty years of the Santa Isabel Madhouse, Leganés (1851-1900)." *History of Psychiatry* 14.3 (2003): 3-23.
- Virtanen, Reino. *Claude Bernard and his Place in the History of Ideas*. Lincoln: University of Nebraska Press, 1960.
- Vozmediano Hidalgo, María Luisa. "Las ciencias médicas a través de las novelas de D. Benito Galdós." Diss. Universidad Complutense, 1881.
- Walker, Phillip. *Zola*. London: Routledge & Kegan Paul, 1985.
- Ward, Philip. "Krausismo." *The Oxford Companion to Spanish Literature*. Oxford: Oxford University Press, 1978.
- Waterworth, James, trans. *The Council of Trent The Fifth Session The canons and decrees of the sacred and oecumenical Council of Trent*. London: Dolman, 1848 21-29. 25 Jan. 2011 <http://history.hanover.edu/texts/trent/trpref.html>
- Waugh, M.A. "Alfred Fournier, 1832-1914. His influence on venereology." *British Journal of Venereal Diseases* 50 (1974): 232-236.

- Weinstein, Leo. *Hippolyte Taine*. New York: Twayne Publishers, Inc., 1972.
- Whiston, James. "Determinism and Freedom in *Fortunata y Jacinta*." *Bulletin of Hispanic Studies* 57 (1980): 113-127.
- . "Introducción" en Benito Pérez Galdós *Lo prohibido*. Madrid: Cátedra, 2001.
- . "Ironía y psicología en *Lo prohibido* de Galdós." *Romance Quarterly* 37 (1990): 199-208.
- White, Hayden. "Foucault Decoded. Notes from Underground." in Hayden White. *Tropics of Discourse: Essays in Cultural Criticism*. Baltimore: Johns Hopkins University Press, 1978, pp. 230-260.
- Willem, Linda. "The narrative premise of Galdós's *Lo prohibido*." *Romance Quarterly* 38. 2 (1991): 189-197.
- Wiley, Jack R. "The *Médico* as a Literary Personage in the Works of Benito Pérez Galdós." Diss. University of Illinois, Urbana, 1969.
- Williams, Elizabeth A. *The Physical and the Moral: Anthropology, Physiology and Philosophical Medicine in France, 1750-1850*. Cambridge: Cambridge University Press, 1994.
- Williams, Raymond. *Keywords: A Vocabulary of Culture and Society*. rev. ed. New York: Oxford University Press, 1983.
- Wilson, Phillip K. "Erasmus Darwin on Hereditary Disease: Conceptualizing Heredity in Enlightenment English Medical Writings." *A Cultural History of Heredity II: 18th and 19th Centuries*, Berlin, 10-12 January 2003. Berlin: Max-Planck-Institut für Wissenschaftsgeschichte, 2003, pp. 109-122.
- Zahareas, Anthony N. "El sentido de la tragedia en *Fortunata y Jacinta*." *Anales galdoseanos* 3 (1968): 25-34.
- Zapatero Ballersteros, E. "La ceguera de Galdós." *II Reunión Nacional de Médicos Escritores. Merida*, 2-4 May 1975.
- Zarza, Joaquín. "Preocupantes, embarazos a temprana edad." *Por Esto!* (Mérida, Yucatán) 13 Jan. 2011, 9.