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# Ground Zero: Research methodology in illuminating gas history without archives

#### **Abstract**

This article, as its title suggests, wishes to discuss some methodological issues of historical research on the industrial past of gas lighting and its sources. I focus more on the example of the gas factory of Athens, a challenging, though not unique, example where the researcher is called upon to document the past of an industry or a productive activity, without the safety of collected documents or a complete corporate record of this activity. I use the term Ground Zero to denote this contradiction of the absence of historical records: I describe by this term the moment when a researcher has to examine a historical economic phenomenon without a certain amount of data. Gas companies operated thanks to an urban pipe network that extended inside the boundaries of a city. Most gas companies took over public lighting, and from 1890 onwards the supply of energy (lighting, heating, appliances) to residences and offices. From my archival investigation, it emerged that the gas lighting plants of some cities belonged to the local government and others to private individuals. The documentation of the historical route of this energy and its establishments in Greece was a challenging task. I deem that the mapping of this route will prove useful to future researchers.

# Plan of the article

- → The history of administrative organization
- → Workers, executives, scientists
- → Commercial promotion and advertising
- → The distribution system of lighting gas
- → Other examples of lighting gas units in industrial heritage monuments
- → The neighborhood

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This article wishes to discuss some methodological issues about conducting historical research on the industrial past of gas lighting and its sources. I focus in particular on the example of the gas factory of Athens, a challenging, though not unique, example where the researcher is called upon to document the past of an industry or a productive establishment, without the safety of a number of collected documents or complete corporate records of this activity. Already from the first day that I started researching on behalf of the City of Athens, I realized, together with the rest of the partners, that we were facing a difficult situation: we were looking for information about the past and the activities of a business that had preserved any documents of its operation. The archive of the City Gas Company of Athens (DEFA), as the company was called in 1995, when it ceased its activities at the Piraeus Street facilities, had not been preserved. To be more elaborate, the documents, technical drawings, photographs and all registrars concerning personnel were left inside the premises in 1982, when it ceased producing illuminating gas. Most of the archives was removed to unknown destination. Some had fortunately ended at the hands of the municipal engineers of the City of Athens. Also following an old and unpleasant path rumours suggested that some of them had ended to the antique bookstores around Monastiraki Square.

I use the term Ground Zero in my paper's title to denote this very contradiction of the shortage of historical records or traces of the past. In other words, I describe by this term the moment, when a researcher has to examine a historical economic phenomenon without an amount of data. In order to understand the difficulty, it is like Indiana Jones is searching for a treasure without clue for its value, size or even a legend about it. I was in front of industrial buildings that no one had any idea about their uses, their history and the people working in there. I feel grateful to the engineer Sakis Chatzigogas who took an active part in this project and helped me to decode the line of works and the plant's technology. It is quite stressful for a researcher to start without anything at hand about an

older than a century corporation. What about its administration, its personnel, bankrupts, and finances? Where should he/she turn to for information if this activity is not registered in business accounts and publications of these times?

This paper is structured in thematic sections related to gas that concerned me as a researcher. The goal is to explain the research methodology. Historians set the main questions and issues and then start searching for answers in private and state institutions that hold archives or records. As someone can read below all answers are not easily accessible. In some cases, researchers need to develop an activist's approach and ask for documents in possible holders like individuals or corporations. Through the paper each thematic section is accompanied by historical data about f.e. labour issues in order one to understand its significance for the research's outcome.

Illuminating gas was the first type of energy supplied to consumers through a pipe network. As such, it introduced the idea of urban networks inside modern cities. Until 1920s it was more of a luxury for upper classes. The gas network was comprehended as a modern infrastructure together with the invention of gas appliances and the connection of more houses to the network. Gas companies operated thanks to an urban network that extended inside the boundaries of each city. In Greece six plants were built in six Greek cities (Athens, Piraeus, Thessaloniki, Patras, Volos, Corfu). Most gas companies took over public lighting and from 1890 onwards the supply of energy (lighting, heating, cooking appliances) to residences and offices. From my archival investigation it emerged that the gas lighting plants of some cities belonged to the local government and others to private individuals. The documentation of the historical route of this energy in Greece was a challenging task and has not preoccupied previous researchers. In fact, various

<sup>1</sup> Sakis Chatzigogas, Yannis Stoyannidis, *The Athens Gasworks. The history, the technology, the people, the museum* (Athens: Technopolis, 2013).

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texts closer to romantic literature had been written, which did not cite any documentation.

- The main goal of the project was to present the historical premises of the Athens Gasworks and to make the plant's history more visible and known to the inhabitants of the Greek capital. The main research topics and questions were put down from scratch. These concerned the administrative history of the corporation, the labouring experiences of the employed personnel (skills and education, ethnic/national origin, gender, age, salary), energy consumers (class and numbers), the gas distribution network and information about the district around the factory.
- The thematic axes were the product of a combination of issues that derived from the scientific fields of social and economic history, labour history, business history and industrial heritage. Essentially, we aimed for the museum route to relate documents and exhibits with the everyday history of the Greek capital. After all, energy, its production, and its distribution run through the daily life of cities. Greek archives preserve number of documents on politicians, known families and ministries but we lack information about companies and their historical routes. For Greece, such research that would reveal the design and construction of one of the first energy networks, seemed almost impossible to bring to light without the original corporate archive.

# THE HISTORY OF ADMINISTRATIVE ORGANIZATION

- To be able to trace the essential information concerning the facilities and the first decades of operation, I turned to the City Archives of Athens, to track the contracts in which the land purchases and transfers of corporate capital were recorded: the Notaries Guild was the source that allowed to capture the first corporate formations.
  - 2 M. Florou, E. Koutsoudaki-Yerolimbou, Th. Spiridaki, Y. Stoyannidis, "Héritage industriel et identité d'un musée: le cas de l'usine de gaz à Athènes", *Patrimoine Industriel*, n° 30, 2013, 84-94.

The Athens Gasworks was founded in 1857. The City of Athens' Council granted French businessman François Theophile Feraldi the right to erect and operate a gas plant. It was the country's first gas plant, and the first power plant of the newly founded capital. It operated almost continuously from 1857 to 1984 and changed permanently the image of the city. The use of gas lighting speed up the process of urbanization of Athens, as it provided the city with the privilege of public lighting with gas and thus the possibility to follow the European standards of the time. At the same time, it provided the middle and upper-class with another kind of luxury, which complemented the ideology of urban progress. As early as 1862, the imposing presence of its original facilities (furnaces, chimney, and round gasholder) on the still undeveloped Piraeus street, signalled the change of uses on the western side of the city, initially attracting working populations from the neighbouring lands, and later other crafts and industries.3

To find more information about the financial status of the company, I turned to the Historical Archives of the National Bank of Greece, the oldest Greek bank. This archive holds the files from the company's loans and transactions, which recorded the annual balance sheets, some of its correspondence and requests to modernize the facilities. The documents in the bank files mainly related to the second period of operation, from 1887 onwards, when the company was purchased by Italian entrepreneur Giovanni Battista Serpieri4 (already involved with the Lavrion mines company since 1864) and Foulon de Vaulx, a representative of the French Gas and Water company. Under new ownership, for several years the company operated under the name Gasworks of Athens and other cities. The administrative history of the second period was reconstructed further thanks to the executive accounts, which were published and stored in the National Library of Greece and the City Library of Athens. The executive accounts

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<sup>3</sup> Chatzigogas, Stoyannidis, *The Athens Gasworks*, 53-56.

<sup>4</sup> Giovanni Battista Serpieri (1832-1897) was the son of an Italian Risorgimento rebel who owned and directed metallurgy businesses in Sardinia until 1862.

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hold information about Serpieri's management, including upgrading of industrial machinery, financial scandals, and rivalries with the first small electricity companies that were established in that period.

Royal decrees and gaslight laws were available on the digital portal of the National Printing Office. They provided useful information on the attempts to configure the price of energy, and on the disputes between the company and the City Council on the percentage right to the corporate income. Architectural plans and documents for the newer period of restoration of the industrial monument (1986-2004) were available in the records of the Ministry of Culture. These records were really useful, and one could describe them as intact. The large number of architectural plans allowed to depict all the different attempts to restore the plant. Moreover, some architects of 1990s agreed to be interviewed. Before our meeting they decided to bring together documents (newspaper articles, photographs, documents) of this era which were preserved in their own archive. Audio-visual material from the period 1930-1990 was also found in the archives of the State television, the Hellenic Broadcasting Corporation (ERT), in which the factory and often the protests of the working staff were the protagonists. Excerpts of these videos are still projected inside the museum.

Bringing the administrative history of the company in the surface was a challenging task as the Gasworks had started operating as a private business in the hands of French and Greek entrepreneurs and later as a municipally owned unit. The records documenting these changes and the conditions that caused the transfer of administrative responsibility are scarce and can be traced only after persistent research. Some more documents concerning a Director of Italian origins came on surface when I interviewed his 90-year-old son. This proved an interesting story as the one word. Grandfather Angelo Romussi was an Italian engineer working at the Milan Gasworks who decided for unknown reason to move to Athens in the 1890s. Oral testimonies of workers and their descendants proved to

be gates to the corporate past as individuals unveiled their memories together with various documents (photographs, administrative papers etc.).

#### **WORKERS, EXECUTIVES, SCIENTISTS**

The company's records concerning its labour 12 force did not survive until 2011. The scanty and fragmentary evidence available (e.g. doctor's list on the workers' diseases, the payroll records (1950s), the punishment book, and the book of lanterns where each gas lighter's itinerary in the streets was mentioned) was kept in the accountant's office of Technopolis. They had been selected as potential museum exhibits. The company's clerks picked these documents out of the corporate records when the Gasworks shut down and preserved them in safe place. The documents were discovered by chance in November 2011 and are currently on display at the Industrial Gas Museum in showcases. Unfortunately, they do not date to the first decades of the company, but one can find some scarce information about the World-War II Nazi occupation and the post-war years. One of the employee registers was found intact in the Greek Literary and Historical Archives, to which someone sold it after the business was shut down. This source of documentation proved significant because it listed workers, artisans, administrators, and engineers. For each employee, they noted the date of recruitment, the stages of his development within the company, and his/her residential address. Thanks to this register we have a partial human geography of the company's labour during and after World War II.

The symbolic place held by the factory, its work- 13 ers, and the wider area in the everyday life of the city are facts that could be documented partially through the daily press. Daily newspapers referred to the strikes and to attempts on part of the state to suppress them, others commented on the price of gas and the new gas appliances or apparatus; many articles documented the daily life of the small district and the crimes taking place.

- Information about unionism and working conditions at the factory came from Orestis Hatzivasiliou's papers, a prominent figure of the post-war trade union struggles, at the Contemporary Social History Archives. Ballot papers of the factory's workers' unions, statutes, proclamations, flyers, and various documents of these unions were saved thanks to the fact that Hatzivasiliou worked at the factory and preserved his personal papers. Other important documents from Hatzivasiliou's collection include information on the employment of orphans as lamplighters during the first post-war years; and an application study for the Watergas building, thanks to which it was possible to date the construction of the building to 1952, and to document the factory's post-WWII collaboration with German industries. For the introduction and use of this type of energy (watergas) we have vague information and less documents.
- The conversations amongst the workers, their thoughts, and daily problems in the workplace were preserved thanks to the magazine The Gasworker, printed in Athens in the period 1947-1967. The issues had an informative and entertaining content. They hosted crosswords, poems, and short stories by colleagues along with complaints about unpaid working hours and violent treatment of workers by the foremen. This is an interesting source, thanks to which we learn information that is not usually preserved in written testimonies. The publications of labor unions are a source of historical information that relates labour reality with the dreams and perceptions of the workforce. The selection and preservation of their posters, diaries, leaflets, and journals unveil the dreams and discussions for improving their life. By studying their claims and strikes, one can restructure the social reality of these times.
- 16 An important problem in this study was the lack of data on the scientific personnel (chemists, engineers, managers) and the training of the executives of the gas company. Archival research revealed few names of French engineers until the first decades of the twentieth century. An inevitable choice for a researcher

was to turn to the memories of those who worked at the factory in the last decades of its operation (1970-1980). Biographical interviews to former employees were carried out in the form of a questionnaire. Respondents described how they discovered the job, how they were trained and how they evolved within the factory. At the same time, they mentioned anecdotes from their daily lives that enriched what we knew about the techniques and habits of the workers. It is worth noting that some revealed that they had European origins (Italy, Switzerland, France), as an ancestor of theirs had settled in Greece and had worked at the gas plant.5

In another case, an oral testimony revealed a microhistory, which was then supplemented by evidence presented during the interview by the informant. In the 1890s Angelo Romussi, an Italian engineer who worked at the Milan gas plant was hired at the Athens plant. Romussi married a Greek woman and had 4 children with her. His son, Charles (Carolo) Romoussi, started working in 1915 in the accounting office of the gas factory and retired in 1950s as a manager. At the same time, the daughter of Charles, Garoufalia Romoussi, was hired at the factory. She was the first woman to rise to the position of deputy manager in the 1970s in the male-dominated factory.

The employees' interviews were particularly inter- 18 esting as they brought to life information usually printed in the technical manuals and administrative documents. Their memories were not always coherent and accurate, but they revealed the atmosphere of the time. The interviewees exceeded twenty, and thus their testimonies gradually formed the Oral History Collection of the Industrial Gas Museum. In this collection today the researcher comes across testimonies of workers, executives, and residents of the area. It is a rich resource of information and as a project intrigued the interviewees so that in the following years more workers appeared who

Yannis Stoyannidis, "Industrial heritage and public memory: The Industrial Gas Museum narrates" in A. Gazi and E. Nakou (eds.), Oral history in museums and education (Athens: Nissos 2015), 111-120. [published in Greek]

wanted to talk about their experiences. Quite a few submitted after their interviews material that they kept in their personal papers and that was connected to their working life.

#### **COMMERCIAL PROMOTION AND ADVERTISING**

19 The newspapers recorded announcements and advertisements of the "gaslight company", advertisements of gas lighting devices, reports on domestic and factory accidents, the living conditions in the Gasvillage and the residents' claims. In 1937, the exploitation privilege that the City of Athens had granted to the French company expired and the mayor claimed that the gas facilities should come into the City's hands. In the Historical Archives of the National Bank, an important part of the correspondence between the City's financial department, the management of the factory and the administration of the National Bank of the period 1930-1940 was found. Interesting proposals for the purchase and exploitation of the unit by foreign investors were documented in the bank material, but these were never implemented.

20 In 1938 the facility was renamed the City Gas Light Company of Athens and in 1952 it received the name DEFA, which would follow it until its closure. Turning the corporation into a municipal enterprise in 1952 provided for the supervision of the mechanical equipment by an expert from the Ministry of Industry, who also participated in the board of directors of the municipal enterprise. This circumstance resulted the ministry's offices kept records of the period 1960-1980 (feasibility studies, factory organizational charts, correspondence) in the archive of the Ministry of Industry, which is currently preserved in the General State Archives (Greek National Archives). This last juncture brought to light a small series of archival files where we located information on the personnel employed, proposals being submitted by other states and international advisory boards to switch from illuminating gas to natural gas, and many telegrams from residents and their associations requesting the closure of the factory and getting rid of its pollutants. All the above material dated to 1970s.

### THE DISTRIBUTION SYSTEM OF LIGHTING GAS

For the expansion of the gas distribution network during the 19th century, information was sought in the minutes of the Board of the City of Athens, which date from the 1840s. The municipal council was deciding and approving until the end of the 19th century the number of lanterns and their placement in the city (squares, holy temples, prominent public buildings). The complete series of the City's Board discussions allowed to follow all the industrial developments related to gas lighting and its expanding inside the city limits. For example, it is obvious that most of the new pipes in the network where connected when a monument or a prominent house should be lit. The idea of the urban infrastructure as part of a social policy is an idea developed after WWII in Greece. Until then benefits like water, gas, electricity, and communications (telephone) were available most for the upper class.

In the case of the Athens network the publica- 22 tion of the archaeologist Antonios Keramopoulos in 1916 was important as it concerned the problems faced by the construction and burying of the network of pipes which created a public conflict around the preservation of underground antiquities. This is a different dimension of the energy history in a city with historical substrates of previous periods since each excavation brought to light new findings from the cemetery of Kerameikos.

The footprint of the network is adequately rep- 23 resented in the gas company's cartographic material. It is described in detail below. For the problems with the gas network and its leaks I collected information from the newspapers where after the 1920s a fever of suicides by various persons of the middle and upper urban classes was recorded.

# **OTHER EXAMPLES OF LIGHTING GAS UNITS** IN INDUSTRIAL HERITAGE MONUMENTS

One of the most important parts of this research 24 was understanding the international dimensions of this form of energy, the architectural rhythm of the facilities and the management of

its residues. The research started from structured and published online information sources (e.g., Library of Congress, Libraries of Technical Institutions), where I found information about the forms that gas facilities and establishments took in different societies and states. Noting down different Gasworks plants and their building history enriched the museum's stories. Thus, some of these monuments were presented inside the Gas Museum in order visitors to become familiar with the Vienna Gasworks and the Duisburg gasholders. My goal as a historian was to impress the eyes of the visitors with some examples of plants that were restored to cultural hubs.

25 Soon, I organized the gasholders into two categories: A) those that were covered with a metal functional outer form and B) those that had been built so as not to differ from the urban architectural environment. A correspondence followed with technical museums and industrial heritage managers in various European cities. Some of the examples were included in the study we published together with S. Chatzigogas named the Industrial Gas Museum. The comparative study of the examples allowed me to integrate the administrative history of the Athens company into a wider context of technical development and expansion of gas lighting in Europe in the twentieth century. Examples of gas facilities from Warsaw, Wien, Berlin, Stockholm, Duisburg and London were introduced in the museum's exhibition and inside the book The Athens Gasworks. During this research, much time was spent on reading articles about either the building or the accidental explosion of some gasholders across the globe. It proved rather useful as one could realize how these industrial constructions were perceived back in the 19<sup>th</sup> C. The gasholders were deemed as dangerous and at the same time as impressive by the newcomers in the modern cities. Architectural forms and raw material for their construction travelled from one country to many others. The mapping of these collaborations is rather interesting and sometimes surprises the researcher when he realizes the network between constructing firms.

#### THE NEIGHBORHOOD

The polluting activity of the gas plant was linked to the memories and daily life of the residents of the area, who began to protest for the plant's removal as early as the first decades of the 20th century. The name Gazochori, which has been recorded since at least 1885, confirms the close connection of the gas factory with the neighbouring district.6 Memories about the foundation and the early years of this neighbourhood were not traced in publications or city guides of the times. Gazochori must have been something close to an industrial slum with shanties and half-finished houses. Drunkards, thieves, soldiers, and prostitutes were walking its dark streets, while in the morning workers and children took their place. Through the narrations of the pre-War era, it seems like a neighborhood with two sides. The story of a small neighborhood is not easily documented in records. Thus, the main source of information was the newspapers and the articles published by reporters or by the labor conditions inspectors who wanted to investigate this dark spot.

Here I need to comment on the oral history col- 27 lection. The on-site investigation was not limited to oral testimonies of factory workers, but it also included residents. In this way, two parallel series were set in the oral history collection, which described two different areas: the interior of the factory and the surrounding area. For coming closer to residents, Zoe Ropaitou's help was crucial as she had friends whom she grew up within the Gasvillage. The interviews were not only aimed at recording and better understanding the production process, but at capturing events and cultural behaviours and perceptions, which are usually not printed on paper but recorded in human memory. I am quoting an excerpt from an interview with a resident, where she describes her memories of the factory "as a child it scared me. I'd see the coalblack workers carrying the coke in those carts

**6** E. Bournova & Yannis Stoyannidis, "Gazochori: The History of a Neighbourhood (1857–1980)" in the *Social Atlas* of *Athens*, 2018. Url: https://www.athenssocialatlas.gr/en/article/gazochori/ (accessed 07/11/2022).

... and I felt bewildered by it. I thought people were doing some coercive work there." Another excerpt from an interview in which the informant describes her experience from the 1960s "When I had bronchitis my mother...boiled eucalyptus all day and all night to make the atmosphere [suitable] for me to sleep. So, when the bronchitis started, she would put a dad's woolen sweater on me, she would also rain it with alcohol, she would put it on my chest to protect me and then we took the road, we made our trek and arrived in the Gasworks. So, she put my head inside the chimney, where there was something like a hatch... [and told me] to inhale it because it would be good for my bronchial tubes. And when I got chicken pox, we took the same road to Gasworks again. However, this was a usual practice between all mothers". Another informant describes the area of the tanneries in Votanikos "I remember a muddy place, a bad smell... more here you could see the ceramic factories. The people who worked in the tanneries were stinking." Residents describe their own geography of the neighbourhood and highlight the different ways in which social reality is understood and public space is consumed. Collecting memories for the Gas Museum in Athens led to founding an oral history collection next to the scarce documents collected. In the months and years that followed the Museum's opening more workers and engineers' relatives presented their relics from Gasworks and asked to treasure the memories that they had kept from these times.

28 The presentation of the research problems is obviously highlighting the difficulties and multiple dimensions of the historian's profession. But these are part of the research process and perhaps could be described as the glamorous and adventurous part of the profession. The dispersion and fragmentation of the collections of documents and archives, which I described above, automatically raises doubts about whether we can finally reconstruct the records and moreover the social and economic past. Files are material sets of information, which we cannot restore if they are damaged. Even if we look for copies of documents in services and institutions that cooperated with the specific enterprise,

the result will always be incomplete in relation to the original. We can, however, reconstruct memories (in this case of industrial plants) and create new narratives. In fact, what we are ultimately attempting is to become active agents in the constant struggle between memory and forgetting, the historical narrative and its interpretations.<sup>7</sup>

The question, however, remains. By what processes are industrial records finally "lost"? According to the Greek legislation, the owners and heirs of businesses are required to declare and may deposit their files in the National Archives. We are familiar with the reality which is different. The same law allows the owner to decide at his discretion about his records, with the result that records are often abandoned inside the buildings when a corporation is shut down or changes premises. And I get back to the case of the Athens Gas company, which started as a private enterprise but ceased its operation as a public utility. Most of the City Gaslight Company of Athens (DEFA) archive is now lost.

The case of the Barcelona Gas Company, which operated for 144 years (1843-1987) and preserved its archive intact, 3 linear kilometres long, indicates that it is almost impossible to save a similar volume of material somewhere in the City of Athens offices. But before we put down the researcher's pencils, archival reality overturns our assumptions. Against the odds, a month before the opening of the Industrial Gas Museum, the Natural Gas Supply Company informed me that it had preserved a part of the Athens Gas company's technical records on its premises and wanted an experienced historian to appraise it. The recording of the evidence brought to light approximately 80 notebooks, which were kept by the workers of the gas network and recorded in scribbles the faults of the network. The manuals are the size of a small notebook and constitute a relatively complete series of the period 1929-1984. The second large section of this material concerns 1,200 unique technical, engineering, topographic

**7** Jacques Pinard, *L'archéologie industrielle* (Paris: Presses Universitaires de France, 1985).

plans, and maps of the network, which date from 1893-1984 (extreme dates are indicated). In addition to the 1,200 drawings, approximately 200 copies of them are also preserved. The architectural plans of the factory buildings are absent from the set of concrete plans. Most were separated out of the general archive by the City's engineers and remain in their offices. The drawings I described above were rescued during the restoration of the factory (~1995) by employees of the Athens gas lighting company (DEFA), who after the closure of the business were hired by the Natural Gas Company. It seems that often the preserved records are forgotten by its owner, or in other cases turns into a fetish and the owner into a lover, locked in a relationship of dependence on the collection and unavoidably claiming its exclusivity. Thus, parts of the corporate records remain in different hands and cannot be used by research. Each holder applies an access policy ranging from the 'open archives' of the Industrial Gas Museum to the restricted access of other organizations.

The capabilities of digital technology could overcome these constraints and once digitized the material could be posted unified on a portal. Although difficult for the Natural Gas corporation (and possibly for other partners) to realize, such a reconstruction of the archive will allow more combinations and comparisons of historical data than the physical location of the records currently allows. Fetishism with historical documents is another obstacle we need to

deal with in the coming days. I insist on the prospect of this digital platform where one will be able to read all these documents together and the holders will retain the ownership to the paper material. Thus, more details will be unveiled, and broader understanding of this era will be accomplished on the digital environment. Digital projects with archives allow more documents to gather and grant easier access to potential researchers.8 One of the advantages of digital technology is that it allows us to transfer multiple copies of the digitized and digital born documents without disturbing their order in the original record.

The variety of disciplines that engage with 32 industrial heritage (history, architecture, engineering, sociology, museum studies), the inter-disciplinary approaches to industrial past, the interplay and mediation of interpretations ensure that archives are always an occasion to produce a fresh discourse about the past. Conclusively this paper unveils the different issues that industrial past deals with and the number of steps that a researcher needs to take when he/she is in quest for information. I believe that even in a scarce number bank and family archives, state archives, oral testimonies proved how rich the original corporate records of the Athens Gasworks could have been. Even if we cannot restore the complete picture, by constant research we can unite different parts of this social and economic reality.

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# **Bibliography**

# Bournova, E. & Y. Stoyannidis

"Gazochori: The History of a Neighbourhood (1857–1980)" in the Social Atlas of Athens, 2018. Url: https://www.athenssocialatlas.gr/ en/article/gazochori/ (accessed 07/11/2022).

# Chatzigogas, Sakis & Yannis Stoyannidis

The Athens Gasworks. The history, the technology, the people, the museum (Athens: Technopolis, 2013).

# Florou, M., E. Koutsoudaki-Yerolimbou, Th. Spiridaki, Y. Stoyannidis

"Héritage industriel et identité d'un musée: le cas de l'usine de gaz à Athènes", *Patrimoine Industriel*, n° 30, 2013, 84-94.

#### Millar Laura

Archives: principles and practices, (London: facet publishing 2010) Pinard Jacques, *L' archeologie industrielle*, (Paris: Presses Universitaires de France 1985).

# **Stoyannidis Yannis**

"Industrial heritage and public memory: The Industrial Gas Museum narrates" in A. Gazi and E. Nakou (eds.), *Oral history in museums and education* (Athens: Nissos 2015), 111-120.

"Corporate memory and business archives in Greece", *Business Archives Section Quarterly*, Vol. 1/1, 2019. Url: https://basnewsonline.com/project/corporate-memory-and-business-archives-in-greece/(accessed 07/11/2022)