

Main changes in the Spanish Way of Life after the Second Industrial Revolution: images of modernity through the “Género Chico” (1870-1914)*

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After the «INDUSTRIAL REVOLUTION'S TAKEOFF»¹, Spain moves forward towards the second stage of a modernization process (1868-1914) characterized, above all, by the use of electrical energy². Since the 1968 Revolution, the adoption of free trade³ eases the arrival of foreign capital. Investing on banking and credit societies such as the Banco Hipotecario de España (lit. Mortgage Bank of Spain) (1875), public water, gas, streetlight, transport and electricity service companies such as the S.E.E. (1881), Barcelona Traction Light and Power and Energía Eléctrica de Cataluña (lit. Electrical Energy of Catalonia, both from 1911) further contributes to the expansion of modernization.

The new bourgeoisie becomes richer thanks to three main sectors: financial, industrial (in Catalonia and the Basque Country) and commercial – in Madrid⁴, and some coastal cities in the periphery⁵. This brings about a new urban model opposed to that of rural Spain, still attached to old traditions and ways of living. As Bécquer already discerned in 1864, progress brings about the disappearance of immemorial uses and traditions:

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¹ VILAR 1990, p. 8.

² PASDERMADJIAN 1960.

³ The implementation in Spain of the Universal Metric System begins in the middle of the 19th century, but will be effective after signing the *Convention du Mètre* (1875) in Paris. PUENTE FELIZ 1982.

⁴ BAHAMONDE MAGRO – TORO MÉRIDA 1978.

⁵ Barcelona, Valencia, Alicante, Málaga, Cádiz, La Coruña, Santander, Bilbao, which generate or give output to the products and manufactures from the «cereal producers from the Meseta, Catalan textile manufacturers, Andalusian wine merchants, Galician salting producers, Basque ironmongers, and miners from the South, Asturias and Bilbao». VILAR 1990, p. 17.

As the word flies through the telegraphic thread, the railway expands, the industry grows, the cosmopolitan spirit of civilization invades our country, its characteristic features, its immemorial traditions, its picturesque garments and its old-fashioned ideas go away with it⁶. Such quick modernization will end up sinking us in a deep identity crisis after the loss of the last colonies in 1898, as is evinced by the dialectics between tradition and modernity.

The enriched urban bourgeoisie adopts the modern amenities provided by technique such as tap water, heating, bulbs, telephones, radios, sewing machines, etc., rejoicing in a certain sybaritism that distinguishes them from the middle and low class. The arrival of electricity to the streets and, to a lower extent, to the household, will free the urban world from the darkness⁷. In addition, new means of public transport, such as, tramways, omnibus and, later on, the underground and private ones like cars, will change the physiognomy of wealthy urban spaces and modify uses and traditions, thus making daily life easier.

Prosperity brings about longer leisure time for the wealthy class and some free time for the urban middle class, which imitates the social behaviour of the new rich. Thus, apart from taking pictures of themselves, summer tourism grows – thermal as well as sea bathing -, they do sports and go to the casino, the athenaeum and the theatre on a regular basis.

The theatre, main space of representation and sociability of the nineteenth-century society, is still favoured by the wealthy class. In the last third of the nineteenth century, the pay-per-hour theatre helps new groups to be able to join the wealthy in the audience. Thanks to this, a network of small theatres will host popular masses, which are able to attend a show for their first time, something out of their reach until then⁸. «For little money, a whole family can have a nice time for an hour», says Pérez Galdós. In these theatres, «the dress code is not as demanding as in others, so they are a great choice for modest families [...] The first performance, at eight thirty, is the softest one; the last one, at eleven thirty, is for sure the spiciest one»⁹. According to Galdós, this «pastime» theatre welcomes a multiform repertoire that seeks novelty with the aim of entertaining the audience, thus making it possible for

⁶ BÉCQUER 2000. Our translation.

⁷ OTERO CARVAJAL 2016, p. 257.

⁸ Concerning the prices of Madrid theatres during the Restoration, see also VERSTEEG 2000, pp. 88 and on.

⁹ PÉREZ GALDÓS, 1923, p. 215. Our translation.

theatre consumers to be constant and insatiable, and to belong to a productive system of supply that allows it to be considered as a popular mass genre¹⁰.

The plays at the pay-per-hour theatres range from lyric farces that present the misery of popular classes in a friendly manner to revues on current affairs and zarzuelas «chicas» and «grandes» or, already in the twentieth century, cabarets or variety shows.

All plays show an obvious discursive connection with contemporariness through their critical attitude against the power and the journalistic character that links them to the daily reality of the audience. This makes it possible for them to even re-update – in a clear case of work in progress – through the inclusion, in the source text, of new allusions, improvisations, changes in the script, etc. Dramatic texts collect a lot of information about contemporary society, thus turning the repertoire into a real descriptor of the times. As pointed out by Barce, the scripts show

names of politicians and opera singers, dancers, cabaret singers, bullfighters, etc., brands, of commercial products, references to the then nascent cinema, to the Royal Theatre, to municipal problems, the prices, clothes fashion and uses, references to other music pieces and texts and other pieces of the zarzuela repertoire, cabaret and popular songs, fashion dances, etc.¹¹.

In this work, we will approach the image of modernity as shown in the texts of lyric theatre during the second industrial revolution, approximately between 1868 and 1914, through the appearance of the stories in the texts of some of the most determining factors: the railway, electricity, and other means of transport and inventions that radically transformed life, leading it to modernity.

THE RAILWAY CENTURY

There is general consensus about the importance of the railway in the economic and industrial development of nineteenth-century Spain through the articulation of domestic trade and of the exit of industrial products toward the ports, thus making the old dream of «unifying the country»¹² possible. Peninsular orography meant a great economic effort, which concentrated on investments, and deviated from the emerging industry¹³. Most investments were from

¹⁰ HARNEY 2006.

¹¹ BARCE 1995, p. 207. Our translation.

¹² LITVAK 1991, p. 185.

¹³ TORTELLA 1972.

foreign capital – the Savage man of the zarzuela *Sombras Chinescas* (1896) affirms that railway companies «are from abroad, but they get more money»¹⁴.

After a first railway line inaugirates in 1837 in the isle of Cuba, back then an overseas province, which helps transport sugar cane from Güines to the Havanian port¹⁵, a train line is opened between Barcelona and Mataró in 1848. In 1851, the line between Madrid and Aranjuez is inaugurated. Finally, in 1853, the line that transports coal from the Caudal basin to the port of Gijón (Asturias)¹⁶ is opened.



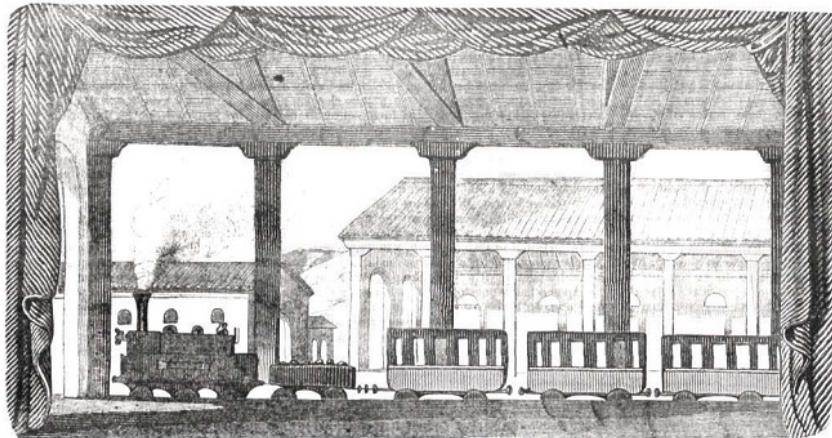
ILL. 1: Six dances Collection published in *El pasatiempo musical*, Madrid, 1851.

Although it takes longer than expected, towards 1866, the Spanish *iron line* goes from having 300 to almost 5000 kilometres, thus becoming the third longest European railway net.

¹⁴ GARCÍA ÁLVAREZ – PASO 1897, p. 24.

¹⁵ DE DIEGO 1983. Recently it was discovered that the Royal Asturian Company of Mines was the first Spanish Company to install the Railway in its mining exploitations. In 1836 the Arnao Mine uses this transport first than in the Isle of Cuba. GARCÍA QUIRÓS 2003, p. 1.

¹⁶ ROCES FELGUEROZO 2006.



Teatro de la Cruz.—Escenografía de la comedia *Aranjuez, Tembleque y Madrid*.

ILL. 2: Scenography in the comedy *Aranjuez, Tembleque, Madrid* (1853). *La Ilustración*, 10-12-1853, p. 496.

Together with railway companies, and by means of the Ley General de Ferrocarriles (lit. General Law of Railways) (1855), the State agrees to «transfer civil servants to their destination, the troops and their material to the shipping ports towards the colonies as well as the Civil Guard, including their horses – which increased security levels in the trains – from one watch post to another»¹⁷. Moreover, the train is in charge of distributing the mail¹⁸, money consignments and the press, and it even tows transactions onto platforms that travel together with the wagons so that passengers can reach their final destination when there still is no train way for it.

The broad presence of the railway in the lyric repertoire, above all in the nineteen eighties and nineteen nineties, is proof of its great impact. The fact is that, undoubtedly, «passion for the progress of that period made the railway be identified with prosperity»¹⁹ and with the opening up to the rest of Spain, Europe and even overseas, as states the mayor of *Vía libre* (1893), happy to announce the arrival of the «dragon of those times»²⁰ to his town – in Pérez Galdós' words.

TABLE 1 . ZARZUELAS RELATED TO THE RAILWAY (1854-1897).

Title	Genre	Authors [L: Libretto / M: Music]	Premiere Theatre*	Premiere Date
<i>Tren de escala</i>	Zarzuela, 1 act	L: J. Morán M: M. Sánchez Allú	Circo	07/05/1854

¹⁷ HEREDIA CAMPOS 2011, p. 1.

¹⁸ At the beginning, the mail was transported in passenger wagons, until 1863, when thanks to the increase of the mail wagons it is possible to multiply the number of shipments.

¹⁹ LITVAK 1991, p. 184.

²⁰ PÉREZ GALDÓS 1983, p. 110

<i>De Madrid a Biarritz</i> <i>(Viaje económico en tren de ida y vuelta)</i>	«Zarzuela cómica», 2 acts	L: M. Ramos Carrión / C. Coello M: E. Arrieta	Zarzuela	24/12/1869
<i>La vuelta al mundo</i>	«Viaje inverosímil de grande espectáculo cómico-lírico», 3 acts, 1 prologue, 15 «cuadros»	L: L. M. de Larra M: F. A. Barbieri / J. Rogel	Príncipe Alfonso	18/08/1875
<i>Los sobrinos del Capitán Grant</i>	«Novela cómico-lírico-dramática», 4 acts / 18 «cuadros», about <i>Los hijos del Capitán Grant</i>	L: M. Ramos Carrión M: M. Fdz. Caballero	Príncipe Alfonso	25/08/1877
<i>¡A Sevilla por todo!</i>	Zarzuela, 2 acts / 6 «cuadros»	L: J. de Burgos M: F. A. Barbieri	Alhambra	24/12/1880
<i>Viaje a Suiza</i>	«Veraneo cómico-lírico», 2 acts / 7 «cuadros»	L: M. Pina M: Á. Rubio	Variedades	18-03-1882
<i>La del tren</i>	«Juguete lírico», 1 act	L: A. Croselles M: R. Taboada Mantilla	Recoletos	27/06/1883
<i>Ida y vuelta</i>	«Viaje cómico-lírico», 2 acts / 6 «cuadros»	L: C. Navarro / J. Usúa M: M. Nieto	Martín	16/02/1884
<i>El viaje a Suiza</i>	Vodevil, 3 acts	L: M. Echegaray / Vital Aza M: Á. Rubio	Zarzuela	23-01-1886
<i>Prueba... fotográfica</i>	«Juguete cómico-lírico», 1 act	L: E. Navarro Gonzalvo M: A. Rubio / C. Espino	Eslava	01-11-1887
<i>De Madrid a Barcelona</i>	Revista, 1 act	L: G. Perrín / E. Perillán Buxó M: F. Chueca / J. Valverde	Principal (Barcelona)	11/02/1888
<i>Viajeros al tren</i>	[Zarzuela, 1 act]	L: M. de Larra y Osorio M: T. Reig Arpa	Recoletos	04/08/1888
<i>A Roma por todo</i>	«Sainete lírico», 1 act / 3 «cuadros»	L: E. Sánchez Seña M: M. Fdz. Caballero	Eslava	11/04/1889
<i>De Madrid a París</i>	«Viaje cómico-lírico», 1 act / 5 «cuadros»	L: J. Jackson Veyán / E. Sierra M: F. Chueca / J. Valverde	Felipe	12/07/1889
<i>Vía férrea</i>	«Sainete cómico-lírico», 1 act / 2 «cuadros»	L: C. Maravillard / F. Oviedo M: Á. Ruiz	Martín	20/01/1890
<i>Nocturno</i>	«Pasatiempo musical», 1 act	L: E. Fdz. Campano M: R. Chapí	Maravillas	27/06/1890
<i>La caza del oso o El tendero de comestibles</i>	«Viaje cómico-lírico», 1 act / 3 «cuadros»	L: J. Jackson Veyán / E. Sierra M: F. Chueca	Apolo	06/03/1891
<i>¡Pero cómo está Madrid!</i>	«Revista lírica en forma de folleto», 1 act / 2 «cuadros»	L: E. Navarro Gonzalvo / C. Navarro M: J. Jiménez	Tívoli	26/08/1891
<i>Vía libre</i>	«Zarzuela cómica», 1 act	L: C. Lucio / C. Arniches M: R. Chapí	Apolo	25/04/1893
<i>El viaje imprevisto</i>	«Zarzuela de gran espectáculo», 4 acts	L: A. Cotó Fitá M: R. del Castillo / E. Guarin	Tívoli (Barcelona)	08/12/1893
<i>El paso a nivel</i>	Zarzuela, 1 act	T. E. Sánchez Pastor M: R. Chapí	Apolo	23/03/1897
<i>Los lobos marinos</i>	«Zarzuela cómica», 2 acts / 3 «cuadros»	L: M. Ramos Carrión / V. Aza M: R. Chapí	Apolo	17/05/1897

* We only add the city when the Theatre is not Madrid.

The first localized examples are related to Offenbach's buffo world, linked, in turn, to Jules Verne, which became very important in Spain²¹. Really inspiring for Spanish authors is the surrealist departure of the French army to the crusades from the North Station in Paris in *Geneviève du Brabant* (1859) or the opening scene of *La vie parisienne* (1866) in the West

²¹ CASARES 1996-97; and CORTIZO 2003.

Station, with one choir of railway workers and another one of passengers dancing to the polka and cancan. Verne is recalled both in *La vuelta al mundo* (1875)²² and in *Los sobrinos del Capitán Grant* (1877), zarzuelas from the lyric summer periods of the Buffos of Arderíus in the Príncipe Alfonso Theatre. In the former, the main characters, already in North America – eighth «cuadro»²³, act two - take a train to escape from the Sioux, although the Indians rob the railway in a scene that has incidental background music with whistle and gun noise²⁴. And in *Los sobrinos del Capitán Grant*, tenth «cuadro», *El tren de las doce* takes place in an Australian railway station, whereby a convoy derails –also with incidental music²⁵.

Many zarzuelas from the eighties make the most of the theatrical possibilities of Northern Madrid's stations – *De Madrid a Biarritz* (1869), *Ida y vuelta* (1884), *¡Hasta la vuelta!* (1908) –, or the city's *Mediodía* Station, as well as Atocha Station – *¡A Sevilla por todo!* (1880), *A Roma por todo* (1889), *De Madrid a París* (1889) o *Tren de lujo* (1913). Other stations that appear are that of Burgos – *El barbero de Sevilla* (1901) –, Utrera – *Choque de trenes* (1900) –, Romerales – *El alma del querer* (1910) – or Hendaya (France) – *El cocinero de S.M.* (1897).

Stations are lively thanks to press, lottery and flower street vendors that get on stopped trains. Such is the case of the bouquet vendor that offers her violets while singing a waltz in *Tren de escala* (1854). On the platform, we find not only passengers but also railway workers, police officers, drivers, porters in charge of carrying luggage – *De Madrid a Biarritz* (1869), *¡A Sevilla por todo!* (1880), *Ida y vuelta* (1884) o *A Roma por todo* (1889). These porters, mostly boys, hardly live on the tipoffs that passengers give them. «Porque es tan corto el sueldo / que aquí nos dan, / que comprar podemos / tan solo un pan...» (lit. «Because the wage is so low / because the wage we are given here / that we can only buy / only one loaf of bread») is what these boys claim to get for carrying trunks and suitcases at the Utrera station (Seville) in *Choque de trenes* (1900).

²² CASARES 1994; and CASARES 2002.

²³ We have decided to preserve the Spanish term «cuadro», in the original sense of set of Scenes with the same scenography.

²⁴ The quote that appears in *El Juicio oral* where a character who works as a theatrical extra declares he is able to perform all kinds of characters, for example «an Indian those who steal the train in *La vuelta al mundo*» (PERRÍN and PALACIOS. 1901, p. 31), reveals the success achieved for this zarzuela.

²⁵ BLANCO ÁLVAREZ 2015, pp. 658 and on.

The repertoire regularly makes use of the phonetic resource provided by onomatopoeias that imitate the sounds of the train. The whistle and the sound of the bell at the station indicating the arrival or the departure of the train is accompanied by the scream “All aboard!” – just like bullfighters and *chulos*²⁶ do when going to the Paris world exhibition in the Pasacalle number 5 of *De Madrid a París* (1889) or the scene two of *Prueba... fotográfica* (1887)²⁷ –, the passing of the railway through the tunnel in *Tren de escala* (1854), *Ida y vuelta* (1884), *Nocturno* (1890), *¡Pero cómo está Madrid!* (1891), *Vía libre* (1893)²⁸ or *Choque de trenes* (1900)²⁹. This brings about fear and mystery as well as makes ‘passengers suffocate / with the smoke of coal’³⁰. This also happens with the noise of the train on the track in *Nocturno* (1890) by Chapí, where «el tren comienza a andar, / y principia el trucutrún, / triquitrín y tracatrán, / y se marcha haciendo fun, fun / fun, fun, fun, fun» (lit. «the train begins to walk / and so the trucutrún starts, / triquitrín and tracatrán, / and so the train leaves doing fun, fun / fun, fun, fun, fun»).

In general, the repertoire’s journeys take place within Spain, as happens in e.g. *¡A Sevilla por todo!* (1880), *Ida y vuelta* (1884), *De Madrid a Barcelona* (1888), *La caza del oso* (1891) or *Los lobos marinos* (1897). Some plays take place abroad, as *De Madrid a Biarritz* (1869), *El viaje a Suiza* (1886), *De Madrid a París* (1889) and *A Roma por todo* (1889). The journeys are uncomfortable and even dangerous – in *Hatchis* (1884), Sabas claims «¡no he descarrilado nunca! / ni en España, donde suele / haber más sustos que viajes, / y más percances que trenes» (lit. «I’ve never derailed! / Not even in Spain, where there usually / are more frights than trips / and more mishaps than trains»).³¹ To this, Anastasia adds in *De Madrid a París*

²⁶ About this term, see HARNEY 2002, p. 325.

²⁷ «Ya entramos en el túnel... / Qué horrible oscuridad. / A intervalos escúchase / la máquina silbar, / y el rudo traqueteo / del sordo ta-ca-tac... / ta-ca-tac...». [We get into the tunnel... / What horrible darkness! / At intervals we listen / the machine whistle, / and the rude rattle / of the deaf ta-ca-tac... / ta-ca-tac!...]. NAVARRO GONZALVO 1887, p. 8.

²⁸ In the Scene IV: «An electric bell is heard and little by little the noise of the train that passes in the distance», while the choir sings: «¡Ay, cómo corre / ay, qué bonito / qué ruido mete / con ese pito!» [Oh, how does it run / how beautiful / what noise / with that whistle!]. LUCIO – ARNICHES 1893, pp. 37 and 39.

²⁹ The Doppler effect is also imitated: «It’s hearing the train trepidation closer. The bell rings again and the telegraph rings are also heard. Try to imitate the noise of the rotating platforms, placing on a drum some trays and hitting them with mallets». ALFONSO – BANQUELLS 1900, p. 22.

³⁰ FERNÁNDEZ CAMPANO 1890, p. 27.

³¹ PERILLÁN BUJÓ 1884, p. 13.

(1889) «vamos a exponer la vida: ¡como que tenemos que viajar en ferrocarril»³² (lit. «we are risking our lives: why do we have to travel by train!»). Trains normally arrive fairly late – four or five hours every day, according to Felipe in *Los lobos marinos* (1897); in fact, the passengers are normally unhappy, as is evinced by the initial choir in *Choque de trenes* (1900):

Son los trenes de España / de tan *buenas* condición, / que aunque la llegada anuncian, / llegan tarde a la estación. / Con los choques, hundimientos, / averías y demás, / hay que ir siempre confesados / y rezándose a san Blas³³.

Ex. 1: Opening bars from the *Intermedio*, n. 5, *Los lobos marinos*, by R. Chapí. Piano score

LOS LOBOS MARINOS
ZARZUELA CÓMICA EN 2 ACTOS
letra de los Sres.
RAMOS CARRIÓN y VITAL AZA
MÚSICA DEL MÉRITO
R. CHAPÍ.

Pr. 5 Pts.

N.º 5. INTERMEDIO del Ferro-carril.
Allegro. (160—)

PIANO. (Bocina y silbato del tren, dentro)

The trips are normally done for pleasure, as is the case of *La caza del oso* (1891) – «A hunting weekend that makes up for modern stress in our commercial buoyant bourgeoisie». In this piece, the main character travels from Madrid to Asturias to hunt a «big bear, six meter high standing»³⁴. It is also the beginning of wellness tourism to thermal resorts between June

³² JACKSON VEYÁN – SIERRA 1891B, p. 9.

³³ ALFONSO – BANQUELLS 1900, p. 8 (lit. «The trains in Spain / are in such *good* condition / that, even when they announce their arrival, / they arrive late to the station. / They crash, they sink, / they fail, and that's not all / one needs to have always confessed their sins / and travel while praying to Saint Blas»).

³⁴ JACKSON VEYÁN – SIERRA 1891, p. 28.

and September. In 1877, there were 143 thermal houses in Spain, increasing to 188 in 1889³⁵. Travelling to these houses of thermal baths «demands a considerable spending of money and is time-consuming»³⁶, meaning that only a few wealthy ones could afford it. On the other hand, the middle class was only able to go to some health resorts that were well communicated with big cities³⁷. This is the case of the resort in Carabaña (Madrid), which appears in *¡Pero cómo está Madrid!* (1891), or that of Trillo (Guadalajara), where the characters of *Bodas por ferrocarril* (1852) and those of *El magnetismo... ¡animal!* (1869) receive water treatments.

The reduction in travelling time and the greater comfort of new railway communications also contributed to the increase in coastal tourism in the North of the peninsula, bringing about «important improvements in those places and, therefore, a growth in touristic infrastructures (bath establishments, hotels, cafés, etc.)»³⁸. Isabel II's trip to San Sebastián made the place even more appealing. This turned the Basque coast into a meeting space for relevant personalities such as musicians from Navarre, like Arrieta, Zabalza, Guelbenzu or Sarasate, who would spend part of their summer in between San Sebastián and Biarritz³⁹. It is not strange for Arrieta then to make use of parody in his zarzuela *De Madrid a Biarritz* (1869) through his trip in no less than four scenes – «¡Viajeros al tren!»⁴⁰, «Adiós, Madrid, que te quedas sin gente», «Le dîner est servi», «¡Al agua, patos!». The Spanish middle class progressively promotes the tradition of *veranear*, spending the summer somewhere else. The scenography, one of the elements most carefully taken care of, includes a final stage direction revealing how to produce a train movement illusion⁴¹.

³⁵ LARRINAGA 2002, pp. 170-171.

³⁶ BARQUÍN GIL 2012, pp. 3-4.

³⁷ Unfortunately, none of the Spanish spas achieved international recognition of Spa, Bath, Baden-Baden, Kalrsbad or Vichy, and in 1895, the «Dr. Jules Rochard discouraged stays in Spain considering that there was an absolute absence of comfort». LARRINAGA 2002, p. 173.

³⁸ LARRINAGA 2002, p. 161.

³⁹ CORTIZO 1998, p. 38.

⁴⁰ «After the curtain rises, a poster with huge letters appears in which you can read: 'Trip to Biarritz for 25 reales! In 2nd class cars with 8 seats for 32 people. Round trip ticket: chocolate, lunch, dinner, doctor, pharmacy and funeral: everything paid'». CORTIZO 1998, p. 397.

⁴¹ «To imitate the train march it will be enough to pass behind the wagon, houses, trees, hills, etcetera, and continuously the telegraph poles. Before leaving the train there must be at the bottom a junk that appears to be the wall of the station, which will run in the opposite direction to that which the train appears to take. Afterwards the backdrop must be a horizon». CORTIZO 1998 pp. 396 and on.

Ex. 2: Fragment from no. 2, *De Madrid a Biarritz* (1869) by E. Arrieta. Manuscript score.



Summer holidays are also the song topic of the railway station porters choir in scene XII of *Ida y Vuelta* (1884), in which they criticize the pretentiousness of the society of the time⁴². - «En el tiempo de los baños, / cursis hay de medio pelo / que nos dicen van a Biarritz / y se quedan en Pozuelo» (lit. «at the time of the baths, / there are small-time kitsch ones / who say they're going to Biarritz / and remain in Pozuelo»).

International tourism appears as an element of social distinction in *De Madrid a Biarritz* (1869), and again in *Un viaje a Suiza* (1886), the honeymoon – after a marriage of convenience – between Corgoloni, a wealthy chemist, and his young spouse on the train, in a sleeping car. Sleeping cars appeared for the first time in Spain in a trip from Madrid to Hendaye⁴³ in 1880, and it was not until four years later that it was included in the lyric repertoire of *Ida y vuelta* (1884).

Un viaje a Suiza (1886) is a vaudevillian pantomime by Blum and Toché translated into Spanish by Aza and Echegaray from the French homonymous play. It was shown in Spain after four hundred performances since it premiered in 1879 at the Théâtre des Variétés in Paris, and after being played in Brussels, London and New York (in 1881). Its protagonists were the Hanlons Lee brothers, comedian acrobats who had already worked in Madrid in 1870 and 1877. The dramatic incident – the stunts of the young wife's former lover and his friends, the Hanlons brothers, to avoid the carnal union of the marriage – is a mere pretext to

⁴² NAVARRO – USÚA 1884, p. 27.

⁴³ HEREDIA CAMPOS 2011, p. 3.

amuse the audience with acrobatics, juggling, magic tricks and great stage effects of surreal humour, such as the collapse of a stagecoach, the explosion of a train on stage or the fall of one of the acrobats through two floors⁴⁴. It was a great success, and the Hanlons brothers performed again the play in Bilbao the following year, 1887.

TABLE 2: ZARZUELAS RELATED TO THE RAILWAY (1900-1913)

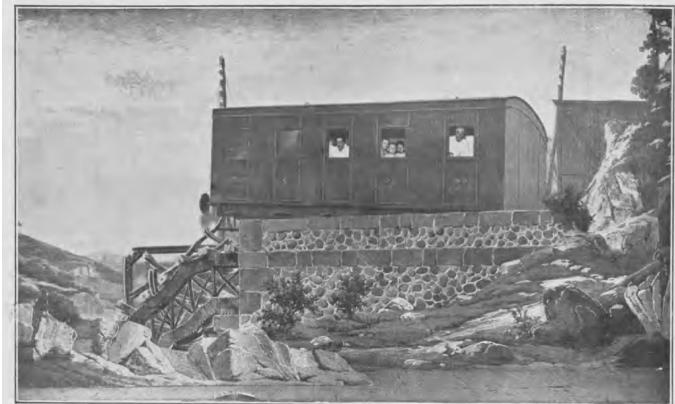
Title	Genre	Authors [L: Libretto / M: Music]	Premiere Theatre	Premiere Date
<i>Choque de trenes</i>	«Humorada cómico/lírica», 1 act	L: F. Alfonso / D. Banquells M: F. Alfonso	Gran Vía (Barcelona)	16/05/1900
<i>El tren 22</i>	«Pasillo cómico-lírico», 1 act	L: E. Sánchez Pastor M: V. Zurrón	Apolo	01/08/1900
<i>El barbero de Sevilla</i>	Zarzuela, 1 act	L: J. Jiménez M: M. Nieto	Zarzuela	01/02/1901
<i>Abanicos y panderetas o ¡A Sevilla en botijo!</i>	«Humorada satírica», 1 act / 3 «cuadros»	L: S. and J. Álvarez Quintero M: R. Chapí	Apolo	10/07/1902
<i>El túnel</i>	«Zarzuela de costumbres montañesas», 1 act / 3 «cuadros»	L: E. Prieto / R. Rocabert M: A. Saco del Valle	Cómico	06/12/1904
<i>Frou/Frou</i>	«Humorada cómico-lírica», 1 act / 3 «cuadros»	L: E. Pérez Capó / A. Paso M: R. Calleja	Eslava	27/01/1905
<i>La guardabarrera</i>	Zarzuela, 1 act / 5 «cuadros»	L: L. de Larra y Ossorio / E. Gullón M: T. López Torregrosa	Moderno	15/02/1905
<i>El Tunela</i>	Zarzuela, 1 act / 3 «cuadros». Parody of <i>El Tínel</i>	L: Ibarrola / Camacho M: E. Fuentes	Cómico	15/02/1905
<i>¡Hasta la vuelta!</i>	«Sainete lírico», 1 act	L: E. García Álvarez / E. López Monis M: R. Calleja	Cómico	24/03/1908
<i>S.M. el botijo</i>	«Revista de verano», 1 act / 6 «cuadros»	L: J. Jackson Veyán / L. de Larra M: T. López Torregrosa	Gran Teatro	24/07/1908
<i>El alma del querer</i>	«Sainete andaluz», 1 act / 3 «cuadros»	L: P. Pérez Fdz. M: A. Vives / T. Barrera	Gran Teatro	27/07/1910
<i>El capataz</i>	Zarzuela, 1 act / 4 «cuadros» Second part of <i>El Tínel</i>	L: E. Prieto / R. Rocabert M: A. Saco del Valle / C. Vela Marqueta	Novedades	11/11/1911
<i>El expreso de las diez</i>	Zarzuela, 1 act / 4 «cuadros»	T. J. Maldonado / J. Alvarado M: C. Vela Marqueta / P. Cambronero	Novedades	17/10/1913
<i>El tren de lujo</i>	«Zarzuela cómica», 1 act / 3 «cuadros»	L: M. Mihura / R. González del Toro M: C. Roig / P. Marquina	Zarzuela	20/12/1913

The use of the railway is generalized even among the working classes, who have access to the so-called ‘train botijo’⁴⁵ (sarcastic metaphor for the slowest train), the cheapest one. This one also appears in repertoires, always in a friendly way as in – *Abanicos y panderetas o ¡A*

⁴⁴ COSDON 2009.

⁴⁵ The first «botijo» train linked together Madrid and Alicante, the first important Mediterranean city communicated by rail with Madrid, and was inaugurated by Queen Isabel II in May 1858. The popular nickname attached to this train –«botijo» train– comes from the «botijo», a clay vessel to always get cool water during the suffocating Spanish summer.

Sevilla en botijo! (1902) or *El alma del querer* (1910)–, where everything is fun, and the passengers sing along and dance to the sound of a guitar. Only in a few titles, as *S.M. el botijo* (1908), the dreams of the poor end up frustrated, and eventually, the train derails.



ILL. 3: *S.M. el botijo. El arte del Teatro*, III/ 58 (15-08-1908), p. 8.

The latest developments appear rapidly in the repertoire; the farce *¡Hasta la vuelta!* (1908) develops in a modern train with *toilette*, since, for the *cocottes*: «Encanta a la mujer / poder veranear / y con *toilets* de moda / a los hombres deslumbrar. / Da mucho tono el *groom* / y no me ha de faltar / el primo que nos pague / el *sleeping car*»⁴⁶ (lit. «Women love / to summer / and with fashionable toilets / dazzle men. / The groom gives much tone / and I should not be missing / a daft to pay for / the sleeping car»).



ILL. 4: *¡Hasta la vuelta! El arte del Teatro*, III/ 52 (15-05-1908), p. 4.

This frivolous repertoire coexists with more realistic works collecting pieces of life of the most disadvantaged classes in rural environments which have been «invaded» by an element

⁴⁶ Scene XXII. GARCÍA ÁLVAREZ – LÓPEZ MONÍS 1908, p. 29. The galicism *Cocotte* has the meaning of a prostitute. The play uses the English word *groom* with its original sense.

of modernity and danger, an opening to an alien world, the railway. *La guardabarrera* (1905), for example, dramatizes the tragic story of Juana, a gatekeeper who lives in Villalba (Madrid), in the country, and has been deceived by Ezequiel, a railway worker, with whom she has a son. When Ezequiel knows about the courting between Juana and Félix, the engine driver of the express train, he tries to cause an accident in order to kill him. The death of Félix is eventually avoided, but when the truth comes out, he leaves Juana for being a single mother. The staging of the wreck caused by the accident is very detailed.

Rosa, the protagonist of *El expresivo de las diez* (1913), is also a gatekeeper, and like Juana, is in love with the engine driver of the express train, a modern man coming from foreign lands who drives a train, «negra perla, enorme, esbelta / entre gasas de humo envuelta / con dos rubíes delante»⁴⁷, says Rosa. In this case, the zarzuela ends happily.

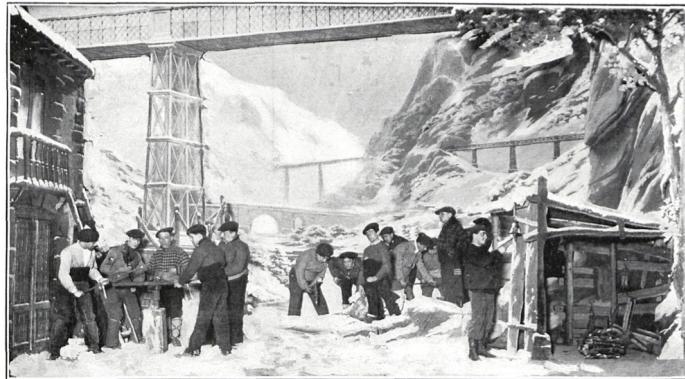
In the titles of Table 1, the emergence of a tunnel meant some novelty and adventure; «¡El túnel, ay, socorro, que descarrilamos...!» (lit. «The tunnel, ah, help, we derail!»), is the final line of one of the characters in n. 5 de *De Madrid a Biarritz* (1869), to close the curtain that separates the second «cuadro» to the third one. We also find tunnels in *Un viaje a Suiza* (1886) or *Vía férrea* (1890). And in *Ida y vuelta* (1884), «cuadro» III shows: «La boca de entrada del túnel de Torrelodones a la derecha; y en el centro, un poco en alto, la vía, con palos de telégrafo, etc. Es de día. Se oye la marcha del tren, que se aproxima, penetrando por el túnel: gritos y silbidos, gran algaraza»⁴⁸.

El túnel (1904) is the title of the zarzuela that portrays the harsh working conditions of the labourers who worked in the tunnel, 1300 meters long, that was opened around 1866 between Reinosa and Bárcenas (Cantabria)⁴⁹. Hard work is combined with horrible working and weather conditions, plus power abuse.

⁴⁷ MALDONADO - ALVARADO 1913, p. 10. (lit. «black pearl, huge, slender / wrapped up between gauzes of smoke / with two rubies in the face»).

⁴⁸ NAVARRO - USÚA 1884 , p. 31. (lit. «The mouth of Torrelodones tunnel on the right; and in the centre, a little high up, the railway, with telegraph posts, etc. It is during the day. The motion of the train can be heard, approaching, getting into the tunnel: whistling and shouts»).

⁴⁹ In the play, the construction of the tunnel has already finished and the train is circulating through it. The laborers work in the maintenance of the railways. FERRER TORÍO - RUIZ BEDIA 2003.



ILL. 5: *El túnel. El Teatro*, no. 54 (03-1905), p. 21.

The text includes the proletarian demand of the three «eights»: «Ocho horas *pa dormir*, ocho *pa trabajar* y ocho *pa la instrucción*⁵⁰. The final scene of the second «cuadro» presents a suicide attempt, eventually avoided by Zeneque⁵¹, as Tolino jumps to the railway. The picture below⁵² shows how Tolino must have seen and felt the locomotive approaching as it exits the tunnel. Finally, the engineer imposes justice. He is the leader of the story, and, after fixing the problem, gets into the tunnel with the workers at the end of the play.



ILL. 6: *El túnel. El Teatro*, no 54 (03-1905), p. 22.

⁵⁰ PRIETO – ROCABERT 1905, p. 10. (lit. «Eight hours to sleep, eight to work, and eight to education»), and a choir of strikers (scene IX, «cuadro» II).

⁵¹ In the sequel to the zarzuela *El Túnel*, called *El capataz* (1911), Zeneque confirms that he will gather to the other workers in the First May Labour Day demonstration, adding «you already know that I am a good socialist» [scene VIII]. PRIETO and ROCABERT 1911, p. 16.

⁵² In the Teatro Díaz from Calahorra (La Rioja), the scenographer Manuel Grisso hung a painted curtain in which «the machine that simulates the train exit from the tunnel is painted with such property that it seems to crash to the public, leading a spectator to escape from his chair fearing being crushed by the iron monster». *La Rioja*, 12-03-1906, in: SÁNCHEZ SALAS 1995.

This zarzuela, which depicts progress as an element associated with the exploitation of labourers, thus destroying the happy Arcadia and tearing apart the landscape with the industrial ugliness, has a great success, and is developed years later in a sequel titled *El capataz* (1911), which continues telling the miserable life of Tolino, who is already married and works in the foundry of the old engineer. *El capataz* reached three hundred and fifty-five stagings⁵³ in Madrid, Barcelona, Valencia and Alicante, to which we have to add revivals in La Coruña, Santander, Bilbao, Burgos, Valladolid, Salamanca, Cadiz, Seville, Almeria, Cordoba, Jerez, Novelda, Elche, etc.

The development of the telegraph cable is intrinsically linked to the railway: the Ley General de Ferrocarriles (lit. General Railways Act) (1855) imposed installing a telegraph in every station, prompting the wiring of telegraph posts together with the railways⁵⁴. Towards 1857, the Iberian Peninsula had a telegraph network already configured; in 1864, it included the main cities of Spain, leaving outside Melilla and the Canary Islands, that in 1880 were provided with submarine telegraphic communication. That is the reason we already find in the repertoire the telegraph and the telegraphic telegram since the sixties.

As for the telephone, after starting its use in Cuba in 1877, it was again Dalmau and Xifra who installed the first lines, getting the privilege of introducing Graham Bell's phones in Spain on 20 February 1878, the year it was admired in the entire world from the Universal Exhibition in Paris. On 16 August 1882, the Minister of the Interior was enabled to grant to individuals or companies, the establishment and management of telephone networks destined public service. Therefore its appearance is delayed until the end of the eighties when, for instance, the «sainete» *Comunicaciones* (1888) develops its second «cuadro» in Madrid's telegraph office and the third one in the telephone office, with the choir of telephone workers.

TABLE 3: THE TELEGRAPH AND THE TELEPHON IN THE FIN DE SIECLE ZARZUELAS

NEW COMMUNICATION SYSTEMS				
1. TELEGRAPH				
Title	Genre	Authors [L: Libretto / M: Music]	Premiere Theatre	Premiere Date
<i>Un muerto de buen humor</i>	«Cuento del siglo pasado»	L: A. Llanos y Alcaraz M: J. Rogel	Variedades (Bufos)	21-04-1867
<i>Los órganos de Móstoles</i>	«Zarzuela bufa», 3 acts	L: L. M. de Larra M: J. Rogel	Circo	14-09-1867
<i>El potosi submarino</i>	«Zarzuela cómico fantástica de gran espectáculo», 3 acts	L: R. García Santisteban M: E. Arrieta	Bufos Arderius	21-09-1870
<i>Hatchis</i>	«Revista político-social», 2	L: E. Perillán Buxó	Eslava	12-01-1884

⁵³ BREY 2018, p. 135. *El capataz* reached five editions of the libretto between 1911 and 1914.

⁵⁴ LALANA SOTO, J. L. – SANTOS Y GANGES 2012, p. 3; y OLIVÉ ROIG – SÁNCHEZ MIÑANA 2007.

	acts / 8 «cuadros»	M: A. Rubio / C. Espino		
<i>Comunicaciones</i>	«Sainete lírico», 1 act / 3 «cuadros»	L: P. de Guzmán / J. De la Cuesta M: A. Ruiz / H. Rodríguez	Eslava	24-02-1888
<i>¡Las virtuosas!</i>	«Boceto cómico-lírico», 1 act / 5 «cuadros»	L: R. Monasterio M: A. Brull	Eslava	12-10-1888
<i>Madrid Petit</i>	«Viaje semifantástico», 1 act / 4 «cuadros»	L: C. Navarro / F. Castellón M: J. Valverde (hijo)	Martín	21-01-1891
<i>El siglo XIX</i>	«Revista lírica», 1 act / 7 «cuadros»	L: C. Arniches / S. Delgado / J. López Silva M: E. Montesinos	Apolo	06-02-1901
<i>Los dos viejos</i>	«Zarzuela cómica», 1 acto / 3 «cuadros»	L: A. Domínguez M: F. A. de San Felipe	Novedades	16-04-1909
2. TELEPHONE				
<i>Hatchis</i>	«Revista político-social», 2 acts / 8 «cuadros»	L: E. Perillán Buxó M: A. Rubio / C. Espino	Eslava	12-01-1884
<i>Madrid viejo y Madrid nuevo</i>	«Paralelo lírico», 1 act / 8 «cuadros»	L: C. Navarro / M. Arenas M: Á. Rubio / T. Reig	Zarzuela	13-11-1885
<i>Comunicaciones</i>	«Sainete lírico», 1 act / 3 «cuadros»	L: P. de Guzmán / J. De la Cuesta M: A. Ruiz / H. Rodríguez	Eslava	24-02-1888
<i>Sombras chinescas</i>	«Extravagancia cómico-lírica», 1 act / 6 «cuadros»	L: E. García Álvarez / A. Paso M: T. Valverde / T. López Torregrosa	Eslava	24-12-1896
<i>El siglo XIX</i>	«Revista lírica», 1 act / 7 «cuadros»	L: C. Arniches / S. Delgado / J. López Silva M: E. Montesinos	Apolo	06-02-1901
<i>Madrid en el año dos mil</i>	«Panorama lírico-fantástico de gran espectáculo», 2 acts / 10 «cuadros»	L: G. Perrín / M. Palacios M: M. Nieto / A. Rubio	Variedades	13-01-1887

THE SOCIAL ISSUE: MINES AND FACTORIES

In Spain, the expression «cuestión social» (lit. «social issue») is generalized since 1880 to define, euphemistically, the absolute poverty of the working classes that have appeared from the emerging industrial capitalism. Krausist Liberals, Catholics with a social conscience inspired by Leo XIII and his *Rerum novarum* (1891), and bourgeois forces with republican ideas from the First Republic, will demand a regulatory intervention by the State to improve the working and living conditions of the working classes⁵⁵.

The mining, steelmaking, and textile industries cause the overcrowding of the working population in real ghettos, lacking vital living conditions.

Social problems are not the preferred topics of the audience that packs theatres, which is fundamentally bourgeois. Instead, they prefer a «pastime» theatre, in terms of Unamuno, which avoids social criticism, with «interiores bien amueblados y actores vestidos con lujo»⁵⁶ (lit. «well furnished interiors and actors dressed in luxury»). However, some composers and writers ideologically close to republican or socialist ideas, such as Breton and Chueca, left samples of their commitment to the most disadvantaged classes in the repertoire.

⁵⁵ MATOS SILVEIRA – RAYA LOZANO 2012

⁵⁶ RUBIO JIMÉNEZ 1982, p. 11.

In Table 4 we collect some of the titles that dramatize the harsh living conditions of industrial workers. They are not many compared the amount of titles that reflected the hardships of the rogues and the needy who survive in the city. *La trapera* (1902), *La inclusera* (1903), *La cañamonera* (1907) or *La suerte perra* (1915), among others, attest this. All of them have stories that «llegarían a ser muy dramáticas si se enfocasen de otra manera: los celos, el abandono del hogar, la mendicidad, el hambre [...] los criados ladrones, los vividores a costa del prójimo, las disputas conyugales, etc.»⁵⁷ Working days are a real pain, without any right, not even to strike, as Barce says, and this is shown in *La suerte perra* (1915) among other plays. They all, however, share a kind look towards the miserable society portrayed by Galdós, Baroja and Valle-Inclán, texts with which the farces share a gloomy naturalism, transcended in the lyrical works thanks to the music.

TABLE 4: THE POVERTY AND THE SOCIAL ISSUE IN THE ZARZUELAS (1899-1912)

Title	Genre	Authors [L: Libretto / M: Music]	Premiere Theatre	Premiere Date
<i>Los mineros</i>	Zarzuela, 1 act	L: S. Delgado M: T. López Torregrosa	Eldorado (Barcelona)	11-03-1899
<i>El dinero y el trabajo</i>	Zarzuela, 1 act / 3 «cuadros»	L: J. Jackson Veyán / R. Rocabert M: A. Vives / A. Saco del Valle	Cómico (Madrid)	15-04-1905
<i>La huelga de mineros</i>	Zarzuela, 1 act / 5 «cuadros»	L: F. Folch Hernández M: L. Reig	Apolo (Barcelona)	10-06-1905
<i>Luz en la fábrica</i>	«Zarzuela dramática», 1 act / 3 «cuadros»	L: J. B. Pont / A. Sotillo M: E. Úbeda	Princesa (Valencia) Novedades (Madrid)	04-12-1909 19-11-1910
<i>Aurora social</i>	«Zarzuela dramática social», 1 act, 1 prologue / 3 «cuadros»	L: J. Díaz Bejerano / G. Aguayo Marañón M: M. Romero / V. Romero	Barbieri (Madrid)	08-11-1912

El Túnel (1904) and *El Capataz* (1911), plays already mentioned in this work – see Table 2 –, must be added to the titles shown in Table 4 above. These are social zarzuelas, in particular, *El Túnel*, along with *El dinero y el trabajo* (1905) and *Luz en la fábrica* (1909), and dramatize sexual harassment towards women with an outcome which «ends up in individual or collective revenge»⁵⁸.

El dinero y el trabajo (1905) is a sequel to *El Túnel*. This play refers to the homonymous work of Leo Tolstoi, which had been translated into Spanish in 1893, and which, in addition, is being read by Juan, the manager of the weaving mill «La Amistad». This fair and loyal worker is betrayed and driven away from the factory by the boss, who wants to coerce Juan's

⁵⁷ BARCE 1995, p. 197. (lit. «would be very dramatic if they were focused differently: jealousy, the abandonment of the home, vagrancy, hunger [...] servants that are thieves, *bon vivants*, marital disputes, etc.»).

⁵⁸ BREY 2018, p. 306.

wife, whom he lusts for. Once the scam is exposed, Juan reaffirms his dignity and decides to leave the company; the support of the rest of workers ends up stopping all the machines on the music of the orchestra.



ILL. 7: *El dinero y el trabajo*. *El Teatro*, no. 56 (05-1905), p. 24.

This zarzuela, defined as a «socialist play» by the *Diario Oficial de Avisos de Madrid* and *El Teatro* magazine, is «a praise both to labour and workshops, fraternal fellowship, marital fidelity and also solidarity between generations by workers who are proud of their condition and trade whose aim is to get some respect and not the anti-capitalist revolution»⁵⁹. There is no revolution attempt, just a rejection of the abuse and moral teaching that enshrines labour and the money earned through work.

A woman is also at the heart of the plot in *Luz en la fábrica* (1909), in which the action takes place in a hydroelectric power company⁶⁰. While the plot is a marital revenge – the murder of Mr Silverio by Salvador, a labourer, after knowing that he is having an affair with Andrea, his wife, – the play presents a hostile context with unemployed workers, skeptical anarchists who lecture their colleagues reading Kropotkin, mothers that not can breast-feed their children, vagrancy, etc.

Mining, an activity characteristic of the northern regions, is portrayed in *Los mineros* (1899) and *Aurora social* (1912). The former takes place in a mining town in the north of Spain:

⁵⁹ BREY 2018, p. 137.

⁶⁰ Undoubtedly, the recent creation of the Sociedad Hidroeléctrica Española [Spanish Hydroelectric Society] is present in this title. This company begins its activities in 1907 developing an important investment in this system until 1913. XIMÉNEZ HERRÁIZ 2013, p. 642.

[...] un puente sobre un río en cuyo margen derecha del espectador se levanta un gran ciudad industrial y fabril, en la que se ven los muelles con fardos, grúas, trenes de mineral, etc., y un poco más lejos, casas, paseos, fábricas, altos hornos...⁶¹.

With a background full of labour claims in terms of protests and strikes -«¡Al arma, compañeros [...] Dejad las galerías / buscad la redención / y acaben ya los días de imbécil sumisión»⁶², sing the workers in the second «cuadro» -we witness the honour-driven revenge of Juan, a miner who kills a captain of lancers who had played with his daughter's feelings. *Aurora social* also takes place in a mining context, in this case in Vizcaya, in the contemporary period, i.e., the Spain of 1912. And here we can also see a choir of striking miners, singing a trade union anthem: «La unión es la fuerza, / nuestro gran ideal, / es el primer paso / de avance de la Internacional»⁶³. The plot of this play is a bit more complex, since the wealthy heiress Aurora, after being harassed by an unworthy and libertine priest, loses her godfather, Don Baltasar. Then, while providing some aid to workers, she meets Máximo, one of the trade union leaders, who is in fact the man who saved her from the priest and, eventually, he turns out to be her real father. The transformation of Aurora in a committed worker with the cause of equality is immediate: the inherited properties of Don Baltasar are to be given to the workers, and she waves the red flag during the end of the play when we hear the choral anthem of equality, which could also be heard at the beginning of the zarzuela.

THE «CENTURY OF ELECTRICITY»

Selgas defines the 19th century as the «century of electricity»⁶⁴, the very antithesis of the previous «century of enlightenment». This new energy is considered the element that defines the era, a thesis confirmed after the revision of the lyric repertoire.

The power industry in Spain began in Barcelona, in 1875, thanks to Dalmau, who exported

⁶¹ Cuadro III. DELGADO 1899, p. 29. (lit. «There is a bridge over a river, on its right bank (from the audience perspective) there is a big industrial city, in which we see docks with bundles, cranes, trains carrying ore, etc., and a little further away, houses, factories, furnaces...»).

⁶² Cuadro II, Escena II. DELGADO 1899, p. 28. (lit. «Get your gun, colleagues [...] «Leave the galleries / seek redemption / and let's finish with the days of silly submission»).

⁶³ DÍAZ BEJERANO - AGUAYO MARAÑÓN 1912, p. 7. (lit. «The union is strength, / our great ideal, / it is the first step / marching towards the International».)

⁶⁴ We borrow the expression «siglo de la electricidad» [the electricity century] from SELGAS 1871.

his lighting system outside Catalonia bringing light to the Canal Imperial de Aragón in Zaragoza (1876), the Fábrica y Minas de Mieres in Asturias (1879) and even to Cuba, to the sugar factory property of Joaquín Ibáñez (1879)⁶⁵. In terms of its use for urban lighting, after London (1862), Vienna (1875) and Philadelphia (1876), we have to wait until 1878 for the first trials of electric lighting in Madrid, at the Puerta del Sol, coinciding with the celebration of the royal wedding of Alfonso XII and María de las Mercedes; and, one more year at the Campos Elíseos, where the bullring was illuminated to enjoy an evening bullfight that turned out to be a bit spooky⁶⁶.

After the celebration in 1881 of the Universal Exposition in Paris, dedicated to electrification and its applications, Spain continues its unstoppable process towards electric light, carrying out the following year new lighting tests in Calle de Alcalá, between the Puerta del Sol and the Café Suizo, with Edison's incandescent lamps system⁶⁷. In 1884, the Sociedad Matritense de Electricidad is established, and counts among its users the Casino de Madrid or the Café de Levante, the Apolo theatres, Comedia, Zarzuela, Lara y Martín⁶⁸. From June to September, this company provides light to the Jardines del Buen Retiro and to the Salón del Prado⁶⁹.

In March 1888, the Real Orden (lit. Sovereign Order) that enacts the compulsory installation of electric lighting in the theatres of Madrid was passed. One of the main reasons for this imposition has to do with security, since gas lighting had already caused several fires. It also meant a guarantee of well being and comfort, and «enhanced the images of luxury, prestige and comfort»⁷⁰ of theatres. In compliance with this regulation, on 9 November 1888 the Teatro Real opened its gates using the new system of electric lighting.

In the scenic area, the electricity allows the development of a series of stage effects – projectors, colour lights, floodlights, volumetric games, etc.– and emotional – «producing psychological stress, inducing different states of mind, highlighting an actor, changing the place of action, etc.»⁷¹ - that the theatres will experience from the 1890s. Electric light is modernity, as claimed by Ulpiano in the second «cuadro» –called «Hoy las ciencias adelantan

⁶⁵ TORTELLA 1994, pp. 95 and on; and MALUQUER DE MOTES 1992.

⁶⁶ FERNÁNDEZ BREMÓN 1879, p. 2.

⁶⁷ SÁNCHEZ SÁNCHEZ 1999, p. 158.

⁶⁸ XIMÉNEZ HERRÁIZ 2013, p. 154.

⁶⁹ To know the lighting process of Madrid, GARCÍA DE LAS INFANTAS 1986.

⁷⁰ PÉREZ ZAPICO 2011, p. 53.

⁷¹ *Ibidem*, p. 54.

que es una barbaridad» (lit. «nowadays science is a great breakthrough») – in *Sombras chinas* (1896): «el progreso es la civilización, el progreso es el teléfono, el progreso es la electricidad»⁷².

TABLE 5: ZARZUELAS RELATED WITH THE ELECTRICITY AND THE PETROLEUM

NEW FORMS OF ENERGY				
1. ELECTRICITY				
Title	Genre	Authors [L:libretto / M: music]	Premiere Theatre	Premiere Date
<i>Luces y sombras</i>	«Gacetilla cómico-lírica», 1 act and 4 «cuadros»	L: S. Lastra / A. Ruesga / E. Prieto M: F. Chueca / J. Valverde	Variedades	01-02-1882
<i>La Gran Vía</i>	«Revista lírico-cómica», fantástico-callejera», 1 act	L: F. Pérez y González M: F. Chueca / J. Valverde	Felipe	02-07-1886
<i>Madrid viejo y Madrid nuevo</i>	«Paralelo lírico», 1 act and 8 «cuadros»	L: C. Navarro / M. Arenas M: Á. Rubio / T. Reig	Zarzuela	13-11-1885
<i>Madrid en el año dos mil</i>	«Panorama lírico-fantástico de gran espectáculo», 2 acts and 10 «cuadros»	L: G. Perrín / M. Palacios M: M. Nieto / A. Rubio	Variedades	13-01-1887
<i>La verdad desnuda</i>	«Sátira social cómico-lírica», 1 act and 5 «cuadros»	L: C. Arniches / G. Cantó M: A. Brull	Maravillas	07-07-1888
<i>Sombras chinas</i>	«Extravagancia cómico-lírica», 1 act and 6 «cuadros»	L: E. García Álvarez / A. Paso M: J. Valverde (hijo) / T. López Torregrosa	Eslava	24-12-1896
<i>Cuadros disolventes</i>	«Apropósito cómico-lírico-fantástico inverosímil», 1 act and 5 «cuadros»	L: G. Perrín / M. Palacios M: M. Nieto	Príncipe Alfonso	03-06-1896
<i>Los amarillos</i>	«Zarzuela cómica», 1 act and 3 «cuadros»	L: F. Flores García / J. Abati M: A. Saco del Valle	Romea	01-02-1900
<i>El siglo XIX</i>	«Revista lírica», 1 act and 7 «cuadros»	L: C. Arniches / S. Delgado / J. López Silva M: E. Montesinos	Apolo	06-02-1901
<i>La manta zamorana</i>	Zarzuela, 1 act	L: G. Perrín / M. Palacios M: M. Fdz. Caballero	Zarzuela	07-03-1902
<i>El paraíso de los niños</i>	«Zarzuela fantástica infantil» 1 acto and 2 «cuadros»	L: S. Delgado / C. Arniches M: J. Valverde	Apolo	28-12-1904
<i>La chanteuse</i>	«Zarzuela cómica», 1 act and 3 «cuadros»	L: M. de Labra / F. de Torres M: J. Valverde / T. López Torregrosa	Gran Teatro	12-12-1906
<i>La mala fama</i>	Sainete, 3 «cuadros»	L: M. Mihura / R. González M: I. F. Castilla	Martín	01-06-1909
<i>Luz en la fábrica</i>	«Zarzuela dramática», 1 act and 3 «cuadros»	L: J. B. Pont / A. Sotillo M: E. Úbeda	Princesa (Valencia) Novedades (Madrid)	04-12-1909 19-11-1910
<i>La niña de los besos</i>	Opereta, 1 act and 3 «cuadros»	L: M. Mihura / R. González M: M. Penella	Gran Teatro	23-05-1911
<i>La gallina de los huevos de oro</i>	«Comedia de magia», 2 acts and 8 «cuadros»	L: A. Paso / J. Abati M: A. Vives	Lara	23-12-1911
<i>La cupletista de moda</i>	«Historieta cómico-lírica», 1 act and 3 «cuadros»	L: E. Polo M: F. Arderius / E. Úbeda	Barbieri	04-08-1914
2. PETROLEUM				
<i>Luces y sombras</i>	«Gacetilla cómico-lírica», 1 act and 4 «cuadros»	L: S. Lastra / A. Ruesga / E. Prieto M: F. Chueca / J. Valverde	Variedades	01-02-1882

⁷² GARCÍA ÁLVAREZ – PASO 1897, p. 12. (lit. «progress is civilization, progress is the phone, progress is he electricity»).

<i>La Gran Vía</i>	«Revista lírico-cómica, fantástico-callejera», 1 act	L: F. Pérez y González M: F. Chueca / J. Valverde	Felipe	02-07-1886
<i>Las hojas del calendario</i>	«Revista cómico-lírica», 1 act, prologue and 5 «cuadros»	L: G. Merino / E. López Marín M: A. Álvarez / M. Chalons	Romea	21-02-1894

The replacement of the old lighting systems with electricity is a recurrent topic in the repertoire. The “gacetilla cómico-lírica” *Luces y sombras* (1882) has the electric Light as the protagonist. Scene III in the first «cuadro», presents a debate between different forms of lighting in contemporary Spain⁷³: Phosphorus, Gas, Lamps, Candles, Plug –that sings a musical performance–, Oil and Electric Light, which appears «rodeada de gran resplandor por la luz Drummond»⁷⁴. (lit. «surrounded by the great glow of the limelight».) In the final apotheosis of the play – «Gloria al progreso» (lit. «Glory to the Progress»)–, the electric Light, after defining its ideals as «la industria, el comercio, el arte» (lit. «the industry, the commerce, the art»), is identified with «la luz de la ilustración»⁷⁵ (lit. «the light of enlightenment») that will defeat ignorance.

La Gran Vía also glorifies electricity, which in conflict with the Gas, the Oil, and the Candle; in addition, the oil ends causing a little blast⁷⁶, which is a characteristic effect already seen in *Luces y sombras. Madrid en el año dos mil* (1887) ends with a new apotheosis of electricity, in which its 10th and last «cuadro» is called «El palacio de la luz» (lit. «The palace of light»); and the following year, *La verdad desnuda* (1888) includes a new showdown between Gas and electric Light. This time there is music, and Gas attacks electric Light because he depends on «un gran motor» («a large engine»), while the electric Light repeats claims already known – «Yo soy el progreso [...] Y ya en Madrid / de moda voy a estar / ya que sin mí / vive en la oscuridad»⁷⁷–. The play ends with the apotheosis of the Truth wearing a «sol en la cabeza»⁷⁸ (lit. «a sun on the head»), which should be illuminated once more by the limelight [sic].

⁷³ «The use of electricity spread rapidly because it was a more effective, clean and hygienic system, which provided better lighting quality. But still in 1920 only 8.9% of Spaniards were illuminated with electric light». SÁNCHEZ SÁNCHEZ 1999, p. 206.

⁷⁴ Third Scene, First «Cuadro» I. LASTRA, RUESGA and PRIETO 1882, p. 14.

⁷⁵ Forth «Cuadro». LASTRA – RUESGA – PRIETO 1882, p. 41.

⁷⁶ Sixth and Seventh Scenes, Second «Cuadro». PÉREZ Y GONZÁLEZ 1994, p. XXXVIII. To maintain the actuality of the argument, these scenes will disappear since the Tenth Edition of the Libretto.

⁷⁷ Seventh Scene, Second «Cuadro». ARNICHEZ and CANTÓ 1888, pp. 23 and 24. (lit. «I am progress [...] and already in Madrid / fashionable I will be / because without me / living in the darkness it will be»).

⁷⁸ ARNICHEZ – CANTÓ 1888, [p. 45].

“HOY LAS CIENCIAS ADELANTAN QUE ES UNA BARBARIDAD...”⁷⁹

In 1901, in the «revista» *El siglo XIX*, electricity brings together in sixth «cuadro» some of the most important inventions of the last century – the Telephone, the Telegraph, the Automobile, the Phonograph, the Bicycle and the Photography –, to the shout of «¡Avanzad, avanzad, que con nosotros al mundo viene la libertad»⁸⁰. All the technical advances and inventions, which change the everyday life in Spain in the last decades of the Nineteenth Century, appear quickly in the lyrical repertoire that functions as a repository of contemporary novelties.

Transports [Table 6] that has already experienced a first revolution thanks to the railroad, will continue unstoppable their way to modernity. The English Tram which arrives to Madrid in 1870 to replace omnibus and horse-drawn carriages as we can see in *Madrid viejo y Madrid nuevo* (1885) is abandoned from 1899 in favor of the electric tram, whose appearance is testified by the lyric repertoire in *El galope de los siglos* o *La luna de miel*, both from 1900. Madrid will have to wait until 1919 to have a first metropolitan line, but already in 1910 we can find the Metro in *¡A ver si va a poder ser!*

The automobile began to appear in Madrid streets at the beginning of the 20th century: on February 13, 1902, the Marqués de Bolaños enrolled the first car in the capital of Spain. This same year, the «revista» *La visión de Fray Martín* presents an interesting game of synesthesia by demanding in its fourth «cuadro» the public suffers a strong smell of petrol.

TABLE 6: NEW TRANSPORTS IN THE ZARZUELAS (1885-1910)

NEW TRANSPORT SYSTEMS				
1. ANIMAL-POWER TRAM AND RIPPERTS				
Title	Genre	Authors [L: Libretto / M: Music]	Premiere Theatre	Premiere Date
<i>El fonógrafo</i>	Invento, 1 act	L: J. Castillo y Soriano M: I. García Rosetti	Recoletos	25-08-1885
<i>Madrid viejo y Madrid nuevo</i>	«Paralelo lírico», 1 act and 8 «cuadros»	L: C. Navarro / M. Arenas M: Á. Rubio / T. Reig	Zarzuela	13-11-1885
<i>La Gran Vía</i>	«Revista lírico-cómica, fantástico-callejera», 1 act	L: F. Pérez y González M: F. Chueca / J. Valverde	Felipe	02-07-1886
2. ELECTRIC TRAM				
<i>El belén del abuelito</i>	«Apróposito cómico-lírico», 1 act and 3 «cuadros»	L: C. Navarro / M. Fdz. de la Puente M: M. Chalons	Zarzuela	24-11-1899
<i>El galope de los siglos</i>	«Humorada satírica-fantástica», 1 act and 8 «cuadros»	L: S. Sinesio Delgado M: R. Chapí	Apolo	05-01-1900
<i>La luna de miel</i>	«Humorada cómico-lírica», 1 act and 3 «cuadros»	L: J. Molas / E. García Álvarez / A. Paso	Eldorado	07-07-1900

⁷⁹ Introduction, number 1. DE LA VEGA 1994, p. XXXIX.

⁸⁰ ARNICHES, DELGADO – LÓPEZ SILVA 1901, p. 38.

		M: E. Montesinos		
<i>El fondo del baúl</i>	«Apropósito cómico-lírico», 1 act and 5 «cuadros»	L: J. Jackson Veyán M: J. Valverde (hijo) / T. Barrera	Eslava	18-09-1900
<i>Gimnasio modelo</i>	«Pasillo cómico-lírico», 1 act	L: L. de Larra y Ossorio M: G. Cereceda	Cómico	10-11-1900
<i>Quo vadis</i>	«Zarzuela de magia disparatada», 1 act	L: S. Sinesio Delgado M: R. Chapí	Apolo	28-12-1901
<i>Sueño de invierno</i>	«Fantasía cómico-lírica», 1 act, 4 «cuadros» and prologue	L: G. Merino M: G. Mateos / A. Vives	Cómico	29-03-1902
<i>Un viaje de placer</i>	Juguete cómico-lírico, 1 acto y 3 cuadros	L: R. Galván Candela M: E. Anglada	Martín	28-09-1908
<i>¡A ver si va a poder ser!</i>	Revista fantástica de actualidad inspirada en los primeros derribos de la Gran Vía madrileña, 1 acto, prólogo, 5 cuadros y apoteosis	L: E. Polo, J.de Burgos / L. Linares Becerra M: J. Candela y A. Gorcelián	Martín	09-05-1910
3. CAR				
<i>El fonógrafo</i>	Invento en 1 acto	L: J. del Castillo y Soriano M: I. García Rosetti	Recoletos	25-08-1885
<i>Madrid viejo y Madrid nuevo</i>	Paralelo lírico en 1 acto y 8 cuadros	L: C. Navarro / M. Arenas M: Á. Rubio / T. Reig	Zarzuela	13-11-1885
<i>La Gran Vía</i>	Revista lírico-cómica, fantástico-callejera en un acto	L: F. Pérez y González M: F. Chueca / J. Valverde	Felipe	02-07-1886
<i>La visión de Fray Martín</i>	Zarzuela, 1 act and 5 «cuadros»	L: A. Viergol M: G. Giménez	Lírico	28-08-1902
<i>Miss Full</i>	«Humorada cómico-lírica-bailable en medio acto»	L: A. Viergol M: R. Chapí	Moderno	24-03-1905
<i>Un viaje de placer</i>	«Juguete cómico-lírico», 1 act and 3 «cuadros»	L: R. Galván Candela M: E. Anglada	Martín	28-09-1908
<i>¡A ver si va a poder ser!</i>	«Revista fantástica de actualidad inspirada en los primeros derribos de la Gran Vía madrileña», 1 act, prólogue, 5 «cuadros» and apotheosis	L: E. Polo / J. de Burgos / L. Linares Becerra M: J. Candela / A. Gorcelián	Martín	09-05-1910
<i>El tren de lujo</i>	«Zarzuela cómica», 1 act / 3 «cuadros»	L: M. Mihura / R. González del Toro M: C. Roig / P. Marquina	Zarzuela	20/12/1913
2. SUBWAY				
<i>¡A ver si va a poder ser!</i>	«Revista fantástica de actualidad inspirada en los primeros derribos de la Gran Vía madrileña», 1 act, prólogue, 5 «cuadros» and apotheosis	L: E. Polo / J.de Burgos / L. Linares Becerra M: J. Candela / A. Gorcelián	Martín	09-05-1910

The technique also encourages the development of new arts such as photography, cinematography or phonography; the three of them appear abundantly in the repertoire. Edison's phonograph, an invention that astonishes the world at the 1889 Parisian Exposition, already appears in *El fonógrafo* (1885) although the voices and choruses that are supposed to be heard through the device are actually broadcast behind the scenes.



ILL. 8: *El fonógrafo ambulante* (1899), front page.

TABLE 7: NEW ARTS IN THE ZARZUELA REPERTOIRE (1887-1903)

NEW ARTS					
1. PHOTOGRAPHY					
Title	Genre	Authors [L: Libretto / M: Music]	Premiere Theatre	Premiere Date	
<i>Prueba... fotográfica</i>	Juguete cómico-lírico, 1 act	L: E. Navarro Gonzalvo M: A. Rubio / C. Espino	Eslava	02-11-1887	
<i>Las hojas del calendario</i>	«Revista cómico-lírica», 1 act, prologue and 5 «cuadros»	L: G. Merino / E. López Marín M: A. Álvarez / M. Chalons	Romea	21-02-1894	
<i>El siglo XIX</i>	«Revista lírica», 1 act and 7 «cuadros»	L: C. Arniches / S. Delgado / J. López Silva M: E. Montesinos	Apolo	06-02-1901	
<i>Enseñanza libre</i>	«Apropósito cómico-lírico», 1 act and 5 «cuadros»	L: G. Perrín / M. Palacios M: G. Giménez	Eslava	11-12-1901	
<i>El bateo</i>	«Sainete lírico», 1 act and 4 «cuadros»	L: A. Paso / A. Domínguez M: F. Chueca	Zarzuela	07-11-1901	
<i>La chanteuse</i>	«Zarzuela cómica», 1 act and 3 «cuadros»	L: M. de Labra / F. de Torres M: J. Valverde / T. López Torregrosa	Gran Teatro	12-12-1906	
<i>Fotografía feminista</i>	«Humorada cómico-lírica», 1 act and 3 «cuadros»	L: D. Garrido M: S. Rada	Barbieri	21-10-1915	
2. CINEMATOGRAPHY					
<i>Sombras chinescas</i>	«Extravagancia cómico-lírica», 1 act and 6 «cuadros»	L: E. García Álvarez / A. Paso M: T. Valverde / T. López Torregrosa	Eslava	24-12-1896	
3. PHONOGRAPHY					
<i>El fonógrafo</i>	Invento, 1 act	L: J. del Castillo y Soriano M: I. García Rosetti	Recoletos	25-08-1885	
<i>Madrid viejo y Madrid nuevo</i>	«Paralelo lírico», 1 act and 8 «cuadros»	L: C. Navarro / M. Arenas M: Á. Rubio / T. Reig	Zarzuela	13-11-1885	
<i>El bazar H</i>	«Establecimiento cómico-lírico», 1 act and 3 «cuadros»	L: C. Navarro / M. Arenas M: M. Fdz. Caballero	Recoletos	08-08-1887	
<i>Las hojas del calendario</i>	«Revista cómico-lírica», 1 act, prologue and 5	L: G. Merino / E. López Marín M: A. Álvarez / M. Chalons	Romea	21-02-1894	

	«cuadros»			
<i>Sombras chinescas</i>	«Extravagancia cómico-lírica», 1 act and 6 «cuadros»	L: E. García Álvarez / A. Paso M: T. Valverde / T. López Torregrosa	Eslava	24-12-1896
<i>El fonógrafo ambulante</i>	Zarzuela, 1 act and 3 «cuadros»	L: J. González M: R. Chapí	Apolo	24-04-1899
<i>El siglo XIX</i>	«Revista lírica», 1 act and 7 «cuadros»	L: C. Arniches / S. Delgado / J. López Silva M: E. Montesinos	Apolo	06-02-1901
<i>Venus-Salón</i>	«Fantasía cómico-lírica», 1 act and 4 «cuadros»	L: F. Limendoux / E. López-Marín M: R Calleja / V. Lleó	Lírico	01-08-1903

In Table 8 we collect some medical advances, such as the X-rays that, after being discovered in 1895 by Wilhelm Conrad Röntgen, appear in *Sombras chinescas*, premiered in Madrid in December of the following year. This work also alludes to the vaccination system that already had been implemented in Spain since the decade of the seventies, around the project to create the Instituto Nacional de Vacunación (National Institute of Vaccination)⁸¹.

TABLE 8: SOME MEDICAL ADVANCES WHICH APPEAR IN THE ZARZUELAS

MEDICAL ADVANCES				
1. SMALLPOX VACCINE				
Title	Genre	Authors [L:libretto / M: music]	Premiere Theatre	Premiere Date
<i>Sombras chinescas</i>	«Extravagancia cómico-lírica», 1 act and 6 «cuadros»	L: E. García Álvarez / A. Paso M: J. Valverde (hijo) / T. López Torregrosa	Eslava	24-12-1896
2. X-RAYS				
<i>Sombras chinescas</i>	Extravagancia cómico-lírica, 1 acto y 6 «cuadros»	L: E. García Álvarez / A. Paso M: J. Valverde (hijo) / T. López Torregrosa	Eslava	24-12-1896
<i>El juicio del año</i>	Humorada, 1 acto, 5 «cuadros»	L: C. Lucio / Á. Palomero M: E. Monterio	Comedia	28-12-1896
3. MICROSCOPE				
<i>Prueba... fotográfica</i>	Juguete cómico-lírico, 1 acto	L: E. Navarro Gonzalvo M: A. Rubio y Espino	Eslava	02-11-1887

Sports [Table 9] begin to form part of the bourgeois leisure pursuing a new «hygienic» and healthy lifestyle. In this period sports societies such as the Veloz Club (1870) were constituted in Madrid, to promote the skating, especially among modern young girls, and velocipede races⁸². These two sportive activities encouraged by the Veloz Club, already appear in *El potosí submarino* premiered as soon as in 1870.

TABLE 9: SOME SPORTS WHICH BEGIN TO APPEAR IN THE ZARZUELAS (1870-1901)

SPORTS				
1. SKATING RINK				
Title	Genre	Authors [L: Libretto / M: Music]	Premiere Theatre	Premiere Date

⁸¹ CAMPOS MARÍN 2004.

⁸² TORREBADELLA I FLIX, OLIVERA BETRÁN – BOU 2015.

<i>La Gran Vía</i>	«Revista lírico-cómica, fantástico-callejera», 1 act	L: F. Pérez y González M: F. Chueca / J. Valverde	Felipe	02-07-1886
2. CYCLING [VELOCIPED]				
<i>El potosi submarino</i>	«Zarzuela cómico fantástica de gran espectáculo», 3 acts	L: R. García Santisteban M: E. Arrieta	Bufos Arderius	21-09-1870
<i>El bazar H (1887)</i>	«Establecimiento cómico-lírico», 1 act and 3 «cuadros»	L: C. Navarro / M. Arenas M: M. Fdz. Caballero	Recoletos	08-08-1887
<i>Madrid Petit</i>	«Viaje semifantástico», 1 act and 4 «cuadros»	L: C. Navarro / F. Castellón M: J. Valverde (hijo)	Martín	21-01-1891
<i>Las hojas del calendario</i>	«Revista cómico-lírica», 1 act, prologue and 5 «cuadros»	L: G. Merino / E. López Marín M: A. Álvarez / M. Chalons	Romea	21-02-1894
<i>Sombras chinescas</i>	«Extravagancia cómico-lírica», 1 act and 6 «cuadros»	L: E. García Álvarez / A. Paso M: J. Valverde (hijo) / T. López Torregrosa	Eslava	24-12-1896
<i>El siglo XIX</i>	«Revista lírica», 1 act and 7 «cuadros»	L: C. Arniches / S. Delgado / J. López Silva M: E. Montesinos	Apolo	06-02-1901
3. PHYSICAL TRAINING				
<i>Gimnasio modelo</i>	«Pasillo cómico-lírico», 1 act	L: L. de Larra y Ossorio M: G. Cereceda	Cómico	10-11-1900

In the repertoire also appear new machine like the sewing one or the elevator, which improve the quality of life in the final years of the Nineteenth Century, placing the Spanish society in a new context of progress.

TABLE 10: SOME OTHER INVENTIONS WHICH APPEAR IN THE ZARZUELAS (1870-1908)

OTHER INVENTIONS				
1. SWEING MACHINE				
Title	Genre	Authors [L: Libretto / M: Music]	Premiere Theatre	Premiere Date
<i>El potosi submarino</i>	«Zarzuela cómico fantástica de gran espectáculo», 3 acts	L: R. García Santisteban M: E. Arrieta	Bufos Arderius	21-09-1870
<i>Máquinas Singer</i>	«Juguete cómico-lírico», 1 act	L: R. Monasterio / F. Yraizoz M: M. Nieto	Felipe	21-06-1886
<i>Ligerita de cascos</i>	Zarzuela, 1 act	L: S. Delgado M: L. Torregrosa	Romea	24-04-1900
<i>Un viaje de placer</i>	«Juguete cómico-lírico», 1 act and 3 «cuadros»	L: R. Galván Candela M: E. Anglada	Martín	28-09-1908
2. TELESCOPE				
<i>Un viaje de mil demonios</i>	«Zarzuela bufo-dramática», 3 acts and 7 «cuadros»	L: R. García Santisteban / R. Puente y Brañas / M. Pastorrido M: J. Rogel	Circo	02-10-1873
<i>Madrid en el año dos mil</i>	«Panorama lírico-fantástico de gran espectáculo», 2 acts and 10 «cuadros»	L: G Perrín / M. Palacios M: M. Nieto / Á. Rubio	Variedades	13-01-1887
3. ELEVATOR				
<i>Hay ascensor</i>	«Pasillo cómico-lírico», 1 act	L: F. Limendoux M: J. Viaña	Apolo	03-05-1887

However, paradoxically the inventions are exhibited in the theatre through falsifications that magnify their essence; thus, the power of the electric Light is simulated by the limelight –a non-electric light–, the sonic possibilities of the phonograph are recreated through real singer acting behind the coulisses, and the new car appears on the stage producing a strong smell of gasoline among the public.

Translated by Alfonso C. Rodríguez

BIBLIOGRAPHY

ALFONSO - BANQUELLS 1900

ALFONSO, Francisco and BANQUELLS, Daniel. *Choque de Trenes*, Madrid, Velasco ed., 1900.

ARNICHES - CANTÓ 1888

ARNICHES, Carlos and CANTÓ, Gonzalo. *La verdad desnuda*. Madrid, Imprenta J. Rodríguez, 1888.

ARNICHES - DELGADO - LÓPEZ SILVA 1901

ARNICHES, Carlos; DELGADO, Sinesio and LÓPEZ SILVA, José. *El Siglo XIX*. Madrid, Imp. hijos de M. G. Hernández, 1901.

BAHAMONDE MAGRO - TORO MÉRIDA 1978

BAHAMONDE MAGRO, Ángel. and TORO MÉRIDA, J. *Burguesía, especulación y cuestión social en el Madrid del siglo XIX*. Madrid, Siglo XXI, 1978.

BARCE 1995

BARCE, Ramón. «El sainete lírico (1880-1915)», in: *La música española en el siglo XIX*, edited by Casares & Alonso, Oviedo, Servicio de Publicaciones de la Universidad de Oviedo, 1995.

BARQUÍN GIL 2012

BARQUÍN GIL, Rafael. «El turismo y los primeros ferrocarriles españoles (1855-1914)». *IV Congreso de Historia Ferroviaria*, 2012, pp. 110-136.

BLANCO ÁLVAREZ 2015

BLANCO ÁLVAREZ, Nuria. *El compositor Manuel Fernández Caballero (1835-1906)*. Ph.D. Diss. Oviedo, Universidad de Oviedo, 2015.

BÉCQUER 2000

BÉCQUER, G. A. *Desde mi celda*, edited by M. Paz Díaz Taboada, Madrid, Espasa, 2000.

BREY 2018

BREY, Gérard: *Lucha de clases en las tablas: el teatro de la huelga en España entre 1870 y 1923*. Zaragoza, Prensas de la Universidad de Zaragoza, 2018.

CAMPOS MARÍN 2004

CAMPOS MARÍN, Ricardo. «El difícil proceso de creación del Instituto de Vacunación del Estado (1871-1877)», *Asclepio*, Vol. LVI-1-2004, pp. 79-109.

CASARES 1994

CASARES, Emilio. *Francisco Asenjo Barbieri. I. El hombre y el creador*, Madrid, ICCMU, 1994.

CASARES 1996-97

CASARES, Emilio. «Historia del teatro de los Bufos, 1866-1881. Crónica y dramaturgia», in: *Cuadernos de Música Iberoamericana*, ICCMU, vols. 2-3, (1996-97), pp. 73-118.

CASARES 2002

CASARES, Emilio. «*La vuelta al mundo*», in: *Diccionario de la Zarzuela. España e Hispanoamérica*, edited by Emilio Casares, 2 vols., Madrid, ICCMU/SGAE, 2002.

CORTIZO 1998

CORTIZO, Mª Encina. *Emilio Arrieta. De la ópera a la zarzuela*. Madrid, ICCMU, 1998.

CORTIZO 2003

CORTIZO, Mª Encina. «Zarzuela y ópera bufá. Modelos estilísticos del teatro lírico español a finales del siglo XIX», in: *La musique entre France et Espagne. Interactions stylistiques 1870-1939*, edited by Louis Jambou, París, Presses de la Université de Paris-Sorbonne, 2003, pp. 59-80.

COSDON 2009

COSDON, Mark. *The Hanlon Brothers: From Daredevil Acrobatics to Spectacle Pantomime, 1833-1931*, Southern Illinois University, 2009.

DE DIEGO 1983

DE DIEGO, Emilio. «El ferrocarril: La Habana-Güimes», *Cuaderno de historia Moderna y Contemporánea*, 4. Universidad Complutense de Madrid, 1983, pp. 59-77.

DE LA VEGA 1994

DE LA VEGA, Ricardo. *La verbena de la Paloma*, edited by Ramón Barce, Madrid, ICCMU, 1994.

DELGADO 1899

DELGADO, Sinesio. *Los mineros*, Madrid, Imp. de los hijos de M. G. Hernández, 1899.

DÍAZ BEJERANO - AGUAYO MARAÑÓN 1912

DÍAZ BEJERANO, Julio and AGUAYO MARAÑÓN, Gregorio. *Aurora social*. Madrid, Imp. Velasco, 1912.

FERNÁNDEZ BREMÓN 1879

FERNÁNDEZ BREMÓN, José. «Crónica general», *La Ilustración Española y Americana*. Madrid, Año XXIII, nº XXV, 08-07-1879, p. 2.

FERNÁNDEZ CAMPANO 1890

FERNÁNDEZ CAMPANO, Enrique. *Nocturno*, Madrid, R. Velasco Imp., 1890.

FERRER TORÍO - RUIZ BEDIA 2003

FERRER TORÍO, Raquel and RUIZ BEDIA, M^a Luisa: «El túnel de Reinosa». *Cuadernos de Campoo*, nº 34, diciembre de 2003.

GARCÍA ÁLVAREZ - PASO, 1897

GARCÍA ÁLVAREZ, Enrique and PASO, Antonio. *Sombras Chinescas*, Madrid, R. Velasco Imp., 1897.

GARCÍA ÁLVAREZ - LÓPEZ MONÍS 1908

GARCÍA ÁLVAREZ, Enrique and LÓPEZ MONÍS, Antonio. *¡Hasta la vuelta!* Madrid, Imp. de los hijos de M. G. Hernández, 1908.

GARCÍA DE LAS INFANTAS 1986

GARCÍA DE LAS INFANTAS, José M^a. *Primeros pasos de la luz eléctrica en Madrid y otros acontecimientos*. Madrid, Ed. Fondo Natural, 1986.

GARCÍA QUIRÓS 2003

GARCÍA QUIRÓS, Paz: «Minería y ferrocarril minero en Asturias a finales del siglo XIX». III Congreso de Historia Ferroviaria. “Siglo y medio de ferrocarril en Asturias”. Gijón 2003.

HARNEY 2002

HARNEY, Lucy D. «Carnival and Critical Reception on the ‘Sainete’ tradition», in: *MLN*, Vol. 117, n. 2, Hispanic Issue (Mar., 2002), pp. 310-330.

HARNEY 2006

HARNEY, Lucy D. «Controlling Resistance, Resisting Control: the *género chico* and the Dynamics of Mass Entertainment in Late Nineteenth-Century Spain», in: *Arizona Journal of Hispanic Cultural Studies*, 2006, 10, pp. 151-167.

HEREDIA CAMPOS 2011

HEREDIA CAMPOS, Carmen. «A la voz de parada y fonda», in: *Alta velocidad*, Ministerio de Fomento, Julio-agosto, 2011, p. 1.

JACKSON VEYÁN - SIERRA 1891A

JACKSON VEYÁN, José and SIERRA, Eusebio. *La caza del oso*, Madrid, R. Velasco Imp., 1891.

JACKSON VEYÁN - SIERRA 1891B

JACKSON VEYÁN, José and SIERRA, Eusebio: *De Madrid a París*, Madrid, R. Velasco Imp., 1891.

LALANA SOTO - SANTOS Y GANGES 2012

LALANA SOTO, J. L. and SANTOS Y GANGES, Luis. «Electricidad y cambio tecnológico. La implantación de la electricidad en las instalaciones técnicas ferroviarias», in: *Simposio Internacional Globalización, innovación y construcción de redes técnicas urbanas en América y Europa, 1890-1930*. Uni. de Barcelona, 2012, pp 1-18.

LARRINAGA 2002

LARRINAGA RODRÍGUEZ, Carlos. «El turismo en la España del siglo XIX», in: *Historia Contemporánea* 25, 2002, pp. 157-179.

LASTRA - RUESGA - PRIETO 1882

LASTRA, Salvador, RUESGA, Andrés and PRIETO, Enrique. *Luces y Sombras*. Madrid, Imp. José Rodríguez, 1882.

LITVAK 1991

LITVAK, Lily. *El tiempo de los trenes: El paisaje español en el arte y la literatura del realismo (1849-1918)*. Barcelona, Eds. del Serbal, 1991.

LUCIO - ARNICHES 1893

LUCIO, Celso and ARNICHES, Carlos. *Vía Libre*, Madrid, Velasco ed., 1893.

MALDONADO - ALVARADO 1913

MALDONADO, José y ALVARADO, Jorge. *El expreso de las diez*. Madrid, SAE, 1913.

MALUQUER DE MOTES 1992

MALUQUER DE MOTES, Jordi. «Los pioneros de la segunda revolución industrial en España: la Sociedad Española de Electricidad (1881/1894)», in: *Revista de Historia Industrial*, nº 2, 1992, pp. 121-142.

MATOS SILVEIRA - RAYA LOZANO 2012

MATOS SILVEIRA, Rosana and RAYA LOZANO, Enrique. «La ‘cuestión social’ en la España de la Restauración monárquica (1874-1931): apuntes históricos para la génesis de la profesionalización de lo social», in: *Textos & Contextos* (Porto Alegre), vol. 11, n. 1, jan./jul. 2012, pp. 142-155.

NAVARRO GONZALVO 1887

NAVARRO GONZALVO, Eduardo. *Prueba... fotográfica*. Madrid, Imp. José Rodríguez, 1887.

NAVARRO – USÚA 1884

NAVARRO, Calixto and USÚA, José. *Ida y vuelta*. Madrid, Establecimiento Tip. de M. P. Montoya, 1884.

OLIVÉ ROIG - SÁNCHEZ MIÑANA 2007

OLIVÉ ROIG, Sebastián and SÁNCHEZ MIÑANA, Jesús: «De las torres ópticas al teléfono: el desarrollo de las telecomunicaciones y el Cuerpo de Telégrafos», in: *El Ochocientos. De los lenguajes al patrimonio*. Técnica e Ingeniería en España. VI. M. Silva Suárez (Ed.). Vol. 5. Zaragoza, Real Academia de Ingeniería, Institución Fernando el Católico, Prensas universitarias de Zaragoza, 2007b, pp. 551-608.

OTERO CARVAJAL 2016

OTERO CARVAJAL, Luis Enrique. «La sociedad urbana y la irrupción de la modernidad en España, 1900-1936». *Cuaderno de historia contemporánea*, 38, número especial, 2016, pp. 255-283.

PASDERMADJIAN 1960

PASDERMADJIAN, H. *La Segunda Revolución Industrial*. Madrid, Tecnos, 1960.

PÉREZ Y GONZÁLEZ 1994

PÉREZ Y GONZÁLEZ, Felipe. *La Gran Vía*, edited by e M^a E. Cortizo y R. Sobrino. Madrid, ICCMU, 1994.

PÉREZ GALDÓS 1923

PÉREZ GALDÓS, Benito. «El teatro por horas». *Nuestro teatro*. Madrid, Renacimiento, 1923.

PÉREZ GALDÓS 1983

PÉREZ GALDÓS, Benito. *Rosalía*. Alan E. Smith (ed.). Madrid, Cátedra, 1983.

PÉREZ ZAPICO 2011

PÉREZ ZAPICO, Daniel. «La llegada de los arcos voltaicos. Electricidad, combates por el progreso e historia local, Oviedo (1886-1913)». *Historia Social*, n. 69 (2011), pp. 49-70.

PERILLÁN BUXÓ 1884

PERILLÁN BUXÓ, Eloy: *Hatchis*. Madrid, Establecimiento tipográfico del Universo, 1884.

PERRÍN - PALACIOS 1901

PERRÍN, Guillermo and PALACIOS, Miguel. *El Juicio Oral*, Madrid, Fiscowich, Arregui y Aruej, 1901.

PRIETO - ROCABERT 1905

PRIETO, Enrique and ROCABERT, Ramón. *El túnel*. Segunda edición. Madrid, SAE, 1905

PRIETO - ROCABERT 1911

PRIETO, Enrique and ROCABERT, Ramón. *El capataz*. Madrid, R. Velasco Imp, 1911, p. 16.

PUENTE FELIZ 1982

PUENTE FELIZ, Gustavo. «El sistema métrico decimal. Su importancia e implantación en España», in: *Cuadernos de Historia Moderna y Contemporánea*. Universidad Complutense de Madrid, vol. 3 (1982), pp. 95-125.

ROCES FELGUEROZO 2006

ROCES FELGUEROZO, Carlos. «El puerto de El Musel y el muelle de Gijón en relación con los ferrocarriles mineros», in: *IV Congreso de Historia Ferroviaria*, Málaga, 2006, pp. 1-28.

RUBIO JIMÉNEZ 1982

RUBIO JIMÉNEZ, Jesús. *Ideología y teatro en España: 1890-1900*, Universidad de Zaragoza, 1982.

SÁNCHEZ SALAS 1995

SÁNCHEZ SALAS, Bernardo. «El hierro del que están forjados los sueños o *Extraños en un tren*», in: *Actas del V Congreso de la A.E.H.C.* A Coruña, C.G.A.I., 1995, pp. 227-241

SÁNCHEZ SÁNCHEZ 1999

SÁNCHEZ SÁNCHEZ, Isidro. «VI. Las luces del 98. Sociedades eléctricas en la España Finisecular». *Sociabilidad fin de siglo: espacios asociativos en torno a 1898*, edited by Sánchez Sánchez & Villena Espinosa, Cuenca, Ediciones de la U. de Castilla-La Mancha, 1999.

SELGAS 1871

SELGAS, José de. *Delicias del nuevo paraíso, recogidas al vapor en el siglo de la electricidad*, Madrid, Admon. de La Moda Elegante, 1871.

TORREBADELLA I FLIX, OLIVERA BETRÁN and BOU, 2015

TORREBADELLA I FLIX, OLIVERA BETRÁN y BOU: «Orígenes e institucionalización del asociacionismo gimnástico-deportivo en la España en el siglo XIX (1822-1900)». *Apunts. Educación Física y Deportes* 2015, n. 119, 1er. trimestre (enero-marzo), pp. 7-54.

TORTELLA, 1972.

TORTELLA, Gabriel. *Los orígenes del capitalismo en España. Banca, Industria y Ferrocarriles en el siglo XIX*. Madrid, Ed. Tecnos, 1972.

TORTELLA 1994

TORTELLA, Gabriel. *El desarrollo de la España Contemporánea. Historia económica de los siglos XIX y XX*. Madrid, Alianza Ed., 1994.

VERSTEEG 2000

VERSTEEG, Margot. *De fusiladores y morcilleros. El discurso cómico del género chico (1870-1910)*, Amsterdam, Rodopi, 2000.

VILAR 1990

VILAR, Juan Bautista. *La primera revolución industrial española (1872/1869)*, Madrid, Istmo, 1990.

XIMÉNEZ HERRÁIZ 2013

XIMÉNEZ HERRÁIZ, Luis. *La electricidad cambió el mundo. El caso madrileño*, Ph.D. Diss. Madrid, Universidad Carlos III, 2013.