


RESEARCH ARTICLE

Industry, literature, and sociability: The effects of industrialisation of Asturian parishes according to Armando Palacio Valdés

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Abstract

Armando Palacio Valdés characterised the Asturian village of Sama de Langreo in his novel *La aldea perdida* (1903), as an unusual example of an industrialised population entity through four variables: the sale of fresh meat, the existence of street lighting, cafés, and public greenspaces. The aim of this article is to verify the author's approach by comparing the state of the rest of the Asturian parishes at the time of the novel (1879). To do this, a methodology combining the use of literary sources and the analysis of historical documentary sources will be applied. The results obtained confirm the Asturian author's assessment of the industrialisation process in Sama as an exceptional milestone for the province, as well as evidencing the rapid pace of industrialisation in the rest of the Asturian parishes.

Introduction

The chronological period known as the Belle Époque – between the end of the Franco–Prussian War in 1871 and the outbreak of the First World War in 1914 – was a period of great change in European culture linked to the development and spread of the Industrial Revolution, technological evolution, and the promotion and expansion of capitalism, which were to have an impact on the population and its social habits. Spain and, specifically, that of the Principality of Asturias, despite being far away from the main centres of industrialisation, also succumbed to the changes that took place. They progressively modified, especially at the turn of the century, their social and economic infrastructures (Prados de la Escosura, 2017) and introduced new elements of these into the community acquis. Thus, at the turn of the century, the economic dimension of industrialisation was reflected in a cultural dimension that materialised the effects of the impact caused by it. And it is precisely this cultural framework that is analysed in this article.

Many material vestiges of the industrial process left traces of its imprint. Regulations, documents, and architectural remains are just some of the essential primary sources for the study of this period. However, they are not the only first-hand sources that can be used to access historical knowledge, as new historiographical trends have shown. Thus, within the interdisciplinary approach that dominates current studies, the usefulness of the cultural productions, contemporary to the period under study and understood from different perspectives, are used as critical mirrors of the society in which they are generated (Storey, 2016). Art, music, and literature are the fruit of their time, that is to say, they are a reflection of the political, social, economic, and cultural situation of a given time–space framework, and this circumstance makes them a source of the first order.

Nowadays, critics of the benefit of using these sources for historical knowledge have been largely overcome. In recent years, many examples are available from different disciplines – social history, history of political thought, or women’s history – that have made artistic creation, and especially literary creation, the main source of their analyses. For example, Forni (2020) uses Edmondo De Amicis’ novels which explore in depth the Italian educational system at the end of the nineteenth century. Jackson (2020) uses the fiction and documentary author Bernard Samuel Gilbert to conceptualise the rural community as a concrete space in the common imaginary. Similarly, Iliasova (2021) has analysed several Russian novels in order to understand the social context of Tsarist Russia in the last quarter of the nineteenth century. Nor has economic history remained indifferent to these innovations. In fact, within this field, the utilisation of historical literature as a source of analysis is many and varied. For example, Perdices de Blas and Santos Redondo (2006) coordinated an extensive and pioneering volume, which analysed the connection between classical works of Spanish and international literature, such as *The Merchant of Venice* (1600), *Don Quixote* (1605), or *Oliver Twist* (1839), and literary works such as Honoré de Balzac, Émile Zola, or Leopoldo Alas ‘Clarín’, with concepts or ‘economic ideas’. Another approach is presented by Palacios (2019) who uses nineteenth-century British literature to trace the concept of ‘informal empire’ that Britain exercised over Latin America after the dissolution of the Spanish and Portuguese empires. More concrete examples are the analyses of Ramos Gorostiza (2014) who uses the novel *La aldea perdida* (1903) by Armando Palacio Valdés to explore the anti-industrial discourse of the late nineteenth and early twentieth centuries; Allende (2010) in turn uses the works of Pio Baroja, Joseph Conrad, and Eugene O’Neill to observe the transition from traditional sailing to the modern steamship, whilst Rodríguez (2020) analyses the impact of the economic crises of the late nineteenth century on popular culture through Ken Follet’s novel *A Dangerous Fortune* (1993). The foregoing represents but a small sample of how the relationship between economic history and the use of these sources is still emerging but in doing so reveals solid bases on which to continue building.

The aim of this article is to build on the approach of using literacy sources in economic history, as well as to explore an interdisciplinary methodology that combines cultural studies with the more traditional resources of the subject. The article examines the novel *La aldea perdida* (1903) by the Spanish writer Armando Palacio Valdés. In this work, the author gives a detailed description of the valley in which he grew up, paying special attention to the socio-economic issues of the place and its evolution from a predominantly rural area to a mining and industrial one in the second half of the nineteenth century. Thus, by describing both areas, he identifies the main characteristics on the basis of which an industrialised rural area can be distinguished from a non-industrialised one. Under this assumption, the research question arises: according to Palacio Valdés’ classification, and with the support of the historiographical sources in use, how many parishes were industrialised in Asturias during the final decades of the nineteenth century? And which ones are they?

State of the art

Without discussing the classification of the Spanish industrialisation process as being ‘a latecomer’ (Prados de la Escosura, 1993; Sudrià, 1995; Simpson, 1997), what seems certain is that in the mid-nineteenth century, Asturias began an industrialisation process driven by the hard coal mining industry and activities linked to smelting and ferrous alloys. These formed the basis of the region’s industrialisation – namely, its mining and iron and steel industries. Asturias, located on the Cantabrian coast (see Figure 1), had all the necessary elements to become the industrial engine of Spain: rich subsoil and plentiful natural resources, water and wood (Ojeda, 1985).

However, the industrialisation process in Asturias, due to the orographic limitations and the absence of capital, was slow and late. Before the 1830s, coal mining in the region was a craft industry, ‘unaware of any scientific knowledge and carried out by peasants in a non-systematic and

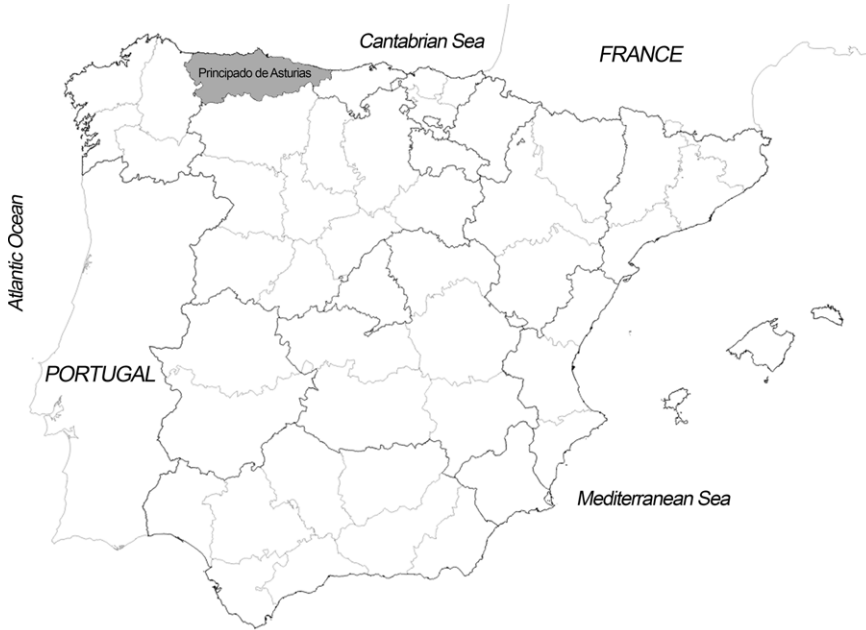


Figure 1. Location of Principado de Asturias in Spain.
 Source: Prepared by the authors.

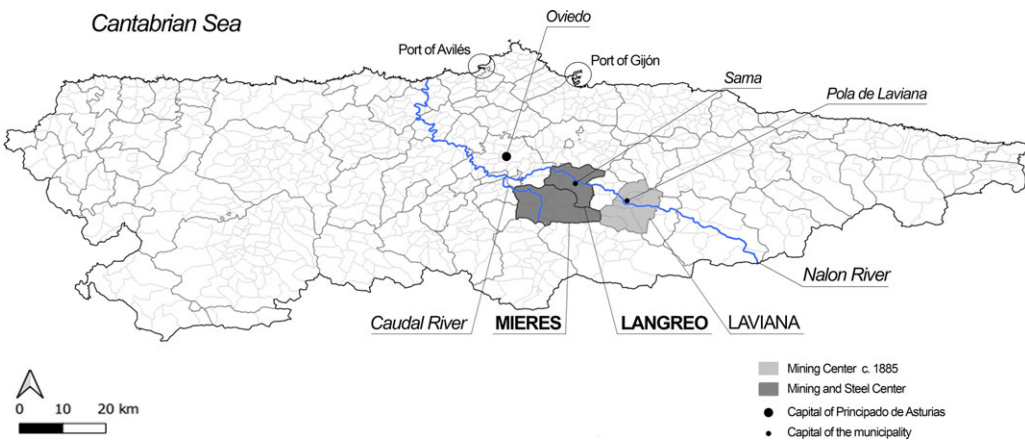


Figure 2. Location of Langreo and Mieres in Asturias.
 Source: Prepared by the authors.

non-continuous manner’ (Muñiz, 2019: 44). Thirty years later, despite the establishment of some of the leading companies in the region’s iron and steel mining process – the Real Compañía Asturiana de Minas or the predecessors of the Fábrica de Mieres and Duro Felguera – half of the production was still in the hands of small, mostly illegal exploiters (Coll and Sudrià, 1987: 63), demonstrating the dependence of economic activity on the primary sector and archaic trade practices.

In fact, it was not until 1860 – coinciding with the start-up of the Duro Felguera company – that the coal mining area, around the rivers Nalón and Caudal in the municipalities of Langreo and Mieres (see Figure 2) respectively, turned Asturias into the country’s main mining and iron and steel centre, replacing definitively the Malaga iron and steel industry until activity in Bilbao boomed.

However, the distance between these mining areas and the two largest ports in the region – Gijón and Avilés – the high transport costs of a new road (1842) and railway (1852) required to service the sites linking the municipality of Langreo with the port of Gijón and foreign competence complicated the growth of the above-mentioned companies. It was not until a few decades later that the connection of the railway with the Mieres municipality (1874), its extension towards the interior of the Iberian Peninsula through the Cantabrian Cordillera (1884), the extension of the railway line from Langreo to the Laviana municipality (1885), or the restructuring of the port of Gijón (1907) contributed towards promoting the sector at the change of the century. Since then and up to the current day, mining and iron and steel activity has been very present in the daily lives of the Asturian population whose historical past – in its economic, political, social, and labour aspects– has been determined by the evolution of both. In this context, it is not surprising that the cultural heritage (traditional folk music, painting, landscape, or literature) has also been influenced by these occupations.

In fact, it is the overall presence of industrialisation in the region that explains the influence that this activity has had on Asturian (and wider Spanish) historiography, where its mining and iron and steel industries have played a key role in studies on Spanish industrialisation. This is particularly the case from the 1980s onwards when the period of economic reconversion already showed that Asturias was facing the *swansong* of mining activity. Therefore, the need to understand these processes and their importance in the economic development of Spain was reflected in the publication of two major reference works: *La industrialización del Norte de España (Estado de la cuestión)* (Hernández and Fernández, 1988) and *Asturias en la industrialización española, 1833–1907* (Ojeda, 1985). Since then, and following the influence of international studies, interest in the subject has continued to grow, being approached from different perspectives – political (Erice, 1995), social (Uría, 1996), labour (Rodríguez, 2000), financial (García, 1988), urban (Tomé, 1988), or geographical (Benito, 1992).

Similarly, with the turn of the century, both within and outside Spain's borders, there is a wide variety of possibilities for study, which has increased even more as a result of the introduction of new historiographical trends with different approaches and methodologies, such as oral (Alonso, 2021), environmental (Olay, 2020), gender, or cultural history (Huerta Nuño, 2021; Vega and Díaz, 2022).

Starting point

This article is based on the novel *La aldea perdida* (*novela-poema de costumbres campesinas*) [*The lost village: novel-poem of peasant customs*] published in 1903. Its author, Armando Palacio Valdés (1853–1938), was the most well-known Spanish writer of his time outside Spain (Dendle, 1995). He was twice nominated for the Nobel Prize, in 1927 and 1928, and his works were translated into several languages. As part of the fin-de-siècle literary trend, his texts, inspired by both realism and naturalism, are characterised by a careful observation of reality. This empirical knowledge complemented his previous experience as a professor of political economy at the San Isidro School of Mercantile Studies in Madrid and professor of civil law at the University of Oviedo (Gómez-Ferrer, 1986) before becoming a writer. This context has made his work a historical source of the first order for the fin-de-siècle period.

This novel has traditionally been read as a statement against the process of industrialisation (Ramos Gorostiza, 2014), linking the work into the popular trend in Spain of the pan-European anti-industrial movement led by John Ruskin at the end of the nineteenth century (Litvak, 1973), whose writings were at that time beginning to be partially translated into Spanish.¹ Thus, the novel coincides in time with similar statements by well-known Spanish authors such as Miguel de Unamuno,² Pío Baroja, José Martínez Ruiz 'Azorín', and José María de Valle Inclán, among others (Litvak, 1975). Just as this novel had an influence on the contemporary anti-industrial genre, its

influence extended beyond the novel's original time and space to find echoes in other international works of the genre.³

The plot of this novel is a reiteration of the cliché of mining literature (Delmiro, 2003; Felgueroso, 2013) in which the main character Demetria, a young peasant girl (a Persephone transcript), is kidnapped and dragged into the mine by a miner known by the name of Plutón (the Roman god of the underworld). Both figures highlight the opposition between two irreconcilable worlds: a traditional, wild, and kind one versus a modern, urban, and violent one. In short, Palacio Valdés makes a self-serving description of two spaces: the rural one, in decline, and the industrial one responsible for dominating the previous one and taking over all its resources.

In order to carry out this task, the author develops the action in a very specific time and space. Thus, the plot takes place in the municipality of Laviana (the author's birthplace) during the years prior to the arrival of the railway (1885) and the months following its inauguration. Thus, the changes are shown in the descriptions of the landscape, the housing patterns, and the rural population before and after the arrival of the railway. This contrast is also reinforced by the descriptions of the neighbouring municipality, Langreo, which was already industrialised.

In this way, we can observe the differences between two municipalities that Palacio Valdés knew from childhood: the rural (Laviana) and the industrialised (Langreo). Both are examples of the before and after of the construction of the railway, a technical advance the author considers as the milestone which announces that industrialisation has been completed. It is in this context that we can contemplate the effects caused by industrialisation in the remaining environments in which societal life takes place.

The comparison between the two municipalities, underpinning the novel, is based on their municipalities: Pola de Laviana (in the process of industrialisation) and Sama de Langreo (industrialised):

Everyone believed that Laviana, due to the number and wealth of its coal mines, was soon destined to play an important role, not only in the province, but also in the Cantabrian region. They wished that those underground treasures would soon come to light; they were eager that in La Pola, capital of the municipality and judicial district, reforms and improvements would be introduced which would make it a worthy rival to Sama, capital of the neighbouring municipality of Langreo. *In Sama, oil lanterns were lit at night to illuminate pedestrians.* In La Pola, they did not even dream of it. *In Sama they ate fresh meat every day.* In Pola, it was salted all year round, except when a neighbour wanted to slaughter a cow and sell part of it. *In Sama there was already a café with marble tables.* In La Pola there were only a few unseemly inns. Finally, and this was what caused most admiration and envy among us, in Sama nothing less than *a promenade had recently been opened with a dozen and a half Indian chestnut trees placed in two rows and eight or ten green-painted wooden benches*, where individuals sat down every day to read the Madrid gazettes. In order to reach such a degree of civilisation, it was necessary for the people of Laviana to join their efforts. This was repeated constantly in La Pola (Palacio Valdés, 1903: 84–85) [italics added].

This paragraph is the key evidence on which the analysis proposed below is built. It identifies the four variables – public lighting (*light*), establishments dedicated to the sale of meat products (*meat*), establishments for the consumption of coffee (*cafés*), and finally, the presence of public green areas (*greenspace*) – that the author uses to differentiate between an industrialised municipality (Sama de Langreo) and one that is not (Pola de Laviana). Thus, the aim of this work is first to analyse whether there are other parishes in Asturias with the same characteristics as Sama; second, to classify them; and third, to study whether any spatial pattern exists. In other words, the Asturian author, on the basis of spaces for socialisation and consumption, provides the keys to distinguish between an industrialised rural space and one that is not and thus proves paramount in answering the research question.

Table 1. Framework conditions to classify industrial parishes

Variable	Description	Fulfilled	Not fulfilled
<i>Light</i>	Public lighting	Yes	No
<i>Meat</i>	Meat food	\geq number of establishments in the reference parish	$<$ number of establishments in the reference parish
<i>Cafés</i>	Coffees		
<i>Greenspace</i>	Public greenspaces	Yes	No

Source: Prepared by the authors.

Methodology: sources and data

In order to answer the research questions proposed, first, the spatial framework of this analysis is limited to Asturias, with an area of 10,604 km², which was administratively divided into fifteen judicial districts in 1879 (organised around the administration of justice). These judicial districts were subdivided into smaller entities, such as municipal councils (public administration), and later, into parishes (religious administration). At present, Asturias is territorially divided into seventy-eight municipalities, and the rural parish is recognised as a legal entity as a traditional form of coexistence and settlement of the Asturian population.

Second, the temporal axis of the study is established by the time of Palacio Valdés' narrative, which is set between 1879 and 1885. Therefore, the earliest date (1879) was selected as the framework for the study.

Once the time–space coordinates have been established and using as reference values each variable in the parish of Sama in 1879, the degree of urbanisation described by Palacio Valdés is analysed for each of the 861 Asturian parishes registered in the Sistema de Información Territorial e Infraestructura de Datos Espaciales de Asturias (SITPA-IDEAS) GeoPortal managed by the Government of Asturias, examining the presence (fulfilled) or inexistence (not fulfilled) of each variable in each parish (see Table 1). The greater the number of variables, the more advanced the stage of industrialisation of the parish, with IV being the highest (100% fulfilled) and I the lowest (25% fulfilled). In Table 1, the values obtained in the parish of Sama de Langreo in 1879 are compared with those obtained in each of the 861 parishes in Asturias in order to observe the degree of compliance with the 4 variables specified by Palacio Valdés in his novel.

Sources and construction of the database

In order to establish the threshold values for each of the variables, we use two different types of sources. On the one hand, to identify the parishes that have public lighting (*light*) or publicly owned green areas (*greenspace*), the study will be based on the specific bibliography in the field, specifically on the works of Pérez (2011) and Tomé and Morales (2009), respectively.

In order to analyse the nineteenth-century population's access to fresh meat (*meat*) or to socialising spaces for the consumption of coffee (*cafés*), a quantitative study will be carried out based on a documentary source of the period, the Anuario-Almanaque del Comercio, de la Industria, de la Magistratura y de la Administración [Yearbook-Almanac of Commerce, Industry, Judiciary, and Administration] (from 1881, the name Almanac is dropped from the title) produced by the bookshop – publishing house of Charles Bailly-Bailliére from 1879 to 1911.⁴

The aim of this Directory – similar to other publications such as those of the Didot-Bottin house (Nolin, 1950) that his promoter, Carlos Bailly-Bailliére, knew from the French publishing house managed by his father – is to establish the identities of those people who are members of public institutions, work in a trade (lawyers, doctors, cabinetmakers, etc), own a shop or a factory, or work in a Spanish public service or overseas territories (Cuba, Puerto Rico, and the

Philippines). In this way, the collection allows us to support a spatial analysis of economic activity, as has already been shown by other authors in the United Kingdom (Osborne, Hamilton, and Macdonald, 2014), the United States (Berenbaum et al., 2018), or France (McWatters and Lemarchand, 2010; Lenardo et al., 2019).

Although the information compiled is not complete for all the annual series, it does follow the same pattern. Structured by provinces, judicial districts, town councils, and villages, as well as providing general information (number of inhabitants, members of parliament, universities, etc), it is classified by economic activity, followed by the name and surname of the owners, including in the main cities, the address where the activity is located.

The *Anuario-Almanaque*, which in its first edition comprised more than 400,000 contact details, was compiled using information gathered through 3 different sources. First, the professionals, traders, and industrialists themselves took advantage of the opportunity to advertise their businesses, and this information was complemented by that provided from official government sources. Finally, in each of the provincial capitals, there were special agents who collected all the information and passed it on to the main office in Madrid. These agents ensured the reliability of the information contained, as well as the continuity of the series published (Alía et al., 1998).

Based on the information contained in this source – corrected using other contemporary records such as the *Contribución Industrial y de Comercio* [Industrial and Trade Tax], the erroneous records of these registrations published in the *Boletín Oficial de Oviedo* [Official Journal of Oviedo], or other guides to economic activities (Cartavio, 1884) – a database has been constructed which includes for each Asturian parish the details of all the occupations, businesses, industries, and public services in 1879, the literary time of Palacio Valdés' novel which coincides with the publication of the first series of the *Anuario-Almanaque*.

In short, the interest of the publication, which at the time was declared of public utility and was awarded prizes at numerous international exhibitions in the late nineteenth and early twentieth centuries (Báñez and Fernández, 2017: 148), lies in the subtitle with which it is called, defining itself as a 'small popular encyclopaedia of practical life'.

Treatment of the database

Once the database was completed, a homogenisation and standardisation process was carried out with regard to the spatial location and the economic activity developed by each of the registered entries. For the year 1879, the database is made up of 7,995 references located in 417 locations that match the category of hamlets, places, villages, or parishes. This required an initial homogenisation of the database to reduce the unit of analysis to the parish, understood as the minimum territorial unit of organisation that can be analysed.⁵

The database generated from the information provided by the original sources was integrated into a geographic information system based on the latitude and longitude coordinates of the parishes. In this way, the 417 settlements registered in the database are located in 406 parishes out of the 861 existing ones, distributed, at the same time, in 71 of the 78 councils that currently constitute Asturias.

The second homogenisation task was to standardise the 7,995 references. These display 376 occupations, businesses and industries registered in the Bailly-Baillière Directory in 1879. They are codified to six digits following the international Primary Secondary Tertiary (PSTI) classification developed by the Cambridge Group for the History of Population and Social Structure.⁶ This codification yields 183 PSTI occupations grouped into 61 sub-sectors which at the same time are aggregated into 9 sectoral divisions. Among the 183 occupations, 9 are registered in the primary sector (land agents and animal husbandry standing out), 99 in the secondary sector (cereal processing, millers, blacksmiths, bakers, weavers, and sausage makers also proving relevant), and 101 in the tertiary sector (liberal professions and the distribution and sale of foodstuffs which tend to predominate).

Empirical results

On the basis of these variables and after applying the aforementioned methodology, a descriptive analysis was carried out for the purpose of verifying the fictional picture painted by Palacio Valdés in his novel.

Public lighting (light)

The first difference that Palacio Valdés notes between Sama and the rest of the Asturian parishes is the presence of public lighting: ‘In Sama, oil lamp posts were lit at night to light the pedestrians’ (Palacio Valdés, 1903: 84–85). This public service introduces an important change in the living conditions of any urban space. Night-time illumination of cities not only offers greater road safety but also allows socio-economic activity to extend beyond the daylight hours.

In this case, despite the fact that Oviedo and Gijón, as major cities in the region, already had a certain degree of provision at the beginning of the nineteenth century – lighting their streets with lanterns using vegetable oil combined with schist managed by the local residents themselves – the results were still deficient. In addition to this first option, lighting by fluid gas was used in the historic centre of Oviedo in 1851 (Santana, 1989) and in Gijón in 1870 (García, 2010). Regarding electrical energy, it was not until 1886 when the first attempts were made in the urban centres of both cities after the construction of the first electrical power plants (Pérez, 2011). Five years later, in 1891, the provision of a waterfall to the city of Avilés would allow the installation of a public electricity network (Pérez, 2015).

However, apart from the development of the three most important cities in the region, Oviedo, Gijón, and Avilés, it was in the mining area of Mieres where in 1879 the *Fábrica de Mieres* was already electrically lighting one of its factories (Maluquer de Motes, 1992: 123); shortly afterwards, taking advantage of the resources of the river Caudal and the factory itself, this service would be extended to the urban area. A similar case is observed in the Nalón basin for the pioneer parishes of Sama, Ciaño, and La Felguera.

In contrast, the rest of the region had to wait until 1901, the reference year for the installation of the electricity network in Spain, when the first electric machines became widespread in the Peninsula. It was then, at the change of the century, that the favourable natural conditions of the Asturian region – the abundance of coal resources, potential river currents, etc – stimulated the development of this sector, converting the region in an example to be followed.

Taking into account the variety of public lighting systems (oil, gas, oil, and electricity) in Asturias present during the last quarter of the nineteenth century, two criteria were applied to define this variable: first, that the lighting was managed by local government and second, that it was spread across the urban centre. Hence, it was determined that in 1879 only seven parishes had public lighting (see Figure 3).

Fresh meat establishments (meat)

For this second variable, it is worth noting that, in the midst of a nutritional transition that followed the industrialisation process and the increase in the food supply, access to the consumption of a wider variety of protein foods such as fresh meat became a more common (Popkin, 1993; García and Trescastro, 2016), as can be seen in the novel.

However, this increased consumption of meat cannot be considered a habit for the majority of the nineteenth-century Spanish population, as academic studies (Bernabeu–Mestre and Villar, 2011; Trescastro, 2013) and, especially, literary testimonies reveal: ‘In Sama they ate fresh meat every day. In Pola, it was salted all year round, except when a neighbour wanted to slaughter a cow and sell part of it’ (Palacio Valdés, 1903: 84–85).

Only those with a high level of income and in urbanised areas could have access to fresh meat. This is why Palacio Valdés highlights the existence of specific establishments dedicated to the sale



Figure 3. Asturian Parishes with public lighting in 1879.
Source: Pérez (2018); prepared by the authors.

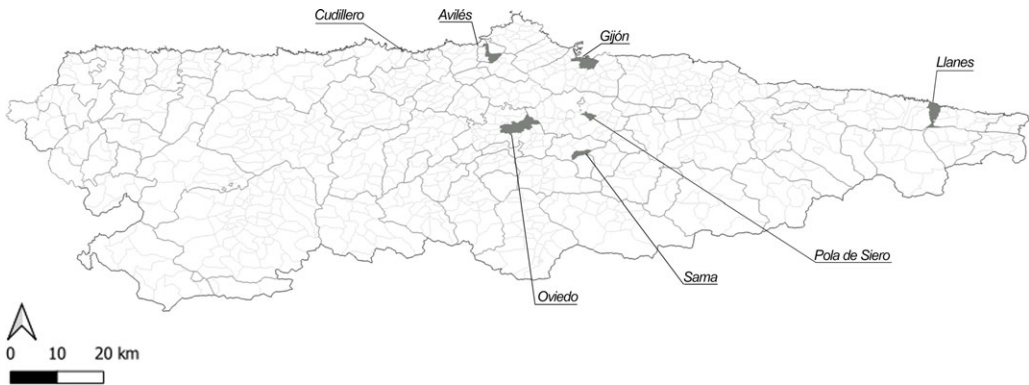


Figure 4. Location of the butcheries in 1879.
Source: Prepared by the authors.

of fresh meat products in order to distinguish a region as industrialised, these being listed in the sources under the titles of ‘carnicería’ or ‘tablajería’ [butcher’s shop].

In 1879, eighty-one butcher shops were distributed across Asturias, four of them located in the parish of Sama. Thus, value 4 is the reference to establish whether or not the rest of the parishes fulfil this condition. According to this parameter, in 1879, only seven locations would equal or exceed the threshold (see Figure 4). The map does not include the forty-three parishes that have between one and three establishments.

Establishments for the consumption of coffee (café)

With regard to the third variable, it is important to bear in mind that at the end of the nineteenth century, the café was a very popular space for informal sociability and that, as in other similar establishments, its distinctiveness lay not in the kind of consumption it offered but in the social meaning it assumed (Bologne, 1993). In fact, from the end of the eighteenth century – in the context of the Enlightenment and the French Revolution – cafés took on a remarkable political symbolism, becoming an environment designed to provide a space for the political, social, and economic aims of the well-to-do classes. In fact, it is this political and social function and the greater spending power of

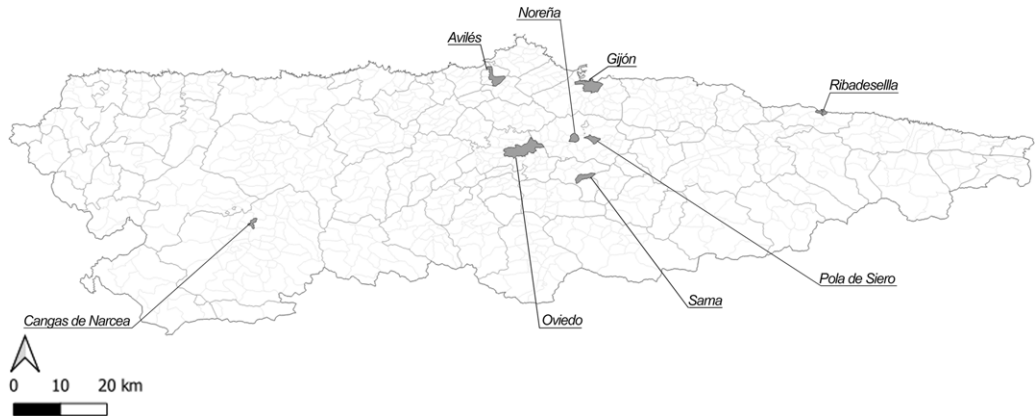


Figure 5. Location of coffee consumption establishments in 1879.

Source: Prepared by the authors.

their customers that the author focuses on, as opposed to other consumption options, in order to establish the difference between an industrialised space and a rural or industrialising one.

Within this variable, we have included those places of sociability linked to coffee consumption described in the sources as ‘cafés’ or ‘cafés and pool’, a binomial that usually appears together in the sources and which also give a good example of the new preferences of a bourgeois sociability that was starting to expand.

In the reference year of the research, the number of establishments dedicated to this activity in the parish of Sama is three. According to this value, in 1879, only eight parishes would equal or exceed this number. In addition, there would be only four other parishes that would register this activity, but without reaching the threshold, these not being included on the map (see Figure 5).

Public green areas (greenspace)

Finally, in order to analyse the variable that Palacio Valdés identifies as ‘a promenade of chestnut trees with green wooden benches’, a promenade with a dozen and a half Indian chestnut trees (1903: 84–85), we use the analysis carried out by Tomé and Morales (2009) on greenspaces in the urban environment of Asturias at the time of this study. They identify parks, gardens, promenades, and tree-lined squares as greenspaces. The increase in these spaces, as a result of nineteenth-century urban planning which considered them ‘essential for the improvement of public health’ (Tomé and Morales, 2009: 70), is a response to the attractiveness of new cities and is also essential in encouraging moments of leisure and bourgeois sociability.

Despite the difficulties involved in identifying this category, given that many of the improvements, adornment, and sanitation interventions in fin-de-siècle cities, as Tomé and Morales (2009: 78) point out, are still undocumented, the analysis of this variable assumes that the parish of Sama already had a public greenspace in 1879. Therefore, the unit is the reference number. Before the beginning of the last quarter of the nineteenth century, at least sixteen parishes had an area in their urban space designated by the municipality as a greenspace (see Figure 6).

Discussion

As mentioned above, *La aldea perdida* is an anti-industrialist argument and therefore belongs to the current of thought of the change of century. The author criticises the consequences of capitalist transformations, the progressive replacement of the rural areas by the city, the end of a society

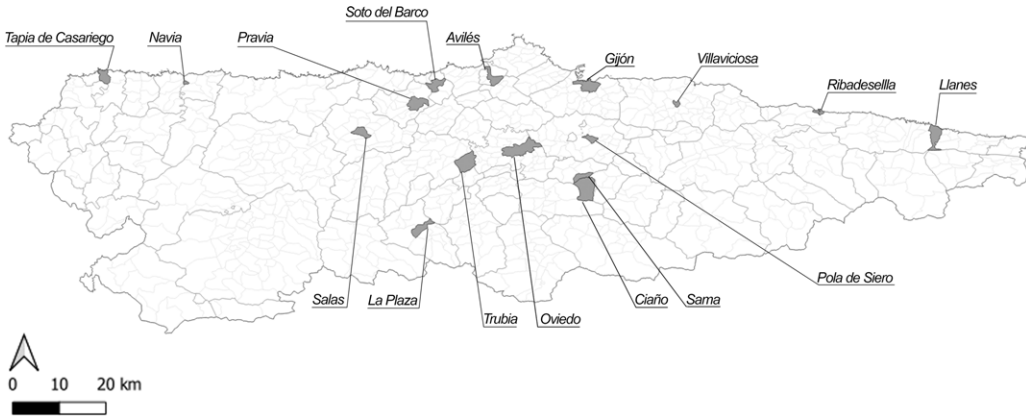


Figure 6. Location of public green areas in 1879.
 Source: Tomé and Morales (2009); prepared by the authors.

based on craftsmanship and rural labour, and the increase in social conflict. To reinforce his viewpoint, Palacio Valdés offers a dichotomy between two civilisations, the rural/ancient and the urban/modern, although he definitely prefers the former – ‘Arcadia no longer exists. Happiness and innocence have left that valley’ (Palacio Valdés, 1903: 2) – whereby he realises the irreversible advance of the modern alternative.

This statement is based on two hypotheses that underlie the novel. On the one hand, the arrival of the railway is empirical evidence that the industrialisation process is already at a very advanced stage and that there is no possibility of reversing it. The academic literature points to this fact by showing how the railway’s arrival contributed, in the short term, to the urbanisation of rural areas (Cañal-Fernández and Gómez-Martín 2022) and, in the long term, the exact opposite, by viewing how it may have contributed to the depopulation of rural Spain (Esteban-Oliver, 2023; Cañal-Fernández and Álvarez, 2022). On the other hand, the effects of these changes linked to industrialisation are not only seen in the economic dimension of rural areas but also in the cultural aspects of a society that is undergoing rapid modernisation – art, music, or literature, as in this case. In this sense, the effect of all these changes on daily life beyond the work environment is particularly noteworthy, especially in terms of socialisation habits. Therefore, in addition to the changes in urban infrastructures that have been observed, changes in the organisation of leisure time should also be noted, resulting from the world of work and its evolution.

Therefore, taking these issues into account, the debate will focus both on the most relevant aspects provided by the analysis of the quantitative results and on their correlations in the fin-de-siècle cultural and socio-economic context.

The level of industrialisation

First, in relation to the analysis of the variables, the results show that the author’s perception of the process of industrialisation and economic growth in Asturias was accurate.

In fact, stage IV of the degree of industrialisation, that is, the stage that fulfils the four conditions proposed by the Asturian author in his description of the parish of Sama de Langreo, is only matched by the provincial capital, Oviedo, and the coastal municipalities in which the main ports are located, Avilés and Gijón (see Figure 7).

Furthermore, it was in these areas where, at the same time, there was a greater concentration of population attracted by the driving forces of an increasingly modern economy. In the mid-nineteenth century, according to the 1857 population census, the population of Asturias was just over half a million inhabitants (515,976); 30 years later, according to the 1887 census, the

Table 2. Population in the main Asturian cities between 1857 and 1887

	1857	1887	Rate of change
Oviedo	25.473	42.716	67.7 %
Gijón	23.621	35.170	48.9 %
Avilés	7.386	10.235	38.6 %
Langreo	7.823	14.014	79.1 %
Total (Asturias)	515.976	595.420	15.4 %

Source: National Statistics Institute; prepared by the authors.

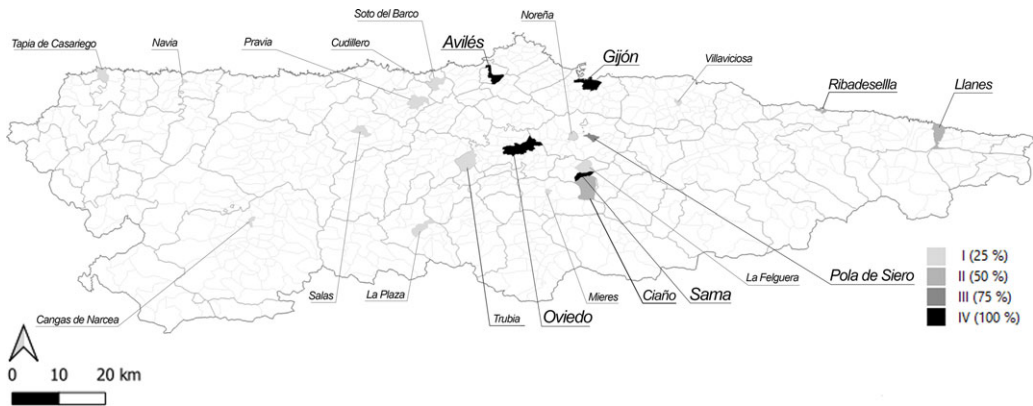


Figure 7. Degree of industrialisation in comparison to Sama in 1879.

Source: Prepared by the authors.

population had almost reached 600,000 (595,420). This is a significant growth (15.39%), especially if we compare it with the rest of the administrative divisions of the country, but it is not comparable with the growth that these four cities underwent as a result of economic activity and industrialisation.

In short, in view of the figures in Table 2, it is easy to deduce the importance of the concentration of the population in a few very specific areas – Oviedo and Gijón accounted for 13.1% in 1887⁷ with the majority of the population dispersed throughout the territory.⁸

Of these cities, Oviedo, as the capital, had the role of the leading centre in the capitalist organisation since geographically, it is in a privileged position being both the physical and economic centre of Asturias, located at the intersection of the region’s network of roads and railways between the coal basins and the ports. In contrast, although Gijón was not the administrative capital, its location as the most accessible port from the central coal basin gave it the title of industrial and port capital of Asturias. Although at a smaller scale, it is a similar tale for the second port in the province, the Avilés estuary and its mouth, which was also linked to the mining industry in the surrounding area and the development of an emerging iron and steel industry.

In short, the presence of a bourgeoisie linked to big business and capital movements and a growing salaried labour force leads to the emergence of a duality in society that will be correlated with the shaping of the urban landscape and with consumer habits, as Palacio Valdés had observed in his novel.

In fact, his focus on Langreo is not trivial or accidental since this Asturian municipality, together with Mieres, became the main scene of Asturian industrialisation. The early arrival of the railway in Langreo in 1852 was what made it stand out against Mieres and turned Langreo into the

subsidiary centre of Oviedo and Gijón by supplying essential commercial, financial, and service needs, supported by its close proximity to the economic activity.

As for the rest of the parishes, although they do not meet the Asturian author's four conditions, it can be seen how their geographical position, either on the coastline or at the intersection of the inland routes, places them at different degrees of the modernisation process explained by the author. This development takes the form of a transition from an essentially traditional society with a rural structure to a modern, urban society where the secondary and tertiary sectors are gaining more and more importance.

Only the parish of Pola de Siero is at level III of industrialisation. It is a municipality located on the trajectory between the Nalón mining basin and the port of Gijón, which is also noteworthy for the exploitation of its mines.

The coastal parishes of Llanes and Ribadesella are at stage II of industrialisation, fulfilling only two of the variables studied. Located on the eastern coast of the region, they are both characterised by an economy dependent on the primary sector, but with a very predominant weight of fishing resources which has made their ports essential commercial points in the north of the peninsula. An additional example is the parish of Ciaño, bordering to the south of Sama de Langreo, whose industrialisation has been driven by the extension of the mining pits of the Nalón basin to the surrounding areas.

Finally, thirteen parishes are at the first stage of industrialisation. Therefore, during this period, their transformation process began. They are a group of parishes with a mainly agricultural-based economy and with strong rural roots in their economic activity combined with a commercial tradition, being coastal and river ports or inland commercial nodes, or with an incipient industrial development. The link between these parishes and the coastline, with the presence of important waterways and their proximity to traditional communication routes, places all these rural areas in the best locations for their commercial activity to be revitalised with the improvement of land transport and the implementation of road infrastructures – bridges, tunnels, and highways. If we add to this situation the mining and industrial development of the region and the arrival of financial and human capital, the direct consequence is an increase in economic activity which will soon have an influence on the consumption and leisure habits of fin-de-siècle society.

In short, as the turn of the century approached, the adoption of a new urban model was gradually imposed. In the construction of this model, the needs of a new society, characterised by its duality, but also those of a modern state typical of western economies, played a fundamental role.

Qualitative results: literature and society

The analysis carried out also shows how fin-de-siècle literature is a first order primary source in dealing with the socio-economic changes that industrialisation entailed, as well as the effects that these changes caused on the symbolic plane of a society in the process of epistemological change.

Literature is not only a more or less accurate description of the author's reality but also a critical mirror in which they denounce the evils that surround them which they subsequently try to put right. In fact, the novel, as the cultural product that it is, fulfils a function that goes beyond that of representation or entertainment since it also serves to reproduce ideological and social content. Hence, its analysis is highly significant in identifying the author's intentionality, thereby granting access to the message in its totality.

In the historical context in which this text is framed, there are many economic, political, and cultural problems that Spanish literature, and in particular Palacio Valdés, echoes: the fin-de-siècle agrarian crisis, industrialisation, and the vices associated with the industrial city or the fracture in Spanish identity following the loss of its colonial empire after five centuries are just some of the most urgent. The events identified under the narrative of 'El Desastre del 98' and the resulting epistemological system gave name to a whole generation that already declared itself regenerationist and that, with its literary writings and essayistic studies, projected various

solutions to what was known as the ‘Spanish problem’ – solutions that, at least in the social sphere, had a strong moralistic content (Ramos Gorostiza, 2014). And, in this sense, novels and authors not only tried to offer an idealised vision of a classical and rural world (*La aldea perdida*, as already mentioned, or *Peñas Arriba* [1895] by José María de Pereda) but also attempted to insist on the vices associated with an industrial city that never sleeps (*Tinieblas en las cumbres* [1907] by Ramón Pérez de Ayala) and on the abuse of alcohol consumption and violence (chapter XV of *La Regenta* [1884–85] by Leopoldo Alas ‘Clarín’), for example. All of them showed in their pages the concerns of a changing society, of the connotations that urban spaces could have on people and social relations, and of the growing desire of human beings to dominate the forces of nature. In short, authors of the period offered in their texts not only value judgements or solutions, sometimes practical and sometimes moralistic, to real problems, but were also able to describe the mirror in which society was reflected. This is one reason why literature is of interest as a source of the study of the past.

Moreover, as mentioned above, Palacio Valdés’ approach to Asturian industrialisation shows how the process goes beyond the economic field to have a particular impact on social aspects. In fact, three of the four variables identified by the author are linked to social habits.

With the illumination of cities (*light*) and the consequent extension of the opening hours of meeting places, new habits related to leisure time appeared. In this sense, as Pérez (2015: 11) points out, everything seems to indicate that progress and the industrial city manage to increase leisure time over working hours, becoming a triumph of the working class and modernity. The street lighting establishes a symbolic duality between two spaces: the urban/illuminated versus the rural/darkened, with all the connotations and metaphors that both issues carry with them, that is, the contrast between a civilised and uncivilised place. Similarly, the narrative of the period gives us a good example of the pejorative connotations associated, not only with the nightlife but also with the existence of rural inns as opposed to urban cafés. In this case, both of the latter are associated with moral issues or with violence.

Likewise, the increase in establishments for drinking coffee (*café*), playing billiards, or having a political conversation in a space reflects the needs of an emerging society, namely, a bourgeois class with a growing social base that adapts aristocratic symbols and lifestyles. That is, with the proliferation of these spaces as the purchasing power of the population increases, one can also trace a process of appropriation and redefinition of aristocratic symbols and lifestyles by a bourgeois class with an increasingly broad social base (Agulhon, 1977).

A similar issue occurs with the increase in public gardens (*greenspace*) and recreational areas throughout the nineteenth century. Although there is a widespread idea that public gardens are a bourgeois creation, it is a conception that, as Jorge Uría (2001: 245) points out, although acceptable, ‘... is still a remarkable simplification’. Although the old nobility style gardens of the upper bourgeoisie spread with the advance of the nineteenth century, becoming a sign of identity, they were accompanied by the traditional use of communal spaces – groves or meadows – as places for popular leisure that, with the increase in population density, would have to be moved to the interior of the cities. However, unlike the use of natural spaces in rural areas, the creation of gardens, promenades, or parks is the result of applying urban planning theories together with an urgency to improve the hygienic conditions of growing urban centres, also helping to mitigate the human need to recreate a social rise through shared leisure. Strolling, cycling, having a drink, or sitting on the benches and enjoying nature were finally available to all social classes. Moreover, it cannot be overlooked that in the selection of these variables, as well as having a direct impact on the change in the customs of an ever less rural and more urban society, there is also a strong contrast between the countryside and the city. This comparison is also very present in literary sources, defined in binomials that finally highlight the difference not only of spaces but also of classes and the different ways of enjoying leisure time and socialising among equals.

Thus, as opposed to darkness and violence or the chaos of rural areas, the order of civilisation is imposed, represented only by a well-lit and well-ordered city. In this sense, it is also noticeable

how, contrary to the wide variety of greenspaces (*greenspace*) that can be found in rural areas, the idea underlying the concept of the industrial city with public greenspaces is, rather, that of human control over nature. Here, supposedly, the most important issue is not that people should be able to enjoy a day in the open air but that they should be able to control it.

Conclusions

The main objective of this paper is to carry out a methodological exploration of two types of primary sources – literary and documentary – which are a priori disparate but, as has been shown, can be complementary.

The use of literature as a historical source has been essential in enabling access to an ‘otherwise unavailable ‘historical reality’. In *La aldea perdida*, it is not only possible to observe in detail the microhistory of its main and secondary protagonists; it is also possible to understand certain group dynamics, to see the representation of craft procedures or professions that are now obsolete, and, perhaps most importantly, to gain access to the practical application of a way of thinking that would probably only persist at a theoretical level anyway.

Moreover, Palacio Valdés’s novel not only provides access to the agrarian world of the Asturian basin during its conversion into a mining region but also provides the keys to a primary quantitative analysis. The use of the *Anuario-Almanaque*, despite its structural limitations in terms of its conceptual diversity and possible failings, has proved to be an important source of information for approaching nineteenth-century economic activity and its evolution during the industrialisation process of the following decades.

The quantitative results obtained show that mining activity not only served as a catalyst for the industrialisation process but also as a driving force for a much more in-depth social transformation which was reflected both in the cultural heritage and in the physical space in which it took place. As a result of the economic activity of the period, but also of the dynamics acquired in this text, it is possible to distinguish all the phases of change experienced by Asturian rural areas, from the generalised stagnation in the last quarter of the nineteenth century to the slow progression of those municipalities that gradually assumed the changes in their urban structure, until the final conversion into completely urbanised and industrialised population centres.

Furthermore, the current study shows how Palacio Valdés, although deeply idealistic in his anti-industrial discourse, remains faithful to the aesthetic commitment he made to Realism, leaving for posterity a description – except for the circumstances deriving from his ideological affiliation and his economic situation – very close to his own reality. However, the author’s subjectivity is still present, especially when his analysis is based on the needs of the social class to which he belongs, and it is for this reason that he focuses especially on spaces for socialising (the café or the promenade), with a strong bourgeois influence, or on a food (fresh meat) which has not yet become widespread among the population as a whole. Far from its focus are solutions to the growing needs of a working class on the move (restaurants, inns, or grocery shops) or of an increasingly demanding industry (sawmills, ironmongers, or building materials).

In short, the author’s analysis of the close relationship established between the industrialisation process, bourgeois aims, and the materialisation of its effects on the new habits of socialisation of the population, as well as its impact on the urban planning and the introduction of public services in the industrial city, should be emphasised.

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Notes

1 The first translations of John Ruskin into Spanish and Catalan were made from 1897 onwards in different formats: monographs (Fillier, 1897), anthologies (Montoliu, 1901), or partial translations in magazines such as *La España moderna*. However, although most of the translations were published from 1907 onwards, the *intelligentsia* of the period had access to

Ruskin's work directly from English or from French translations, as in the case of Palacio Valdés, who had them in his private library (Rodríguez, Llavona, and Ferrer, 2006). The widespread interest in the English thinker in fin-de-siècle Spanish society is also evident in the different studies and articles published by well-known authors such as Joan Maragall and Rafael Altamira, in which they praise his love of the beauty of nature and his fight against industrialism.

2 Unamuno is the first to express his admiration for Ruskin (Fernández Larrain 1965).

3 The best example of the influence of Palacio Valdés's work on the international literature is to be found in Richard Llewellyn's novel *How Green Was My Valley*. Both novels, both set in the eighties of the nineteenth century, attempt to reconstruct, with a deep sense of nostalgia, the image of a village (one Asturian, the other Welsh) located in a green valley that is dying after the advance of the mining industry and the wildest capitalism. In fact, the title phrase of Llewellyn's novel (*How Green Was My Valley!*) reminds us of the expression used in Palacio Valdés's 'Arcadia no longer exists!' (Palacio Valdés, 1903: 2). This classic of British literature published in 1939, like *La aldea perdida*, also contains anti-industrial statements in its pages: the nature-progress conflict, the countryside-city opposition, the praise of rural activity over industrial activity, and so on. Both are included in a broad literary movement concerned with the social and/or environmental consequences of the industrialisation process, which also includes names such as José María Pereda, Carmen de Burgos, David H. Lawrence, and John Steinbeck.

4 From 1912, thirty years after the death of his founder, his children began a new phase of the project after the merger with the publishing company Riera – a publishing company which, since 1896, had also been publishing the Catalan guide *Anuario-Riera*. This publication continued under the new management until 1978 with the name *Anuario General de España* (Báñez and Fernández, 2017).

5 Unlike villages and places – elementary rural settlement units –, parishes, as well as providing a clearer and better delimited level of organisation than the previous ones (Sánchez, 2013), by assuming other functions – economic, social, symbolic or political – and involving the houses, villages, places or neighbourhoods that compose them in their running (Souto, 1995: 4), they acquire an own identity.

6 See <https://www.campop.geog.cam.ac.uk/>.

7 Both cities will surpass 50,000 inhabitants after 1910 (Goerlich et al. 2015, 214).

8 The population density for Asturias in 1887 was 58.1 inhabitants/km². This figure far exceeds the national average of 34.9 at the same date (Goerlich et al. 2015, 116).

References

- Agulhon, M. 1977. *Le Cercle dans la France Bourgeoise, 1810–1848* (Paris).
- Alía, F., Ortiz, M., Sánchez, I., del Valle, A.R. and Villena, R. 1998. *España en Sociedad. Las Asociaciones a Finales del Siglo XIX* (Cuenca).
- Allende, F. 2010. 'El paso de la vela al vapor en Baroja, Conrad y O'Neill'. *Zainak. Cuadernos de Antropología-Etnografía*, 33: 201–220.
- Alonso, Á. 2021. *Memoria, Nostalgia e Identidad Colectiva de los Trabajadores Industriales de Gijón* (Oviedo).
- Báñez, E. and Fernández, G. 2017. *Comercios Históricos de Madrid* (Madrid).
- Benito, P. 1992. *El Espacio Industrial en Asturias* (Vilassar de Mar).
- Berenbaum, D., Deighan, D., Marlow, T., Lee, A., Frickel, S. and Howison, M. 2018. 'Mining Spatio-temporal data on industrialization from historical registries'. *Journal of Environmental Informatics*, 34: 28–34.
- Bernabeu-Mestre, J. and Barona, J.L. 2011. *Nutrición, Salud y Sociedad. España y Europa en los Siglos XIX y XX* (València).
- Bologne, J.C. 1993. *Histoire des Cafés et des Cafetiers* (Canada).
- Cañal-Fernández, V. and Álvarez, A. 2022. 'Explaining the decline of rural population in Spain (1900–2018)'. *Journal of Interdisciplinary History*, 53: 25–47.
- Cañal-Fernández, V. and Gómez-Martín, M. 2022. 'Y el tren arrolló la Arcadia. Un análisis económico y literario de la influencia del ferrocarril en los núcleos rurales asturianos (1879–1911)'. *Historia Agraria*, 88: 131–158.
- Cartavio, Á. 1884. *Guía Industrial y Comercial de Asturias* (Oviedo).
- Coll, S. and Sudrià, C. 1987. *El carbón en España, 1770–1961. Una Historia Económica* (Madrid).
- Delmiro, B. 2003. *Literatura y minas en la España de los siglos XIX y XX* (Gijón).
- Dandle, B.J. 1995. *Spain's Forgotten Novelist: Armando Palacio Valdés, 1853–1938* (Danvers, MA).
- Erice, F. 1995. *Propietarios, Comerciantes e Industriales. Burguesía y Desarrollo Capitalista en la Asturias del Siglo XIX (1830–1885)*. (Oviedo).
- Esteban-Oliver, G. 2023. 'On the right track? Railways and population dynamics in Spain, 1860–1930'. *European Review of Economic History*, 27: 606–633.
- Felgueroso, E. 2013. *Cuando Perséfone Mordió la Granada. Cuadernos Feministas 8* (Oviedo).
- Fillier, A. 1897. *La belleza que vive [A joy Forever]* (Barcelona).
- Forni, D. 2020. 'Male and female teachers between real and ideal. The literary-historical representation of three novels by de Amicis'. *History of Education and Children's Literature*, 15: 653–669.
- García, E. 2010. *Luces de Gijón. El Alumbrado Público Municipal (1834–2010)* (Gijón).

- García, J.J. and Trescastro, E.** 2016. 'Transición nutricional, bienestar y salud: el caso de una ciudad industrial, Alcoy (1852–1928)'. *Dynamis*, **201**: 389–411.
- García, J.R.** 1988. 'Las relaciones banca-industria en el siglo XIX: los banqueros y comerciantes banqueros en la industrialización asturiana'. In *La industrialización del Norte de España (Estado de la cuestión)* (Barcelona).
- Goerlich, F.J., Ruiz, F., Chorén, P., and Albert, C.** 2015. *Cambios en la estructura y Localización de la Población. Una Visión de Largo Plazo (1842–2011)* (Bilbao).
- Gómez-Ferrer, G.** 1986. *La obra de Armando Palacio Valdés como Testimonio Histórico de la España de la Restauración* (Madrid).
- Hernández, J.L. and Fernández, E.** 1988. *La industrialización del Norte de España (Estado de la cuestión)* (Barcelona).
- Huerta Nuño, M.A.** 2021. *Asturias Industrial: un Recorrido por su Patrimonio Histórico* (España).
- Iliasova, L.** 2021. 'The novels about 'new people' of the turn of the 1860s–70s and their reception by the Russian society'. *Dialog so Vremenem*, **76**: 56–69.
- Jackson, A.J.H.** 2020. 'Conceptualising place in historical fact and creative fiction: rural communities and regional landscapes in Bernard Samuel Gilbert's "old England" (c. 1910–1920)'. *Rural History*, **31**: 195–209.
- Lenardo, I., Barman, R., Bénédicte, A. and Kaplan, F.** 2019. 'Repopulating Paris: massive extraction of 4 Million addresses from city directories between 1839 and 1922'. In *Abstracts and Posters from the Digital Humanities 2019 Conference* (Utrecht).
- Litvak, L.** 1973. 'Ruskin y el sentimiento de la naturaleza en las obras de Unamuno'. *Cuadernos de la Cátedra Miguel de Unamuno*, **23**: 211–220.
- Litvak, L.** 1975. *A dream of Arcadia. Anti-Industrialism in Spanish Literature, 1895–1905* (Austin and London).
- Maluquer de Motes, J.** 1992. 'Los pioneros de la segunda revolución industrial en España: la Sociedad Española de Electricidad (1881–1894)'. *Revista de Historia Industrial*, **2**: 121–142.
- McWatters, C.S. and Lemarchand, Y.** 2010. 'Accounting as story telling: merchant activities and commercial relations in eighteenth century France'. *Accounting, Auditing and Accountability Journal*, **23**: 14–54.
- Montoliu, M.** 1901. *John Ruskin* (Barcelona).
- Muñiz, J.** 2019. 'El germen belga de la industrialización en el norte de España. Asturias, 1833–1838'. *Signos Históricos*, **21**: 42–67.
- Nolin, J.** 1950. 'Une grande entreprise française: la maison Didot–Bottin'. *Actualité Économique*, **26**: 102–110.
- Ojeda, G.** 1985. *Asturias en la Industrialización Española. 1833–1907* (Madrid).
- Olay, A.** 2020. 'La descarbonización de las industrias minerales en el Principado de Asturias'. In *Recursos Minerales y Medioambiente* (Oviedo).
- Osborne, N., Hamilton, G. and Macdonald, S.** 2014. 'Historical post office directory parser (POD parser) software from the addressing history project'. *Journal of Open Research Software*, **2**: e23.
- Palacio Valdés, A.** 1903. *La aldea perdida* (Madrid).
- Palacios, M.** 2019. 'Imagining informal empire: nineteenth-century British literature and Latin America'. *Literature Compass*, **16**: e12505.
- Perdices de Blas, L. and Santos Redondo, M.** 2006. *Economía y Literatura* (Madrid).
- Pérez, D.** 2011. 'El camino hacia 1934. Electricidad, combates por el progreso e historia local, Oviedo (1886–1913)'. *Historia Social*, **69**: 49–70.
- Pérez, D.** 2015. 'Electricidad, sociabilidad y prácticas nocturnas. Asturias (1880–1936)'. In *III Simposio Internacional de Historia de la Electrificación* (México).
- Pérez, D.** 2018. 'Hacia una historia social del consumo de la luz eléctrica en Asturias 1879–1920'. *Historia Social*, **90**: 3–21.
- Popkin, B.** 1993. 'Nutritional patterns and transitions'. *Population and Development Review*, **19**: 138–157.
- Prados de la Escosura, L.** 1993. 'Long-Run Economic Growth in Spain since 1800: An International Perspective'. Available in https://e-archivo.uc3m.es/bitstream/handle/10016/4738/long-run_prados_1993.pdf?sequence=2.
- Prados de la Escosura, L.** 2017. *Spanish Economic Growth, 1850–2015* (Basingstoke).
- Ramos Gorostiza, J.L.** 2014. 'La aldea perdida, de Palacio Valdés, alegato anti-industrialista'. *Estudios de Economía Aplicada*, **32**: 223–246.
- Rodríguez, R., Llavona, A. and Ferrer, M.** 2006. 'La biblioteca particular de Palacio Valdés en la Universidad de Oviedo'. In *Palacio Valdés en Asturias* (Laviana).
- Rodríguez, C.** 2020. 'Banking and financial crises in popular literature: A dangerous fortune, by Ken Follett'. *Estudios de Economía Aplicada*, **32**: 201–222.
- Rodríguez, J.J.** 2000. *La Cultura Sindical en Asturias, 1875–1917* (Oviedo).
- Sánchez, J.C.** 2013. 'Bases para el análisis geohistórico del poblamiento rural tradicional en Galicia'. *Boletín de la Asociación de Geógrafos Españoles*, **62**: 75–99.
- Santana, J.** 1989. *Asturias, Una Historia del Gas de Alumbrado* (Oviedo).
- Simpson, J.** 1997. 'Economic Development in Spain, 1850–1936'. *The Economic History Review*, **50**: 348–359.
- Sudrià, C.** 1995. 'Energy as a limiting factor to growth'. In *The Economic Development of Spain Since 1870*, Martín Aceña, P. and Simpson, J. eds. (Aldershot).
- Souto, X.M.** 1995. *As parroquias* (Vigo).

- Storey, J.** 2016. *The Making of English Popular Culture* (London).
- Tomé, S.** 1988. *Oviedo, la Formación de la Ciudad Burguesa, 1850–1950* (Oviedo).
- Tomé, S. and Morales, G.** 2009. 'Los espacios verdes en las ciudades y villas de Asturias'. *Ería*, 78–79: 69–95.
- Trescastro, E.** 2013. 'Educación Alimentaria y Nutrición Comunitaria en la España Contemporánea (1900–1978)' (Alicante).
- Uría, J.** 1996. *Una historia social del ocio. Asturias, 1898–1914* (Madrid).
- Uría, J.** 2001. 'Lugares comunes para los ciudadanos: Breves apuntes sobre el jardín español del siglo XIX'. *Pandora: revue d'études hispaniques*, 1: 245–266.
- Vega, R. and Díaz, I.** 2022. *Desindustrialización. Memoria, Patrimonio y Representaciones* (Oviedo).