«A century of civilization under the influence of eugenics»: Dr. Enrique Diego Madrazo, socialism and scientific progress

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SUMMARY

1.—Introduction. 2.—The ideas of Dr. Madrazo: pedagogy, social medicine and eugenics. 3.—«Un siglo de civilización bajo la influencia eugenésica» (1930). 4.—Five times twenty years makes for a century of eugenics. 5.—Conclusion.

ABSTRACT

This article discusses the thought of one of the pioneers of eugenics in Spain, Dr. Enrique Diego Madrazo. In particular, it analyses his 1930 essay *Un siglo de civilización bajo la influencia eugenésica* [A Century of Civilization under the Influence of Eugenics], as the most explicit work on the eugenic utopia he advocated. This work, because of its breadth, was also one of the most extensive and detailed accounts of the steps to be taken towards the eugenic society that was produced. The present analysis of his work assesses the degree to which his thought, which has been described as «utopian socialist», in fact corresponded to that epithet, given the politically authoritarian nature and the gender bias of some aspects of his one-hundred year plan for the creation of a eugenic society. The article also places Madrazo's thought in the context of his time and other national currents of eugenic thought.

Palabras clave: eugenesia, España, Enrique Diego Madrazo, socialismo utópico. Keywords: eugenics, Spain, Enrique Diego Madrazo, utopian socialism.

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1. INTRODUCTION

The lineage established between controlled reproduction, the perfection of human beings and utopian thought is a long one. In Tommaso Campanella's *City of the Sun* (1623), for example, tall, handsome girls were only to be matched with tall, brave men; sodomy was punished and astrologers determined the optimum hour for sexual intercourse for reproductive purposes (1). The repugnant «sociobiological» accounts of Adolf Hitler are apparent in his thoughts on «race» and the supposed qualities of Slavs and Jews (2). British one-time Communists such as J.D. Bernal elaborated a futuristic society of humans where Marxist perfection would reign and certain groups of people would become what have subsequently been termed «post-human», disconnected from their bodies, as depicted in his *The World*, the Flesh and the Devil (1929) (3).

These kinds of interconnections between political movements of the left and right, the desire for scientific progress and early twentieth-century biological and scientific (or «bio-social») doctrines have been analysed in the recent history of many European countries, including Spain (4). With respect to Spain, the last fifteen years have seen studies

⁽¹⁾ See CAREY, John (ed.). *The Faber Book of Utopias*, London, Faber & Faber, 1999, pp. 60-62. For my purpose here, I am not necessarily equating «utopian» with progressive or leftist thought. Some would distinguish between a progressive utopia and a failed or reactionary one, a dystopia.

⁽²⁾ HITLER, Adolf. *Mein Kampf*, London, Pimlico, 1992 [orig. in German, 1925-1926] (trans. Ralph Manheim), esp. Chapter 11, Nation and Race, pp. 258-299.

⁽³⁾ For Bernal see SWANN, Brenda; APRAHAMIAN, Francis (eds.). J.D. Bernal: A life in science and politics, London, Verso, 1999 and his The World, the Flesh and the Devil: an enquiry into the future of the three enemies of the rational soul, London, Jonathan Cape, 1970 [1929]. On the context of the British socialist scientists of the early twentieth century, see WERSKEY, Gary. The Visible College: A collective biography of British scientists and socialists of the 1930s, London, Allen Lane, 1978.

⁽⁴⁾ The literature is too extensive to list here. Specifically on eugenics and political values, the principal subject of this article, see the key articles by GRA-HAM, Loren E. Science and values: The eugenics movement in Germany and Russia in the 1920s. *The American Historical Review*, 1977, 82 (5), 1133-1164; FREEDEN, Michael. Eugenics and progressive thought: A study in ideological

on, to name just a few areas, fascist ideology and «racial science», the reception of eugenics in the anarchist movement and the relationship between medicine, ideology and the former colonies (5).

Such work in Spain, together with that undertaken in other countries, has laid to rest the notion that science is an objective process, devoid of political interference and one which progressively accrues facts derived from the experimental method. Work on the relations between ideology and science has also combated the notion that one particular set of ideas or practices are *necessarily* part of leftist or right-

affinity. The Historical Journal, 1979, 22 (3), 645-671; the response to Freeden by JONES Greta. Eugenics and social policy between the wars. The Historical Journal, 1982, 25 (3), 717-728; the reply in turn by FREEDEN, Michael. Eugenics and ideology. The Historical Journal, 1983, 26 (4), 959-962; PAUL, Diane. Eugenics and the Left. Journal of the History of Ideas, 1984, 45, 567-590. See also MAZUMDAR, Pauline M.H. Eugenics, human genetics and human failings: The Eugenics Society, its sources and its critics in Britain, London/New York, Routledge, 1992, especially the chapter «The attack from the left. Marxism and the new mathematical techniques», pp. 146-195. On Spain, see ÁLVAREZ PELÁEZ, Raquel. Introducción al estudio de la eugenesia española (1900-1936). Quipu, 1985, 2 (1), 95-122; and ÁLVAREZ PELÁEZ, Raquel. Origen y desarrollo de la eugenesia en España. In José Manuel Sánchez Ron (ed.), Ciencia y Sociedad en España. De la Ilustración a la Guerra Civil, Madrid, CSIC, 1988, pp. 179-204. The articles by Álvaro Girón Sierra have traced links between socio-biological thought and anarchism in Spain. See GIRÓN SIERRA. Álvaro. Anarquismo y evolucionismo: Ricardo Mella, la coacción del grupo social y la creación «sociobiológica» del hombre nuevo. Asclepio, 1994, 46 (2), 131-149; Metáforas finiseculares del declive biológico: degeneración y revolución en el anarquismo español (1872-1914). Asclepio, 1999, 51 (1), 247-273; ¿Hacer tabla rasa de la historia?: La analogía entre herencia fisiológica y memoria en el anarquismo español (1870-1914). Asclepio, 2000, 52 (2), 99-118. For a discussion of the links between socialists, science and the acceptance of bourgeois statist paradigms in Spain, see ÁLVAREZ-URÍA, Fernando. Miserables y locos. Medicina mental y orden social en la España del siglo XIX, Barcelona, Tusquets, 1983, pp. 269-285.

(5) RICHARDS, Michael. Spanish Psychiatry c. 1900-1945: Constitutional theory, eugenics, and the nation. Bulletin of Spanish Studies, 2004, 81 (6), 823-848; CLEMINSON, Richard. Anarchism, Science and Sex: Eugenics in eastern Spain, 1900-1937, Oxford/Bern, Peter Lang, 2000; a recent example of work on the political and medical relations between Spain and the colonies is RODRÍGUEZ OCAÑA, Esteban et al. La acción médico-social contra el paludismo en la España metropolitana y colonial del siglo XX, Madrid, CSIC, 2003.

ist thought. Instead of, for example, an analysis which aligns «soft» (environment-based) hereditarian thought with the left and «hard» (innate) hereditarian thought with the authoritarian right, the interworkings of political ideas and scientific positions have been shown to be much more complex (6).

Two examples illustrate this process. A Lamarckian stance on the progressive effects of the environment on the decline of the race was taken by the conservative E.W. MacBride, something perhaps thought to be more at home with leftists devoted to the improvement of social conditions as a prelude to «biological» regeneration (7). Many Nazi writers viewed what they termed the «degeneration» of homosexuality not as something that could be pin-pointed in the hereditary make-up of the German people, and hence eliminated, but as a practice that arose from unsavoury social conditions and to which all men were potentially susceptible (8). In this way, Nazi thought on the subject coincided in some respects with many analyses made by the left (9). Anarchists in Spain, who devoted many pages of their reviews to the discussion of eugenics, were divided and often contradictory with respect to the relative importance of environment and «hard» heredity (10).

⁽⁶⁾ This has also been argued in the case of the reception of Darwinism. The complex twists and turns of Darwinian thought in Germany and its relationship to «National Socialism» have been analyzed recently in WEIKART, Richard. From Darwin to Hitler: Evolutionary ethics, eugenics, and racism in Germany, New York/Basingstoke, Palgrave Macmillan, 2004.

⁽⁷⁾ BOWLER, Peter J. E.W. MacBride's Lamarckian eugenics and its implications for the social construction of scientific knowledge. *Annals of Science*, 1984, 41, 245-260.

⁽⁸⁾ See the discussion in HERZOG, Dagmar. Hubris and Hypocrisy, Incitement and Disavowal: Sexuality and German Fascism. *Journal of the History of Sexuality*, 2002, 11 (1-2), 3-21 (p. 21, n. 38).

⁽⁹⁾ On anarchism see CLEMINSON, Richard. Anarquismo y homosexualidad. Antología de artículos de la Revista Blanca, Generación Consciente, Estudios e Iniciales (1924-1935), Madrid, Huerga y Murcia, 1995. On the left in general and male homosexuality, see HEKMA, Gert; OOSTERHUIS, Harry; STEAKLEY, James (eds.), Gay men and the sexual history of the political Left, New York, Harrington Park Press, 1995.

⁽¹⁰⁾ CLEMINSON, note 5; ÁLVAREZ PELÁEZ, Raquel. Félix Martí Ibáñez y la eugenesia en España. *In:* José Vicente Martí; Antonio Rey (eds.), *Actas del I*

Therefore, instead of the constructed dichotomies between right/left, «hard»/«soft» inheritance, coercive or more democratic means towards «race improvement», what we see is the utilisation by all ideologies of diverse expressions of scientific knowledge and the attempt to harmonise new scientific thought within the principal tenets of their politics. In this sense, it is worth citing the study by David Stack on the reception of scientific thought, in particular Darwinism, in the late nineteenth-century British socialist left:

«It was not a case of a discrete and established political theory self-consciously adapting to an equally discrete and established scientific theory; or of socialists picking and choosing convenient «scientific» ideas and terms, whilst remaining fundamentally uninfluenced by the tools they acquired. Neither Darwinism nor socialism was a fully developed system of thought. Both were in their infancy and both, therefore, were permeable, adapting and evolving frameworks» (11).

This emphasis on process and the mutual configuration of discursive fields, as well as allowing us to see how «socialism» or «Darwinism» were constructed, also permits us to perceive common threads —political and scientific— running through many medical and scientific texts without, at the same time, seeing these subjects as self-contained or uniformly composed. As one author has recently pointed out with respect to Spain, in scientific texts of the time there was a strong political and social objective or message, which sought to interpret reality and change the conditions under which scientific research was carried out (12). This suggests once more that the objectivity that many scientists alleged as the basis of their work can be seen to be fictitious, although not maliciously so; the very power of scientific

Simposium Internacional Félix Martí Ibáñez: Historia, Medicina e Ideología, Valencia, Generalitat Valenciana, 2004, pp. 57-76.

⁽¹¹⁾ STACK, David. The first darwinian Left: Socialism and darwinism 1859-1914, Cheltenham, New Clarion Press, 2003, p. 6.

⁽¹²⁾ CAMPOS MARÍN, Ricardo. La gestión de la desigualdad: la utopía biocrática de Edouard Toulouse. *In:* Rafael Huertas; Carmen Ortiz (eds.), *Ciencia y Fascismo*, Madrid, Doce Calles, 1997, pp. 25-40 (p. 25).

discourse is exposed by such confident declarations of «scientific objectivity» (13).

In the light of these introductory comments, I propose to analyse the work of the Santander-born medical doctor Enrique Diego Madrazo (1850-1942), a tireless advocate of social medicine and eugenics, who as part of his modern, progressive project also established a sanatorium in Vega de Pas, Santander, and a lay, «rational» school. In doing so I wish to question some of what I understand to be some overly progressive or unproblematic readings of his work, which qualify Madrazo as hailing from a position of «utopian socialism» (14). Such an interpretation would place his work in the tradition of utopian socialism which can be traced to late eighteenth-century European movements (15). The designation of Madrazo as a utopian socialist occludes, in my view, rather than illuminates the interpretation of the tensions between his «socialism» and the means to be employed to establish his eugenic «utopia». On the one hand, as we shall see, Madrazo arrives at a socialist future and the destruction of capitalism by a process more akin to «evolution» than «revolution»; hence, perhaps, his «utopian socialism». On the other hand, however, he was prepared to advocate the most extreme measures eugenists advocated at the time, including sterilisation of certain groups and dictatorial

⁽¹³⁾ Once more, the literature on this subject is extensive. For me, key works have been LATOUR, Bruno; WOOLGAR, Steve. Laboratory life. The construction of scientific facts, Princeton, Princeton U.P., 1986; LONGINO, Helen. Science as social knowledge, Princeton, Princeton U.P., 1990; HARDING, Sandra. Whose science? Whose knowledge? Thinking from women's lives, Milton Keynes, Open University Press, 1991, and, BOURDIEU, Pierre. El oficio de científico: ciencia de la ciencia y reflexividad. Curso del Collège de France 2000-2001, Barcelona, Anagrama, 2003.

⁽¹⁴⁾ See, for example, SUÁREZ CORTINA, Manuel (ed.). Enrique D. Madrazo. Escritos sobre ciencia γ sociedad, Santander, Universidad de Cantabria, 1998, p. 11.

⁽¹⁵⁾ There were previous projects, such as that of Campanella's (see note 1), that can be classified as «utopian», but in order to avoid the regressive simplicity of finding «socialist» movements before modern socialism was engendered, I am referring strictly here to those social movements that called themselves socialist from the late eighteenth century onwards. «Utopian socialism» is therefore generally understood to encapsulate the thought of Saint-Simon, Fourier and Owen, for example.

measures in order to arrive at a state of eugenic perfection. It is this blend of utopian sentiment, authoritarian measures and the lure of science that explain the construction of his eugenic thought out of the political and scientific materials available at the time and it is these connections that we must examine in order to gain a fuller understanding of his work. The purpose of this article, therefore, is not to somehow «prove» that Madrazo was «really» an authoritarian in disguise but to see how both socialism and eugenics were «permeable, adapting and evolving frameworks» and how in their mutual development concessions were made in both directions (16).

In order to analyse this alignment of discourses, I refer to one of Madrazo's principal and more mature works, Un siglo de civilización bajo la influencia eugenésica (1930) (17). His short but programmatic essay will be considered in the context of the broad eugenic movement that was established in the first third of the century in Spain and its «socialist utopian» message will be assessed. In addition, some attention will be paid to questions of gender which necessarily emerge when considering Madrazo's discourse on women and the role he reserved for them in the construction of what he defined as a healthy «race». Finally, I will consider what I see as parallels between some authoritarian elements in Madrazo's thought and some aspects of the ideas of J.D. Bernal, a comparison which enables us to position Madrazo's thought more coherently in the interstices between socialism and scientific eugenics on an international level. In the absence, however, of extensive studies on this question either in Spain or further a field, this section is rather more speculative.

⁽¹⁶⁾ STACK, note 11, p. 6.

⁽¹⁷⁾ This essay was first published in Madrazo's *El destino de la mujer (Cartas entre mujeres)*, Madrid, Librería de los Sucesores de Hernando, 1930, pp. 255-318. Throughout this article, I will refer to the edition of *Un siglo de civilización bajo la influencia eugenésica* reproduced in SUÁREZ CORTINA, note 14, pp. 115-158. I first discussed Madrazo's work in CLEMINSON, note 5, pp. 90-96.

2. THE IDEAS OF DR. MADRAZO: PEDAGOGY, SOCIAL MEDICINE AND EUGENICS

Spain, in the history of European eugenics, is somewhat anomalous in that no national organisation claiming the title of eugenics was established during the heyday of the movement in Europe and America, between the late nineteenth century and the end of World War II. The reception of eugenics was characterised by fragmentation, political division and prohibition in Spain, with the first concerted attempt to create a scientific institutional forum banned by royal decree in 1928. Instead of mirroring the situation in, for example, Britain, France or Germany, countries which all possessed strong eugenics or social hygiene societies by this date, in Spain eugenic ideas were upheld by small groups of scientists, sexologists or sectors of working-class movements such as anarchism (18).

It was in this not too propitious climate that Madrazo articulated his ideas on pedagogy, social hygiene and eugenics from the late nineteenth century onwards. Such developments are charted in Suárez Cortina's introduction to the thought of Enrique Diego Madrazo and in another study of the social and medical context in Santander in which Madrazo developed his ideas and practice in the late nineteenth century; that of María Eugenia Calabuig López. (19)

⁽¹⁸⁾ On the history of the eugenics movement in Spain, see ÁLVAREZ PELÁEZ, note 4; PÉREZ SANZ, Pilar; BRU RIPOLL, Carmen, La sexología en la España de los años 30: Tomo I: Las jornadas eugenésicas de 1928 y 1933. Revista de Sexología, 1987, 30, 1-89, where Madrazo is mentioned as the «father of Spanish eugenics» (p. 6); ÁLVAREZ PELÁEZ, Raquel. El Instituto de Medicina Social. Primeros intentos de institucionalización de la eugenesia. Asclepio, 1988, 40 (1), 343-358, in which the eugenics-oriented Institute of Social Medicine was recorded to have existed between 1919 and 1923; ÁLVAREZ PELÁEZ, Raquel. Medicina y moral sexual en la España de preguerra. Asclepio, 1990, 42 (2), 201-210; CLEMINSON, note 5, pp. 81-108. On right-wing eugenics in Spain see JUÁREZ GONZÁLEZ, Francisca. La eugenesia en España, entre la ciencia y la doctrina sociopolítica. Asclepio, 1999, 51 (2), 117-131.

⁽¹⁹⁾ See CALABUIG LÓPEZ, María Eugenia. El regeneracionismo en Santander: Doctor Madrazo, Santander, Cámara Oficial de Comercio, Industria y Navegación de Cantabria, 1992.

These two studies, together with that of Oria Martínez-Conde (20), make for detailed accounts of Madrazo's life and work. From these texts we learn that Madrazo, like many other influential medical figures such as Ángel Pulido and Pedro Mata, absorbed the general climate of positivism prevalent in progressive scientific circles in the late nineteenth century. Together with the opening up of the social sciences to such renewals, laboratory science changed fast in the same period and Madrazo was engaged, after his visit to Germany, in the elaboration of new surgical techniques, some of which were recorded in his *Lecciones de clínica quirúrgica* (Barcelona, 1888) (21).

Some remarks are necessary on the eugenic thought that Madrazo developed from the beginning of the twentieth century onwards, the years during which the Spanish eugenics movement made its initial tentative steps. His first important work on the subject appeared in 1903 as *iEl pueblo español ha muerto*? (22) This long essay was a mixture of nationalist thought, eugenic ideas and various concessions —perhaps tactical ones, given his conflicts with ecclesiastical figures— to Catholic interpretations. It falls, in part, as do many of his other writings, into the late nineteenth-century «regenerationist» bracket, with frequent references to the alleged decadence of the Spanish race and the means available to counter this perceived decline (23). Regenerationists, often invoking the power of rational

⁽²⁰⁾ The work of ORIA MARTÍNEZ-CONDE, Manuel. *Homenaje al Doctor Madrazo*, Santander, Ediciones Tantín, 1985, is a more personal view and is limited to analysing the life and work of Madrazo with less attention being paid to the scientific context in which he worked.

⁽²¹⁾ On the entry of positivist thought in academic and scientific circles in Spain, see NÚÑEZ RUIZ, Diego. La mentalidad positiva en España: desarrollo y crisis, Madrid, Túcar, 1975. On Madrazo specifically, see CALABUIG LÓPEZ, note 19, pp. 11-24, and on the development of new surgical techniques, see pp. 24-37.

⁽²²⁾ MADRAZO, Dr. [Enrique Diego]. ¿El pueblo español ha muerto? Impresiones sobre el estado actual de la sociedad española, Santander, Blanchard y Arce, 1903. The volume ran to 337 pages, an extensive account.

⁽²³⁾ The centenary of 1898 saw the publication of a large number of analyses of the loss of the colonies and of «regenerationist» thought. For one example, see HARRISON, Joseph; HOYLE, Alan (eds.), *Spain's 1898 crisis: regenerationism, modernism, post-colonialism, Manchester, Manchester University Press, 2000.*

and scientific thought as a means of countering underdevelopment and the primacy of the Catholic Church, were characterized by their «top-down» ideas on the reform of Spanish society; Madrazo was in many ways no exception to this.

iEl pueblo español ha muerto? opens with a reference to «un gran estadista inglés» (certainly Lord Salisbury and his «dying nations» speech) (24), according to whom the «Iberian race» was in danger of entering into terminal decline. The contents of Madrazo's book were designed to refute such a catastrophist diagnosis and to provide the means by which such a bleak future could be averted (25).

Faced with this danger, the text displayed firm convictions on what precisely made up a strong race. The laws of inheritance (Madrazo did not specifically mention any laws, but they were possibly those envisaged by Gregor Mendel (26), «rediscovered» in 1900) would be the primordial factor in the constitution of different races and in this sense the Anglo-Saxon race was depicted as being more potent than its Iberian counterpart: «Alto, fornido, de magnífica armadura ó sea y [de?] poderoso vigor muscular, como máquina estática es perfecta, y fisicamente, la de más poder entre todas las razas» (27). By contrast, southern European races, of Latin extraction, he wrote, were smaller affairs, with petite skeletons and muscles and, to continue the machinic metaphor, possessed a body that «como máquina, bajo el punto de vista de su análisis estático, es, sin duda, de menor potencia» (28). Despite this, he believed

⁽²⁴⁾ The speech was given on 4 May 1898 in London. SUÁREZ CORTINA, note 14, p. 95.

⁽²⁵⁾ MADRAZO, note 22, pp. 1-3.

⁽²⁶⁾ On Mendel see BOWLER, Peter J. The Mendelian revolution: the emergence of hereditarian concepts in modern science and society, London, The Athlone Press, 1989. SUÁREZ CORTINA, note 14, p. 20, notes that Madrazo was also influenced by the thought of Prosper Lucas, who believed that inherited features were reproduced constantly from one generation to the next. On Lucas, see PICK, Daniel. Faces of degeneration. A European disorder, c. 1848-c.1918, Cambridge, Cambridge University Press, 1989, pp. 48-49.

⁽²⁷⁾ MADRAZO, note 22, p. 5.

⁽²⁸⁾ MADRAZO, note 22, p. 6.

that the nervous structure of Latins operated with greater energy even though with less constancy than northern races.

In contrast to some eugenic thinkers, often from northern countries, Madrazo favoured a process of racial miscegenation as a route towards perfection; a blend of the «best» qualities from each national pool (29). Indeed, North and South could become complementary regions, each providing values and biological types that could be mutually assimilated, Madrazo believed. This acceptance of essentialised emotional and social characteristics as «biological» qualities was not unusual for the bio-social thought of the time: «Además existirá siempre una corriente que parte de donde la Naturaleza compele al trabajo, de donde la existencia sin deleites se purifica, una corriente que constantemente es atraída hacia estas regiones de la luz, de la alegría y de los amores, donde se sienten más y mejor la poesía y las dulzuras de la vida» (30).

The remainder of the book followed a style and content that fitted comfortably with the explorations of national identity and race embarked upon in the nineteenth century by scholars such as Ramón Menéndez Pidal and the current of thought broadly known as «regenerationism», referred to above. In these accounts, the history of the Spanish «race» was often charted from the early times of the Iberian invasions, the Roman period, the Moorish presence up to the period

⁽²⁹⁾ The desirability or otherwise of «racial mixing» was discussed in most eugenic accounts. For one example against racial mixing, see KÜHL, Stefan. The Nazi connection. Eugenics, American racism, and German national socialism, Oxford/New York, Oxford University Press, 1994, who records the fact that in the United States of America in the 1910s 32 states prohibited marriage between blacks and whites (p. 16). In Australia, some eugenics organisations were in favour of «miscegenation» as a route towards racial strengthening. See WYNDHAM, Diana. Eugenics in Australia: Striving for national fitness, London, The Galton Institute, 2003, pp. 10-11, 335. Voices in favour of and contrary to «miscegenation» within the First Pan-American Congress on Eugenics and Homiculture (Havana, 1927) are discussed in GARCÍA GONZÁLEZ, Armando; ÁLVAREZ PELÁEZ, Raquel. En busca de la raza perfecta. Eugenesia e higiene en Cuba (1898-1958), Madrid, CSIC, 1999. The review article by MEDINA DOMÉNECH, Rosa. Eugenesia y formas de hacer historia. Cuestiones para el debate, Dynamis, 2004, 24, 291-305, illuminates some of the pitfalls in writing about the history of eugenics.

of decline, from Charles V and the decadence of the state and the growth of a stagnant oligarchy (31). The criticism of the oligarchy was not absent from the thought of writers such as Ioaquín Costa (32), but Madrazo focused on what he saw as the two main culprits of Spanish decadence: the Catholic Church and the monarchy (33). In opposition and in contrast to these decadent sectors and influences on the Spanish character were those which formed the «national mass», or the proletariat. The concession of such an important role to the working classes was not without precedent in regenerationist thought of the period, but contrasted strongly with more «mainstream» writers, who while praising the humble Spaniard, often understood the latter to be drawn from the peasant classes or the unpoliticised working class rather than the «proletariat», which could be dangerously politicised by socialism or anarchism (34). As such, Madrazo's stance was, if not socialist, one that favoured the historical retribution of the poorer sectors of society.

⁽³¹⁾ An analysis of this subjective and retrospective reading of «national» history can be seen in GOYTISOLO, Juan. «Homo hispanicus: el mito y la realidad», in España y los españoles, Barcelona, Lumen, 2002, pp. 23-28. A retrospective reading according to which «Spain» and «Spaniards» existed from the times of the Visigoths in what is now Spain can be seen in MENÉNDEZ PIDAL, Ramón. España y su historia, 2 vols., Madrid, Minotauro, 1957.

⁽³²⁾ The classic work of in this sense is COSTA, Joaquín. Oligarquía y caciquismo como la forma actual de gobierno en España. *In:* Rafael Pérez de la Dehesa (ed.), *Joaquín Costa: Oligarquía y caciquismo, Colectivismo agrario y otros escritos (Antología)*, Madrid, Alianza, 1993, pp. 15-45 [full version originally published 1901].

⁽³³⁾ MADRAZO, note 22, pp. 131-168.

⁽³⁴⁾ MADRAZO, note 22, pp. 169-173. Madrazo's view was that the working class and the bourgeoisie ignored one another, instead of working together towards social co-operation. For a «scientific» view of the value and power of the proletariat see the socialist writings of Jaime Vera, particularly VERA, Jaime. Ciencia y proletariado. Productividad potencial e inversión de fuerzas. *In:* Juan José Castillo (ed.), *Ciencia y proletariado. Escritos escogidos de Jaime Vera*, Madrid, Cuadernos para el Diálogo, 1973, pp. 198-208 [the original article dates from 1912].

The definitive answer to Madrazo's rhetorical question *iEl pueblo español ha muerto?* was, naturally, in the negative (35). Madrazo followed his 1903 text with a number of studies which expanded on the same themes such as *Cultivo de la especie humana* (1904), several theatrical works on the dangers of dysgenics, alcohol, and decadence, the importance of education and eugenics, and his last major work on the subject, *Pedagogía y eugenesia* (*Cultivo de la especie humana*), was published in 1932, two years after *Un siglo de civilización bajo la influencia eugenésica* (36). In all of these texts, there was a strong emphasis on the role of science as a purifying force, education or pedagogy as praxis towards creating a better expression of humanity and, as we will see in particular in *Un siglo de civilización bajo la influencia eugenésica* and *Pedagogía y eugenesia*, the justification of coercive methods to bring about the new eugenic society, under the aegis of a rather ill defined socialist regime.

Finally, before discussing Un siglo de civilización bajo la influencia eugenésica it is worth mentioning two sections from Madrazo's ¿El pueblo español ha muerto? and Cultivo de la especie humana (1904) in order to see how the complex relation between science, progress and religion were played out in his work. As we will see, Madrazo's supposed anti-clericalism, too readily accepted by some commentators, was not as straight-forward as it may at first sight appear. In his ¿El pueblo español ha muerto?, he writes in a sentence that seems as far removed from internationalist socialism as it is from anti-clericalism: «Creo que ningún sentimiento humano puede negar á su patria, y juzgo sagrada la defensa de su alma libre é independiente: tal la hizo Dios y á tal estado debemos contribuir todos que revierta, si es que queremos guardar respeto al Artífice Supremo, y ponernos en el justo término que debe guardar el hombre» (37). This contrasts, however, with what was expressed just

⁽³⁵⁾ In other countries, a less positive stance was taken by those who claimed that the «race» was committing suicide, torn asunder by an underclass of undesirables. See, for example, RENTOUL, Robert Reid. *Race culture; or, Race suicide.* A plea for the unborn, New York/London, Garland, 1984 [1906].

⁽³⁶⁾ SÚÁREZ CORTINA, note 14, pp. 66-67 lists Madrazo's work.

⁽³⁷⁾ MADRAZO, note 22, p. 1.

a year later in Madrazo's *Cultivo de la especie humana*, where we see an anti-religious stance mixed with a clear pro-science position:

«Al ideal de la religión, ha de sustituir el de la ciencia, ó sea al del sentimiento religioso el de la razón, que ya le ha reemplazado en gran parte de las sociedades que van al frente de la cultura.

Nosotros mismos estamos en vías de dicha evolución, que no ha de tardar en desligarnos de tal influencia religiosa, y orientarnos en sentido de mayor sabiduría, que responda a nuevas necesidades sociales, más adecuadas al progreso y bienestar». (38)

3. «UN SIGLO DE CIVILIZACIÓN BAJO LA INFLUENCIA EUGENÉ-SICA» (1930)

The juxtaposition of apparently anti-religious elements with concessions towards God as maker of the world runs through Madrazo's æuvre. In addition, we see how science as progress, utopianism and eugenics characterise his thought. In this sense, as we have stated above, socialism, science and eugenics were not incompatible per se for those who wished to see the end of capitalism and the inauguration of a new period of health and equality. The purpose of this section, therefore, is less to expose any possible «inconsistencies» or supposed «contradictions» in Madrazo's thought and more to see how his eugenic utopia coincided with that of other eugenic thinkers in Spain and further a field and to see how expedient certain coercive and hierarchical strategies were in the overall endeavour to create his anti-capitalist, eugenic society (39).

It is significant that the essay *Un siglo de civilización* was included in the volume *El destino de la mujer* as many of the premises upon which the future eugenic society was based were derived from

⁽³⁸⁾ SUÁREZ CORTINA, note 14, p. 11.

⁽³⁹⁾ Suárez Cortina, however, makes little comment on Madrazo's authoritarianism and questionable gender politics, incorporating them as part of the thought of the times. This was evidently the case. However, gender bias and authoritarian politics cannot but clash with the notion of Madrazo as a «utopian socialist».

a particular role to be fulfilled by women over the hundred years of utopian preparation. The author reaffirmed what he understood to be the importance of the biological characteristics of human-kind and subscribed to a particular notion of the nature of women. On this matter, Madrazo spoke of «destiny» when referring to women's biological and psychological make-up. Other characteristics defined woman's persona: «Su ritmo fisiológico es obediente e inflexible, y el pretender borrar estas leyes y desconcertar su psicología es perderse en las tinieblas de la ignorancia» (40).

The laws of inheritance were of prime importance in the task of the «cultivation of the human species» and education and attention to environmental factors, while valuable, would not save the race and would be incapable of purifying its ills (p. 116). Once more, we see that there is no necessary direct link between the value given to environmental factors and leftist movements; some on the right of the political spectrum also accepted that degeneration was due to environmental factors (41).

While Madrazo acknowledged that sexual pleasure was an important aspect of human existence, something becoming more usual in formal scientific circles of the time, this, he averred, should not be excessive and the use of contraceptives as an aid to increasing pleasure was deemed to be detrimental to health (p. 117) (42). Con-

⁽⁴⁰⁾ Un siglo de civilización, cited in SUÁREZ CORTINA, note 14, p. 115. Page numbers follow this edition and are from now on cited in the main text. A good survey of Spanish medical men's views in the early twentieth century, which shows the essentialist thought prevalent with respect to the biological and social characteristics of women, is ORTIZ. Teresa. El discurso medico sobre las mujeres en la España del primer tercio del siglo veinte. In: María Teresa López Beltrán (coord.), Las mujeres en Andalucía. Actas del 2º encuentro interdisciplinar de estudios de la mujer en Andalucía, Málaga, Servicio de Publicaciones Diputación Provincial de Málaga, 1993, vol. 1, pp. 107-138.

⁽⁴¹⁾ See the discussion on left and right politics and eugenics in the articles cited in note 4.

⁽⁴²⁾ Sexual pleasure was often referred to as the need to satisfy the «sexual instinct», something that was increasingly acknowledged to exist in psychiatric circles at the end of the nineteenth century. The Spanish psychiatrist César Juarros, for example, defined the sexual instinct as *«El instinto: eje de la vida de la especie»*,

traception could thwart the natural order of things; the destiny and the self-fulfilment of the female were inherently tied, according to Madrazo, to child-birth: «Fracasa la vida de la mujer que no cumple con la maternidad» (p. 117). The characteristics of both males and females had been forged by centuries of biological activity, resulting in sexual differentiation between the two sexes and specific roles for both (pp. 117-118).

Madrazo's views on the two sexes were, nevertheless, somewhat complex and, unusually for the times, provided a criticism of masculinity in its present form (43). In this way, the male of the species, despite wishing to improve the world, had actually rendered it a worse place, through his ignorance, wars and greed. «Basta de ensayos masculinos», wrote Madrazo (p. 118); faith was placed in women to bring about the new eugenic world of science and civilisation (p. 118), a perspective that united medical and sexological writers from diverse perspectives (44).

Furthermore, it was essential, Madrazo believed, for eugenic science to penetrate the corridors of power, *«sin violencias y coacciones»*, and government had the duty of making eugenic criteria prevail in the social realm (p. 119). The new *«Church of science»* would illuminate

justifying the existence of the individual and his or her role in the species. See JUARROS, César. *La Psiquiatría del médico general*. Madrid, Ruiz Hermanos Editores, 1919, p. 90.

⁽⁴³⁾ Such a critique was more common in leftist movements. On the anarchist and socialist movements' «sexism» and attempts to combat it by both women and men, see NAVARRO NAVARRO, Francisco Javier. Ateneos y grupos ácratas. Vida y actividad cultural de las asociaciones anarquistas valencianas durante la Segunda República y la Guerra Civil, Valencia, Biblioteca Valenciana, 2002, pp. 259-261. A recent article on historiography on women in the anarchist movement is ES-PIGADO TOCINO, Gloria. Las mujeres en el anarquismo español (1869-1939). Ayer, 2002, 45, 39-72. For a similar period and tensions but different scenario, see HUTCHISON, Elizabeth Quay. From «La mujer esclava» to «la mujer limón»: anarchism and the politics of sexuality in early twentieth-century Chile. Hispanic American Historical Review, 2001, 81 (3-4), 519-553.

⁽⁴⁴⁾ See, for example, GÓMEZ OCAÑA, José. El sexo, el hominismo y la natalidad, Madrid, Editorial Saturnino Calleja, 1919; MARAÑÓN, Gregorio. Ensayos sobre la vida sexual, Madrid, Espasa Calpe, 1969 [1926].

the path to take but there would be no «jerarquías, autoridades y subordinaciones» in this process (p. 119). It is striking, therefore, that Madrazo some paragraphs later was prepared to accept methods that did not correspond to this rather libertarian methodology: «Al escoger una colectividad nacional, lo mismo nos da que la energía directora proceda de un sistema político democrático que dictatorial» (p. 120). Further, in a demonstration of the ends justifying the means, he wrote that «La infalibilidad de los hechos borrarían los escrúpulos» (p. 120).

Madrazo did acknowledge that a parliamentary democracy would be the best regime to oversee the hundred-year process of eugenic reform; however, a more rapid change would be permitted by the existence of a dictator, especially in those countries where there was historic underdevelopment. These more «primitive» peoples should absorb «progress» in order to bring them up to speed with advanced peoples (p. 121). Spain, even though Madrazo does not explicitly say so, was probably understood as one of these «underdeveloped» nations.

4. FIVE TIMES TWENTY YEARS MAKES FOR A CENTURY OF EUGENICS

The century-period of eugenic change envisaged by Madrazo was divided into five twenty-year stages. Each of these is now considered. In the first period, the «executive power» would propel all eugenic reforms by means of a committee that would fuse the aims of Malthusianism, as birth-control, and eugenics as a science which sought «racial beauty» (p. 121) (45). The first decree of the new period would create a Eugenic Committee in every locality. Those who would

⁽⁴⁵⁾ Madrazo, like many eugenists of the time, criticised Malthusianism (or, more correctly, neo-Malthusianism) for its concentration on numbers alone, rather than on the supposed «quality» of offspring, the major concern of eugenics. On this subject, see the analysis for the French case contained in SCHNEIDER, William H. *Quality and quantity: the quest for biological regeneration in twentieth-century France*, Cambridge, Cambridge University Press, 1990. In Spain, however, the first neo-Malthusian movement championed by anarchists in the review *Salud y*

participate compulsorily in this Committee included «select persons» such as the municipal health inspector, the school master, the priest, the local magistrate and the mayor (p. 122). The Committee would be subordinate to the provincial Eugenics Committees, also made up of similar personalities and those engaged in the scientific cultivation of crops and animals (46).

The local Committee would establish an annual programme of Sunday lectures on eugenics and the youth of both sexes would be obliged to attend, in a measure that would not easily be devoid of the «autoridades y subordinaciones» decried above by Madrazo. The Committee would create a medical register «respecto a la constitución, temperamento, idiosincrasia y abolengo físico, moral y patológico de los cónyuges, a la manera de que cada niño lleva [a]l maestro en la escuela su ficha con las características de su evolución física, mental y moral» (p. 123). Such methods may seem foreboding to us now and even redolent of Nazi eugenics. We have to recall, however, that similar eugenic measures were utilised in some states of the United States well before the 1930s and in many other countries and that it was only generally in the mid-1930s that such techniques aroused vociferous concern (47). Indeed, in 1932 in his Pedagogía y eugenesia Madrazo proposed, along with other eugenicists, that a «cartilla eugenésica» should be introduced in Spain. Madrazo wished this to be introduced under the auspices of the Socialist Party on the basis that «Una humanidad enfermiza, cruel y viciosa no puede establecer jamás el Estado socialista» (48).

Fuerza (Barcelona, 1904-1914) combined a concern over «quality» and quantity, not without problematic results. See CLEMINSON, note 5, pp. 109-158.

⁽⁴⁶⁾ In this way, Madrazo's thought was similar to the «stirpiculture» and animal husbandry common in the British and North American eugenics movements.

⁽⁴⁷⁾ On the relationship between U.S. eugenic thought and Nazi «race hygiene», see KÜHL, note 29. More generally, see TROMBLEY, Richard. *The right to reproduce*. *A history of coercive sterilization*, London, Weidenfield & Nicolson, 1988.

⁽⁴⁸⁾ MADRAZO, Enrique Diego. Pedagogía y eugenesia (Cultivo de la especie humana), Madrid, Librería de los Sucesores de Hernando, 1932, pp. 281-282. There was a similar plea made during the Madrid Eugenics Conference of 1933 for the creation of a «certificado prenupcial». See YAGÜE Y ESPINOSA, J. Luis. Reconocimiento, consejo y certificado prenupcial. In: Enrique Noguera; Luis Huerta (eds.), Genética, eugenesia y pedagogía sexual, 2 vols., Madrid, Javier Morata,

The proximity of some of Madrazo's eugenic measures to those of Nazi «race hygiene» is illustrated by his desire in this first stage of eugenics to create a sanitary code that would prevent reproduction amongst those closely related to one another, the lazy, alcoholics, epileptics, the madman and those «infected or intoxicated» in an elastic bracket that included those designated by Anglo-American eugenics movements as «unfit» (p. 123) (49). Such a prohibition would allow youth to create, despite the opposition of Church, bureaucrats and plutocrats, a «raza sana, fuerte y dominadora que trae la libertad, la igualdad y la fraternidad social» (p. 125). How a «dominating» race would bring freedom and equality was a point of political theory not explicated by Madrazo. As a strategy, it may have relied on a Marxian notion of the dictatorship of the most advanced classes, the revolutionary sectors of the proletariat, but this may be an over-reading of Madrazo's text. In any case, in addition to these measures, lay, co-educational, scientific and compulsory schooling would guarantee such advances and would eliminate pride, greed and inequality (p. 127). Finally, exhibitions of eugenic offspring, as in some American states, would show the results of the eugenics policies inspired by the biological laws of Gregor Mendel (p. 128) (50).

^{1934,} vol. 2, pp. 143-149. The two volumes are crucial for an understanding of Spanish eugenics in the 1930s. Madrazo participated in the Conference and published a piece, «Concepto optimista de la vida; la sexualidad, base fundamental del cultivo de la especie humana. Herencia y educación. Selección sexual. Hagamos el individuo para la sociedad, no la sociedad para el individuo. La finalidad de la vida es gozarla», in NOGUERA; HUERTA, vol. 2, pp. 309-314.

⁽⁴⁹⁾ The most well-known Nazi law was that of July 1933 which allowed for the sterilisation of certain groups, the «Law on Preventing Hereditarily Ill Offspring» and the later Nuremberg laws of 1935. The latter included the «Reich Citizenship Law», which allowed only those designated to be of «German» or «German related blood» to be full citizens, and the «Blood Protection Law», which forbade marriage between Jews and citizens of «German or related blood». See KÜHL, note 28, pp. 23; 97-98.

⁽⁵⁰⁾ Eugenics movements were strong on the visual representation of those they considered to be «unfit». For one example, this time with respect to film, see the discussion of eugenic propaganda material in PERNICK, Martin S. *The black stork: Eugenics and the death of «defective» babies in American medicine and motion pictures since 1915*, New York/Oxford, Oxford University Press, 1996.

The «Second Experimental Stage of Eugenic Education» would begin with a set of young people already trained in the rigours of eugenic laws and behaviour. Families now transmitted physical and moral qualities to their children in full knowledge of hereditary laws in the same way as better cows and wheat were produced (p. 129). While the school, attended by all, levelled out differences and prepared children for a future of equality and fraternity, the *«clase directora»* of this second generation distinguished itself by its progressive nature and desire to introduce social reform. Once again, this «directing» class may be notional in the sense that it was the most «advanced» class rather than a new kind of ruling class, but comments such as this on the political structures of this evolving society do make us question both the author's proximity to utopian socialism and his commitment to egalitarianism.

Co-operative businesses in this second stage slowly substituted selfish capitalist firms and both the producer and the consumer —the utopian socialist dream— were protected and united in harmony (pp. 130-131) (51). Cities and industries were decentralised and electric power reached the countryside. The child-bearing mother was provided with a single room «con muros de cristal amasados con aire, luz y agua, rodeada de flores, frutas y pájaros cantores» (p. 131).

In an attempt to show the «products» of the new eugenic society, exhibitions of «fit» children were to continue and the negative characteristics of grand-parents were slowly to be eliminated (p. 132). The consumption of alcohol, along with the use of tobacco and drugs, would cease (p. 133) (52). Together with a number of changes in

⁽⁵¹⁾ One of the first modern socialists to theorise the harmony between producers and consumers in a co-operative venture was Charles Fourier (1772-1837), whose «phalansteries» would be the model for such practices. For an account of Fourier and other utopian socialists see MARSHALL, Peter. *Demanding the Impossible. A history of anarchism*, London, Harper Collins, 1992, pp. 149-152.

⁽⁵²⁾ The dangers of alcohol and the tavern were present in Madrazo's play *Nelis*, reproduced in MADRAZO, Enrique Diego. *Obras de teatro sobre el cultivo de la especie humana*, *Herencia y educación (drama)*, *Nelis (drama)*, Madrid, Est. Tipográfico Editorial, 1913, vol. 1, pp. 207-262. On the question of the observance or otherwise of anti-alcoholism in Spanish and European socialist milieus, see

the alimentary practices of society, the arts would flourish and the democratic institutions would be consolidated. Church and state were to be separated; borders were abolished; military spending became obsolete, and the United States of Europe became a reality (p, 134). Culture was given a place of paramount importance. Esperanto was spoken as the international language and «La rapidez de comunicaciones y la confusión de lenguas ha impuesto este nuevo lazo de cultura y amor, ante el antipático egoísmo nacionalista del capitalismo» (p. 136). Such a state of affairs, combining social and biological improvements, closed the second eugenic stage of Madrazo's utopia with admittedly strong socialist and internationalist features.

The third stage of cultivation of the human species consolidates the defeat of the old interests of capitalist society and «La bondad innata se extiende e invadirá pronto la sociedad entera» (p. 137). The idea of natural goodness was something common to many socialist and anarchist movements of the period; it was thought that one only had to create the conditions for it to flourish. Madrazo believed that, in addition to physical aspects, moral values were also inherited, a criterion also common to left-leaning social eugenicists (53).

Women continue to play a fundamental role in the new eugenic order and it is decreed that breast-feeding will continue up to the age of twenty months and the science of child-care, «puericulture» (54). would increase its ambit to include the health of the mother herself. Men would have to abstain from sexual intercourse with women who were to give birth or who were breast feeding and would have to practise relations with *«mujeres mal acondicionadas para la reproducción, y sí para la satisfacción de la carne»* (p. 138). The changes in communications, food production, the arts and general quality of life proceed apace.

Eugenic beauty exhibitions display the «best» physical, mental and moral types (p. 141) and science is turned on «bad seed» by a means

DE LUIS MARTÍN, Francisco; ARIAS GONZÁLEZ, Luis. Las Casas del Pueblo socialistas en España (1900-1936): estudio social y arquitectónico, Barcelona, Ariel, 1997, pp. 58-59.

⁽⁵³⁾ WEIKART, note 6, pp. 21, 35.

⁽⁵⁴⁾ On the origins of puericulture, see SCHNEIDER, note 45, pp. 55-83.

that many eugenic movements advocated —sterilisation. In Madrazo's words: «La semilla fecundante de la perversidad se ve boicoteada. Los rayos X, de manera incruenta, resuelven con frecuencia y en tiempo oportuno este enojoso problema» (p. 142). The question of whether the application of such surgery is voluntary or not is not mentioned (55). Military expenditure and weapons disappear; lawyers and judges are practically redundant; wealth is centralised in the state (p. 142).

But it is women who continue to hold the most important role of all. The new mother, Madrazo wrote, «sabe hoy que sus ensueños de belleza los realiza la impregnación sexual» (p. 142). Once the state has been centralised and realises the task of «perfeccionar el organismo eugenésico nacional», the third stage is deemed complete.

The fourth stage of the «Cultivation of humanity on the basis of hereditary law» enjoys the general agreement of the population with respect to the spirit of selection in terms of sexual relations (p. 143). The praise of woman by Madrazo reaches new levels as she is discussed in the following terms: she will be able to «perfeccionar el fruto de sus entrañas» (p. 143); «convencida de que la grandeza de su corazón puede hacerla carne, y de que su futura felicidad va aneja a obra semejante, parte ligera en busca de la alianza sexual que conduce a tal término; de modo que acepta el deleite de la cópula como medio, no como fin» (pp. 143-144). Women's life would be devoted to «servir y ayudar con urgencia al desarrollo embrionario» (p. 144), a task she was obliged to perform by «Nature» and compelled to do by her blood and soul. On several occasions, this adulation reaches lyrical proportions: «Su alegría y lágrimas la dicen que no hay consuelo como el suyo, ni amor mejor

⁽⁵⁵⁾ The question of the forced or voluntary sterilisation of «dysgenics» in the historiography of eugenics is a key issue. The International Latin Eugenics Federation, the first Congress of which was held in 1937, held a «softer» view on this question than many German or Anglo-American sources. For the Latin Federation and the question of sterilisation, particularly with respect to divergent anarchist views on the subject, see CLEMINSON, note 5, pp. 51-53, 212-218. Many British socialists and those in the modernist intellectual vanguard believed that sterilisation was an acceptable procedure. For an innovative look at this question see CHILDS, Donald J. Modernism and eugenics: Woolf, Eliot, Yeats, and the culture of degeneration, Cambridge, Cambridge University Press, 2001.

pagado; quiéreme como te quiero; y así se ve y se siente morir en la fortaleza y dulzura de abrazos y besos» (p. 144). «Free love», that is, paring up with more than one male for reproductive purposes, can take place if it benefits the species.

The youth scours its past to eliminate degenerate strains. Capitalist social relations, greed, envy and egotism are banished. The idea that war was progress and that peace sent nations into slumber is dismissed as *«uno de los mil embustes que hace correr la malicia capitalista»* (p. 145). Other remnants from the capitalist age disappear. Private property vanishes and with it practically all disputes; *«un nuevo sol alumbró las conciencias»* (p. 147). Land is collectivised and the courts disappear. Science, for its part, has suppressed the incidence of syphilis, madness, venereal disease and the causes of degeneration (p. 148). No act of procreation takes place without a careful look at one's antecedents. Even a nervous tic could produce untold psychopathic results, Madrazo warns.

As can be seen, Madrazo, relying on laws of inheritance that are not explicitly named but which drew on a mixture of theories including, probably, Darwin, Lamarck, Prosper Lucas and Mendel (56), came to believe that practically everything, «good» and «bad», was inherited. The strength of such ideas at the time was such that it was believed that practically all behaviours could be identified and isolated. Such was the eclecticism of the scientific establishment and the power of ideas on heredity combined with eugenics.

We have arrived at the fifth and final stage of eugenic influence in Madrazo's century-long plan. The fifth stage constituted, logically, the culmination of the efforts of the previous four periods of twenty years. Now, the **caracteres fisicos, intelectuales y morales (...) honran a una civilización muy elevada** (pp. 149-150). The sexual impulse is subordinated to will and pleasure is not the only motivation for intercourse. The male still falls victim to inflated sexual desire, a product

⁽⁵⁶⁾ On the reception of Darwin and other hereditarian theories in Spain see GLICK, Thomas F. Spain. In Thomas F. Glick (ed.), The comparative reception of darwinism, Austin/London, University of Texas Press, 1974, pp. 307-345.

of many centuries'» social practices, Madrazo argues, but women play a fundamental role in countering excessive passion.

Madrazo's concern with respect to «excessive» sexuality was shared by many eugenists of the time. Despite their opposition to Catholic tenets on the «use» of sexuality as procreation alone, many progressive doctors believed that a balance had to be achieved and that sexuality was a «noble» and healthy drive, to be thwarted at one's peril. But this did not mean that sexual license or promiscuity was sanctioned; bodies, fluids and desires had to be controlled in the name of a higher ideal. It was rare that such an equation was broken at the time (57).

Part of the result of this controlled sexuality, channelled towards certain ends, was the elimination of the «perverse» and the confused: «Tullidos y deformes, los de confusa intersexualidad e invertidos, los miserables, psicópatas e impotentes, que servían de estorbo e inquietudes a la actividad de los buenos, han ido desapareciendo. La verdad triunfa hasta tal punto que las leyes de represión y castigo cayeron en desuso» (p. 150). Once more, as in the case of the advocacy of sterilisation, Madrazo leaves us in suspense as to what precisely these repressive laws and punishments would be. Were these measures limited to the prevention of intercourse between those groups listed in the first period as «undesirables» (those closely related to one another, the lazy, alcoholics, epileptics, the madman and those «infected or intoxicated») or were they to embrace sterilisation or even elimination?

In this last stage of eugenic perfection, scientific progress continued and the development of new strains of vegetable and plant

⁽⁵⁷⁾ See, however, for a dissenting Catholic view with respect to dominant Catholic morality, TORRUBIANO RIPOLL, Jaime. *Teología y eugenesia*, Madrid, Morata, 1929. Torrubiano was present at the 1933 Jornadas Eugénicas and gave a talk with the title «*El Cristianismo es el mejor auxiliar de la Ciencia Eugénica*», see NOGUERA; HUERTA, note 48, vol. 1, pp. 60-84. On Torrubiano see CLE-MINSON, Richard. Instancias de la biopolítica en España, siglos XX y XXI. *In:* Javier Ugarte Pérez (ed.), *La administración de la vida: Estudios biopolíticos*, Rubí, Anthropos, 2005, pp. 127-152 (esp. pp. 134-139).

foods replaced the eating of meat (58). The state, once powerful, had been reduced to two functioning departments, or had «withered» away presumably in accordance with Marx and Engels' doctrine, and both these departments were devoted to eugenic matters (p. 151). Women, as before, continued to play a vital role: «la iniciativa de la hembra es grande y exalta el sentimiento en su ardiente corazón. Mantiene enhiesto el lema de su amor magnificado al hijo, y éste, a la sociedad» (p. 153).

In this fifth stage of eugenic achievement, according to Madrazo, communist forms of social organisation became complete. Communism and science were finally united: «La organización social comunista bate en todo su esplendor a las caducas organizaciones que la habían precedido. El actual aprovechamiento y abundancia que ha traído la ciencia, así como la afectuosa cooperación y solidaridad, se deben a la nueva moral» (p. 153). Hierarchies and class interests were banished. The four horses of the capitalist Apocalypse were to be interred: «se convino en celebrar las cuatro fiestas funerales de la Monarquía, de la Iglesia, del Militar y del Capital, para eterna recordación» (p. 154).

In terms of the biological aspects of eugenics, anatomical scientists in this last stage had discovered previously unknown brain cell structures which were the repository of feelings, affections and desires. These were thought to contribute positively to the future development of society. If up to now, Madrazo wrote, only physical and moral characteristics had been cultivated, others more related to the arts and sciences could henceforth be fostered (pp. 155-156).

In addition to these physical and mental changes, primarily viewed by Madrazo as elements lodged in the heritable structure of humanity (the notion of «genes» as such had not yet been popularised), certain changes in the body of human-kind would begin to take place in this fifth period. The human skeleton would become smaller and would adapt to the demands of civilisation. A major

⁽⁵⁸⁾ This aspect of Madrazo's thought connects with that of the naturist and vegetarian movements in Spain. These, by 1930, were varied and extensive. For a recent account, see ROSELLÓ, Josep Maria. La vuelta a la naturaleza. El pensamiento naturista hispano (1890-2000): naturismo libertario, trofología, vegetarismo naturista, vegetarismo social y librecultura, Barcelona, Virus, 2003.

influence on the human body in this sense was the use of electrics and machines. The body, as machine itself, would alter in accordance with these new mechanical advances, in an equation that was recurrent in modernist thought: «El incremento del maquinismo, a base de energía eléctrica, pide más ligereza que fuerza; lo cual se consigue con un organismo humano de menos volumen y más viveza; al manejo de botones y palancas de esfuerzo rápido y prepotente se debe de acomodar la brevedad y rapidez de nuestros movimientos, como también a la vivacidad de nuestra inteligencia e imaginación» (p. 156) (59). Machine metaphors for the body continue and machine and body become merged, as one: «las estadísticas demuestran que se arruinan primero las máquinas grandes y pesadas que las pequeñas y ligeras. La longevidad de la vida humana parte de esta teoría». People would live longer than before and the stuff of life itself would be composed of different materials: «la longevidad se irá dilatando a medida que vayamos construyendo la vida con materiales más resistentes» (p. 156).

The evocation of life as a construction made up of «more resistant materials» cannot fail to conjure up images of the human-as-cyborg, the mixture of flesh and machine, as a common trope of utopian modernist and post-modernist thought (60). Such imagery also reminds us of the «post-human» forms that some people would adopt in J.D. Bernal's eugenic utopia of 1929, which has striking parallels with that of Madrazo. In Bernal's *The World, the Flesh and the Devil* an egalitarian society is created in tune with communist sympathies and the «higher» humans, such as scientists and thinkers, have become literally disembodied, with their brains remaining as communicators by means of electrical impulses.

⁽⁵⁹⁾ On machines, the body and modernism, see SELTZER, Mark. Bodies and machines, New York, Routledge, 1992; ASENDORF, Christoph. Batteries of life: On the history of things and their perception in modernity, Berkeley/Los Angeles/London, University of California Press, 1993.

⁽⁶⁰⁾ See the references in note 58. For another vision of modernism and technology where the human body would be changed often through violence see BLUM, Cinzia Sartini. *The other modernism: F.T. Marinetti's futurist fiction of power*, Berkeley/Los Angeles/London, University of California Press, 1996.

5. CONCLUSION

The general tenor of Madrazo's work, in its aspirations for a eugenic society, is consistent with other projects in Spain and other countries during the period studied. For other Spanish commentators, such as those present in the *«Jornadas Eugénicas»* in May 1933 (61), eugenics and other bio-social theories were envisaged as the harbingers of a new age of felicity and harmony, free from the marks of degeneration that were believed to characterise the Spanish population at the beginning of the twentieth century. Few, however, envisaged such a complete programme of change by the hand of eugenics in combination with an explicit post-capitalist social structure. Indeed, Madrazo's *Un siglo de civilización bajo la influencia eugenésica* must stand as one of the most elaborate plans for eugenic transformation on a socialist basis produced in the 1930s in Spain and beyond.

As we have seen, it is impossible to separate eugenics from its concurrent social and political spheres. The action of science and its effects on society were fused in this kind of eugenic programme. For Madrazo did not stop at advocating the change of the "biological" basis of his human subjects (however questionable the scientific premises upon which his thought was founded); eugenics from his perspective also included the arts, communications, the economy and political structures. In this way, eugenics for many social reformers of the early twentieth century became a vast repertoire of strategies for all kinds of change, not just those referred to as "racial" or "biological".

But Madrazo's five stages of eugenic transformation were premised on certain continuities which betray their own ideological and gendered underpinning. George Mosse and Gisela Bock have shown how manliness, traditional morality and a particular imagery bestowed upon women were integral to German Nazi politics (62). German motherhood was exalted to form a cornerstone of the new state and

⁽⁶¹⁾ NOGUERA; HUERTA, notes 48 & 57, passim.

⁽⁶²⁾ See MOSSE, George. Fascism and sexuality. In nationalism and sexuality: Middle-class morality and sexual norms in Modern Europe, Madison/London, Wisconsin University Press, 1985, pp. 153-180; BOCK, Gisela. Antinatalism, maternity and paternity in German National Socialist racism. In: Gisela Bock; Pat Thane

women who confined themselves to the art of child-rearing found a hallowed place in Nazi mentality. Part of the ability of fascist regimes to attract female support was based precisely on this new prescription, which was a blend of traditional roles of nurturing and caring and the opportunity for a degree of public visibility not experienced by many women before. A similar process, not without its antagonisms, occurred under National Catholicism in Spain (63). In Madrazo's scheme, there were essentially two types of women: those virtuous and devoted to the eugenic task of bringing up offspring and those who were outsiders, the «dysgenics» used for sex when males desired, including prostitutes, forming a striking correlative with traditional Catholic thought which divided women into two groups, the virtuous and the prostitute or «fallen» woman.

Can, therefore, the epithet of «utopian socialism» applied by Suárez Cortina be justified in Madrazo's case? While Madrazo's view on the role of women was similar to that of some utopian socialists (64), his advocacy of authoritarian methods cannot be held to be compatible with utopian socialist designs. For, while on the one hand, Madrazo advocated the establishment of co-operatives, the introduction of an international language, the suppression of borders, judges, the military and most of the state apparatus, on the other hand, he accepted the categories of the «unfit» that eugenicists employed at the time, and was prepared to introduce sterilisation of certain groups, by the arm of the law and hence the power of the state. He advocated dictatorial

⁽eds.), Maternity and gender policies: Women and the rise of the European welfare states, 1880s-1950s, London/New York, Routledge, 1991, pp. 233-255.

⁽⁶³⁾ See NASH, Mary. Pronatalism and motherhood in Francoist Spain. *In:* Bock; Thane (eds.), note 52, pp. 160-177; GRAHAM, Helen. Gender and the State: Women in the 1940s. *In:* Helen Graham; Jo Labanyi (eds.), *Spanish Cultural Studies: an introduction: the struggle for modernity*, Oxford, Oxford University Press, 1995, pp. 182-195. On the use of the female body by the Spanish Falange, see VINCENT, Mary. *Camisas Nuevas:* Style and Uniformity in the Falange Española 1933-1943. *In:* Wendy Parkins (ed.), *Fashioning the body politic: Dress, gender, citizenship*, Oxford/New York, Berg, 2002, pp. 167-251.

⁽⁶⁴⁾ Charles Fourier, for example, wrote of a form of «amorous anarchy» in which women were to be liberated from patriarchy but expected to serve men domestically and sexually. See MARSHALL, note 51, p. 151.

political structures and the creation of a «directing» class to spearhead his eugenic revolution.

What perhaps Madrazo's project did share with utopian socialism, on the other hand, was the unproblematic way in which socialism would triumph and, by extension, the degree of relative simplicity by which eugenic science would be implemented in the space of one hundred years. In this sense, Madrazo's plan had much in common with the «utopian socialist» project, which ironically, was declared «unscientific» by Engels precisely because of its lack of class analysis and inability to perceive how change took place in history (65). Madrazo does not talk of cataclysmic revolutions, of barricades or the difficulties of destroying the capitalist economy and state. All this follows its course as naturally and scientifically as the purification of the body under the banner of eugenics. Madrazo did not enter into the complexities of the debate on the role of the state apparatus in bringing about the desired revolutionary transformation. It may be that such simplicity reflects the lack of sophistication of Marxist socialism in Spain at the time or that we are confronted here with a form of socialism that incorporated many utopian elements, retained well into the period of the elaboration of Marxist «scientific socialism» (66). It could be, also, that Madrazo was aiming to infuse socialism with scientific respectability at a time of repression of leftist movements, when the «social question» was broached from a wide variety of competitive ideological positions. We are, in any case, before a technocratic kind of socialism, driven by an alliance of doctors, priests, engineers and committees. This technocratic socialism was, despite its advocacy of sweeping and complex scientific social and biological reform, im-

⁽⁶⁵⁾ ENGELS, Friedrich. Socialism: utopian and scientific, London, Bookmarks, 1993 [original 1880].

⁽⁶⁶⁾ See HEYWOOD, Paul. Marxism and the failure of organised socialism in Spain, 1879-1936, Cambridge, Cambridge University Press, 1990. A classic critique of the state and of Marxian socialism can be found in the two articles BAKUNIN, Michael. The Paris Commune and the idea of the state, and, On Marx and marxism. In: Arthur Lehning (ed.), Michael Bakunin. selected writings, London, Jonathan Cape, 1973, pp. 195-213 & pp. 232-270, respectively.

poverished in terms of its theoretical base and its understanding of political and historical change.

As a final remark, I would like to refer once more to the similarities between Madrazo's bold futuristic vision of a eugenic society and the technocratic vision of socialism expressed by the British leftist scientist J.D. Bernal during the same period in The World, the Flesh and the Devil. Madrazo, as a medical doctor concerned about the decline of the race, contributed to the regenerationist rhetoric of the first decades of the twentieth century and had much in common with the science-driven strand of socialism that others elsewhere shared (67). In Bernal's vision of 1929, published one year before Madrazo's Un siglo de civilización bajo la influencia eugenésica, the British scientist entertained the possibility of a steady incorporation of new mechanisms and new fibrous substances into the human body, eventually replacing the body by a cylinder-shaped construction, while Madrazo advocated an altered skeletal form for humans. Humans in Bernal's eugenic utopia would communicate by electric impulses and would effectively form «a new class of technicians and experts» (68). Furthermore, scientific institutions could become the government itself and «a further stage of the Marxian hierarchy of domination would be reached», presumably on the road to socialism (69). Madrazo's

⁽⁶⁷⁾ PAUL, note 4, p. 567, for example, refers to a number of socialists such as the Webbs, H.J. Laski, Julian Huxley, Joseph Needham and H.G. Muller who engaged with eugenics in similarly problematic ways as Madrazo, some endorsing «positive» eugenics, and others sterilisation. Apart from mentioning Emma Goldman, Paul does not refer explicitly to the anarchist left.

⁽⁶⁸⁾ BERNAL, note 3, p. 69.

⁽⁶⁹⁾ BERNAL, note 3, p. 72. In a matter of a few years, however, the optimism by which a eugenic society could be achieved using humanitarian methods had waned. Such optimism was dispelled particularly once the extreme authoritarianism of Nazi eugenics came to light in the mid-1930, a watershed in eugenics movements across the world. By this time, a number of critical voices had begun to criticise eugenics, deeming it contaminated by the church, fascists and the state. See MULLER, H.J. Out of the night. A biologist's view of the future, London, Victor Gollancz, 1936. The impression that science was in crisis from a sophisticated 1930s-Marxist point of view can be seen in the fascinating BUKHARIN, Nikolay I. Theory and practice from the standpoint of dialectical materialism. In: P.G. Werskey (Introduction), Joseph Needham (Preface), Science at the cross

vision does not go quite as far, but its harmonious and inexorable story of progress whereby the three cornerstones of the new society—science, eugenics and socialism— merge as one force capable of defeating degeneration, religion and capitalism in the space of one hundred years, draws equally on utopian designs, simplified Marxian tenets and the recourse to authoritarian imposition common to many branches of eugenics, both from the left and from the right, at the time.

roads. Papers presented to the International Congress of the History of Science and Technology, held in London from June 29th to July 3rd, 1931, by the delegates of the USSR, London, Frank Cass, 1971 [orig. 1931], pp. 11-33. On the discussion of the incorporation of eugenics into socialist and Marxist practice in Britain and the Soviet Union, see the discussions on Muller's book by WHITING, P.W. Communist eugenics. Journal of Heredity, 1936, 27, 132-135, and, HUXLEY, Julian S. Marxist eugenics. Eugenics Review, 1936, 28 (1), 66-68.