

Between Myth or Reality

Gustave Eiffel and San Marcos de Arica Temple

Mito o realidad: Gustave Eiffel y el templo San Marcos de Arica

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Gutiérrez-Pinto, D. A. (2020). Between Myth or Reality. Gustave Eiffel and San Marcos de Arica Temple. *Revista de Arquitectura (Bogotá)*, 22(2), 69-77. <https://doi.org/10.14718/RevArq.2020.2267>



doi.org/10.14718/RevArq.2020.2267

Abstract

The research is about Gustave Eiffel and its filiation with the Main Church of San Marcos, whose construction dates in 1875, being the city of Arica part of the Peruvian territory, placing us between the years 1870-1890, when the Public Works of the Government were the main objective of the state, being in charge of the Bureau of Architects and Engineers of Peru, in addition to the information obtained in France and the Fonds Eiffel, which are official documents donated by the family, as well as the official page of the French engineer. It is concluded that Eiffel did not participate in the design and construction of the project, because the building was imported entirely by the Government of Peru from the United States of America, with a complete prefabrication system. These conclusions put an end to the myth that has been managed for years, from the construction of the church to the present

Key words: Historical research; world heritage; monument; collective memory;

Resumen

Con base en la investigación sobre Gustave Eiffel y su filiación con el templo de San Marcos, cuya construcción data de 1875, y cuando la ciudad de Arica aún era parte del territorio peruano; teniendo en cuenta que la información obtenida se ubica en el periodo 1870-1890, momento en que las obras públicas del gobierno fueron el objetivo principal del Estado, y a cargo de las cuales se hallaba la Junta de Arquitectos e Ingenieros del Perú, y la información obtenida en Francia a partir de los Fonds Eiffel y documentos oficiales donados por la familia, así como la página oficial del ingeniero francés, se concluye que Eiffel no participó ni en el diseño ni en la construcción del proyecto, pues la edificación fue importada íntegramente de Estados Unidos por el Gobierno peruano, mediante un sistema de prefabricación en su totalidad. Dichos resultados ponen fin al mito que se ha manejado durante años, desde la construcción de la iglesia hasta el presente.

Palabras clave: Investigación histórica; patrimonio cultural; monumento; memoria colectiva;

Recibido: septiembre 9/2018

Evaluado: febrero 5/2019

Aceptado: julio 8/2020

Introduction

The subject submitted is part of a research on Gustave Eiffel in Perú, done in the Documentary History methodology, for the Master's in Architecture of Universidad Nacional de Ingeniería, at Lima. This issue has been dealt with in articles such as *Despite Rumors, Not Everything That Towers Is Eiffel's*, in the *New York Times* (Neuman, 2014), as well as by independent researchers, but, specially, by the Fondation Société de la Tour Eiffel, in the document *Eiffel en Amérique du Sud Mythes et Histoires* (s. f).

The purpose of this article is to know about Gustave Eiffel's presence and role related to the San Marcos de Arica temple project. Since it has been history the one that has documented many events, as in this particular research, it is important to find out who the author of the said work is, which has been classified as a national monument by the Ministry of Public Works, Architecture Direction, File No. 65, in the Tarapacá region, Arica Province and Commune, Chile Government, according to Decree No. 602 from the Ministry of Public Education dated 04-10-1984, Monument No. 268, whose record states: (...) was built in France, in Gustave Eiffel and Cía workshop, upon request by the Peruvian government for the Ancón seaside resort."

On the other hand, Gustave Eiffel's name has been associated to a vast number of works and architectural and engineering projects which he carried out throughout his life in various places in the world. Perú is part of that exclusive map of countries that bear witness in their territory to the extraordinary work of the French engineer. But, as in other cases, there exist works whose authorship has been confirmed and others of dubious origination. Thus, Eiffel is at the same time a reality and a legend (López-García, 1989, p. 92).

This study is part of a larger research whose purpose was to determine which buildings Eiffel constructed in Perú, as well as to demonstrate

completely his creation, regardless of the construction system and the materials used, which bear his authorship. There are other aspects to take into account, such as the government's policy; incentives in terms of public works; and, especially, to determine how the elements for the project subventioned by the government of José Balta – Peru's president at the time – arrived in locations such as Arica. Research was done within the master's thesis framework because, as it has a historical background, it was essential to demonstrate the main hypothesis: to know how a building so different from others of the same epoch was built: the Aduana [Arica's Customs House] for example. Both are located in the same city, and the latter is the one which bears all the proofs pointing to Eiffel's authorship.

The only documents used to start the research are, precisely, the official page of the *Association des Descendants de Gustave Eiffel* which, should we subject it to a serious historiographical process, could show many defects. Besides, it may be possible to discover that what has taken place in our country has also occurred in others – that the French engineer's myth is part of our culture as many of Perú's departments state that they have an Eiffel work without any foundation or proof, and thus are added up to the incalculable number of projects or works attributed to him.

The hypothesis to start with is to demonstrate that neither Eiffel nor his company had anything to do with the temple's construction. Based on this, the research comprised diverse countries and persons, including many researchers interested in the issue, as well as the major contribution by architect Pedro Guedes. Likewise, the aim was to contribute to the knowledge about Eiffel's work. Thus, priority was given to the need to have an *in situ* analysis to go over some aspects quite recognizable such as the signature on the elements (bricks and others) as well as the existence of contracts or other official documents since the State was responsible for most of the projects analyzed in the modality of public works, customs, ports, churches, stations and railways.

For an integral reading of the issue, the proposal is to have a methodology that permits to deal with a topic about which there are no books or texts; therefore, methods must be employed which shall be described below and which allow to reach convincing results. The latter, at the

same time, can be supported by later research that will allow other researchers to go on as of these findings by exploring all the data kept in Arica¹, in Perú² and in France³, as well as the one which Gustave Eiffel's descendants possess⁴.

Methodology

As a first step, a bibliographic and referential revision is made to have within reach the necessary data and thus begin the real study resulting from this evidential data gathering. Then, the first decision made was that it had to be a documentary research, as this was the only way to prove whether anyone took part in a specific architectural project, how they did it, and when.

On the other hand, Peruvian historiography has not done, until now, a specific study on the work of the famous Paris tower constructor. Therefore, this study is carried out as the first registry of Gustave Eiffel's work between 1870 and 1890 on Peruvian land, including the territories lost after the Pacific War. It is also known that the Arica temple is located in a place that is no longer part of the country; thusly, the data collected had to be researched mostly from primary sources, official documents, department archives, the Board of Engineers and Architects' Proceedings (public works records), official gazettes and private diaries of the time, memoirs and diplomatic documentation in Perú.

A second strategy was to visit all the department and regional archives, university historical files, and government and ministries' libraries and, more so, to consult the Historical Archive of

- 1 Historical archive of the House of Culture (ex. Arica's Aduana), a place where many documents of that time are found, including an original plane of the building's façade, drawn by Casa Eiffel y Cia. Historical archive of the Arica-Tacna Railway.
- 2 Documents taken from the archives in many cities, among them Lima, Arequipa, Iquitos, Moquegua, Tacna and Chala in Perú, where works by Eiffel are supposed to be found.
- 3 The Eiffel Fonds, where the Eiffel files are found presently, in France's National Library and where, at the same time, are located documents, photographs, planes, drawings and even sculptures; but, especially, there are many letters where Eiffel corresponded with all the employees assigned to different countries; in our, it was Mr. Carlos Petot, a person widely mentioned regarding another of Eiffel's works, the Matriz House in Tacna. Other sources were also consulted, such as the Historical Archive of France's Ministry of Work
- 4 One of Eiffel's grandchildren, Sylvain Yeatman Eiffel was consulted and asked concrete questions, via telephone, and he assured that everything they had was kept at the Fonds mentioned already.



Este artículo está disponible en español en la página web de la *Revista de Arquitectura (Bogotá)* <http://dx.doi.org/10.14718/RevArq.2020.2267>
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the Ministry of Public Relations since it could be possible that the constructors could have entered the country in an official manner with work credentials. Lastly, links were established with other researchers in countries such as France or Belgium, and with many Eiffel scholars interested in the outcome of our research because, in spite of the myth held by other countries, it is Perú the one that apparently has true architectonic facts on its territory.

One of the other valuable sources were the newspapers of that time: for example, the official gazette where decrees, reports, laws, etc. were published. The official newspaper *El Peruano* and *El Comercio*, one of Perú's oldest newspapers, where data was looked for regarding the 1850-1890 period – when the war was concluded and its nefarious consequences were in force – since all public works were followed up in the papers.

Results and discussion

Presently, the San Marcos de Arica temple is considered one of the projects done by the Gustave Eiffel's company, as it is mentioned in a certain line of one of the few texts on architecture in Perú (Cuadra, 1991, p.121). But there are further references in tourist pages. This also includes Chile, which has declared the temple a national monument⁵. Even so, it is possible that something like this is not true as there are data pointing out otherwise.

Firstly, there is an official listing in a book whose author, Bertrand Lemoine, an Eiffel biographer, made an extensive and complete study of his works, where, in addition, costs and weight of the said works are given (Lemoine, 1984, p. 108). They are located in different countries around the world, but it can be noted that in the case of the Arica temple, the said data does not exist. Secondly, these data are ratified consulting the extensive listing of documents, writings, letters, specifications, plans, photos, etc. that are held by the Fonds Eiffel, presently at France's National Library, and the only reference to Arica is related to the Aduana building of the said city.

Other official government documents are revised, and data such as the work's execution date are found. In this case, the temple was built in 1875, after the earthquake that hit the south of Perú in 1868, almost simultaneously with the construction of the Aduana building. These facts apparently lead to error and induce to think that the temple is by the same builder, at the time that the terrible earthquake and the subsequent seaquake took place, which affected the whole southern area of Perú and destroyed a great part of the

city, including the temple building and left the city without this community place. The need was then seen to reconstruct the temple at the population's request, as can be deduced by the news and the official correspondence:

In the city of San Marcos de Arica, on the 13th day of the month of August an earthquake took place [...], and considering that:

- 1.- The demanding need to build a church for the lack of one since the 13 August 1868 earthquake.
- 2.- That even though there are several projects before the supreme government [...] they must be brought up before the next congress [...] (*El Comercio* newspaper, 1872, p. 10).

Several years after the temple was built, a new telluric catastrophe desolated the region on 9 May 1877 at 20:30 although, fortunately due to the high terrain where it had been built and its strong structure, it did not suffer greater damages.

The temple of San Marcos de Arica is one of the most documented works in the Arica region; there exists, also, precise information of the construction process which details, for example, the commission for engineer Eduardo Habich (López-Soria, 1998, p. 143) so that he would be in charge of finding the location for its construction.

In that same report, dated 5 February 1873, there are also recommendations and measures taken to ensure its construction. They refer to the preparation of the site and the foundations in order to avoid filtrations into the terrain: "(...) with a 80 cm coat of concrete and another one of 4 cm tiled foundation, after which the construction of the church could be started." (Annals of Perú's Corps of Engineers, 1874, p. 90).

The historical research

In 1546, a year before the Potosí silver mines were discovered (old Alto Perú, in today's Bolivia), the city of Arica is founded at a place called El Chinchorro. Later on, in 1570, taking into account the parishioners' Christianity, the San Marcos Parish is instituted, whose first church was located in that place until 1604, when an earth- and seaquake ravaged the town, which forced its being moved, to be protected by the Arica knoll. The second church was built at its present location. It had two towers and three naves and it was 53 m long and 30 m wide. Most of the materials were brought from Lima, except for the lime, the bricks and the wood, which were forwarded from Guayaquil. Sometime later, once built and already with 200 years of service, this church was destroyed by the 1868 earthquake.

Since the temple was built in 1875 at the same time that the Arica Aduana and wharf were being constructed, it is possible that it may have also been considered the work by the Casa Eiffel. Looking for the veracity of the facts, a first document was found where it is pointed out: "[...] a Central Board has been created to construct

.....
5 One of Eiffel's grandchildren, Sylvain Yeatman Eiffel was consulted and asked concrete questions, via telephone, and he assured that everything they had was kept at the Fonds mentioned already

a temple in this port “[Arica] “[...] (El Comercio newspaper, 1872, p. 20). This and other articles to be quoted in further paragraphs, have been taken from this newspaper, in the section “Correspondence from the Interior. Arica,” where the sequence of events can be found that permitted the temple’s being reconstructed, and which demonstrates, certainly, how originally the San Marcos de Arica temple was built by request from the Ancón port, on Perú’s coast.

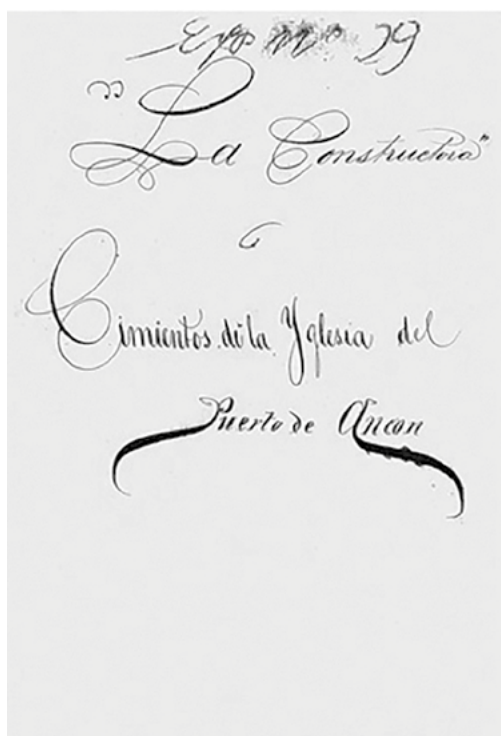
Lastly, the background validating what has been proposed regarding that temple is to be found in another archive (file), whereby all the economic data are recorded, as well as those dealing with the foundation plants, and it clearly states that it will support an iron structure; at the same time some constructive data is recorded.

The title of the document is: *In relation to the construction of the foundations of the Church in the Arcón Port, year 1872, addressed to the vice-president of the Engineers Central Board (Transport, Communications, Housing, and Construction Ministry, 1873, pp. 1-2) as shown in Plates 1, 2, and 3.*

Notwithstanding what has been mentioned, there are contradictions by some scholars regarding this construction: while many mention it was brought from Europe, up to now no verifiable proofs have been found or submitted confirming it. Others state that it was brought from the United States, and from the study on this there is only one file, as seen in Plate 3 on the start of the foundations project and the thank-you letter from Arica residents through their representative, Mr. Eduardo Gómez Pinto, for President Balta, as shown in Plate 4.

Historical tradition points out that the origin of the church construction is due to an initiative by the Peruvian president, D. José Balta, who ordered to change the destination of the Church, traveling from Europe to the Ancón locality so that it would be disembarked in Arica, taking into account the impossibility its inhabitants had to build a new temple. (Montesinos, 1999, p.19)

Other documents, however, tell everything concerning the temple construction for the Ancón town and, as we shall see, there is a file that describes the works on the temple foundations, where construction details are specified, and that they would support an iron structure; more importantly, there is a plan of the foundations that details the dimensions of the structure



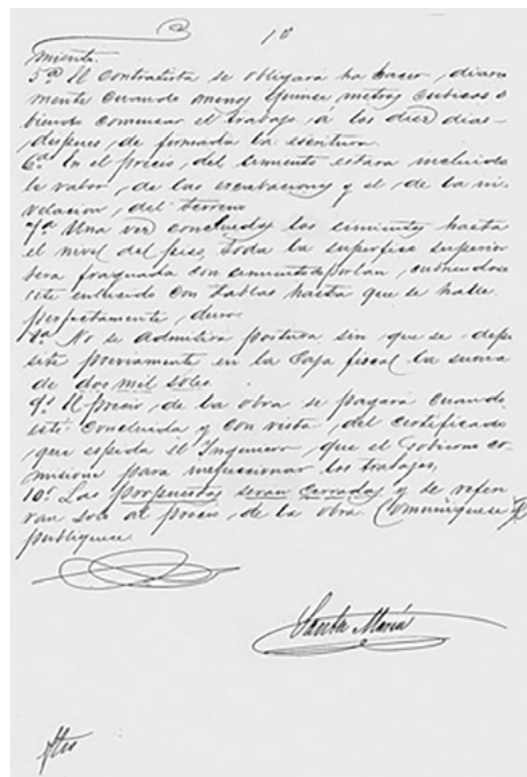
Plates 1 and 2. Cover of the file and part of the documents on the construction of the foundations of the church for the Ancón port.

Source: Transport, Communications, Housing and Construction Ministry, pp. 1, 2, and 3, File No. 29, 3 April 1872.



Plate 3. Page 4 of file on the construction of the foundations of the church for the Ancón port.

Source: Transport, Communications, Housing and Construction Ministry, File No. 29, 3 April 1872.



on the site, as seen in Plate 5. In the said document, precisely, it is pointed out that the temple has a North American origin.

Since it is necessary to proceed with the construction of the church foundations that was requested from the United States Government for the Arcón Port, it is resolved that proposals be requested for the said purpose for a term of 10 days, under the following bases:

1st The material to be used in the said foundations shall be stone extracted from «Toma y Calla» from the Chancay area [...]

2nd The mixture shall be composed of two and a half fragments of clean sand for one part of stone lime burned recently.

3rd The foundations depth, as well as their thickness, shall be the ones marked out on the plan drafted by architect D. J. A. Meakin (*Diario Oficial El Peruano*, 27 April 1872, Tome I)

From research on this matter, the name of the architect, in addition, has been found, about whom no other information was given in spite of the searches carried out both in Perú's Engineers Corps annals and the Ministry of Foreign Affairs files, but information about another architect has been found, one who was in charge of the foundation works of the Ancón church, as shown in Plate 6:

"The State Architect D. Jacono López Castilla, hereby is appointed inspector of the foundations works of the Puerto de Ancón Church. To be recorded, communicated. Signature, Santa María (Transport, Communications, Housing and Construction Ministry, 1872, p. 1)

In the file mentioned is found, in addition, the foundations plan which bears measurements and other clear details. Should we compare it with the Arica church we find, firstly, the façade asymmetry and an only nave with five decorative col-

umns, symmetrically ordered and which delimit two lateral corridors. The asymmetry seen in the building's front is due to the tower location: it has farthings suggesting a less angular form. The same happens with the altar whose shape and appearance eliminate the angles. In the vistas of the Arica church presently, it is quite evident how the main elevation suggests a motley temple with a lateral tower. It is also evident that it lies on an elevated terrain, whose details also appear in the correspondences, which allows us to state the importance and adaptability of the constructions proposed in the catalogs; more so, if its pre-manufactured condition is taken into consideration as well as its later ensemble or set up, wherever it was required, and where it is to be placed.

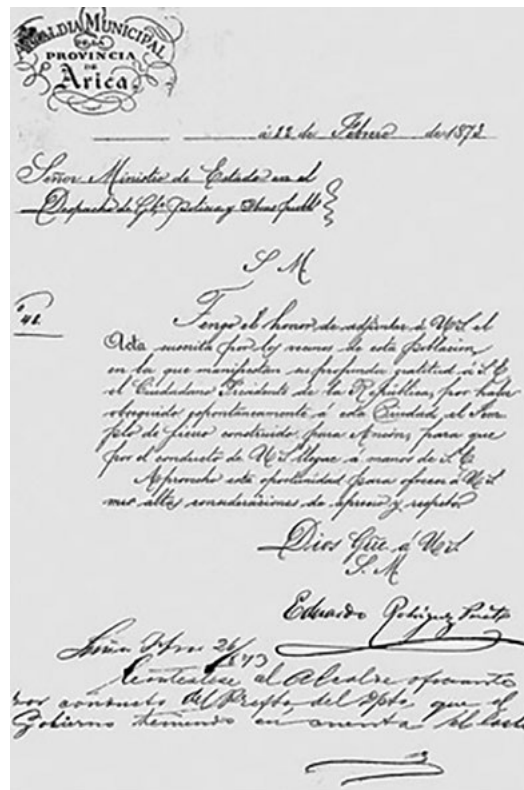


Plate 4. Thank-you letter from Mr. Eduardo Rodríguez Pinto to the Minister of State in the Government, Police and Public Works Office, for the present of the iron temple constructed for Ancón, so that it can be handed out to the citizen-president of the republic, D. José Balta, Arica Province Municipal Town Hall.

Source: Transport, Communications, Housing and Construction Ministry, Letter dated 22 February 1873.

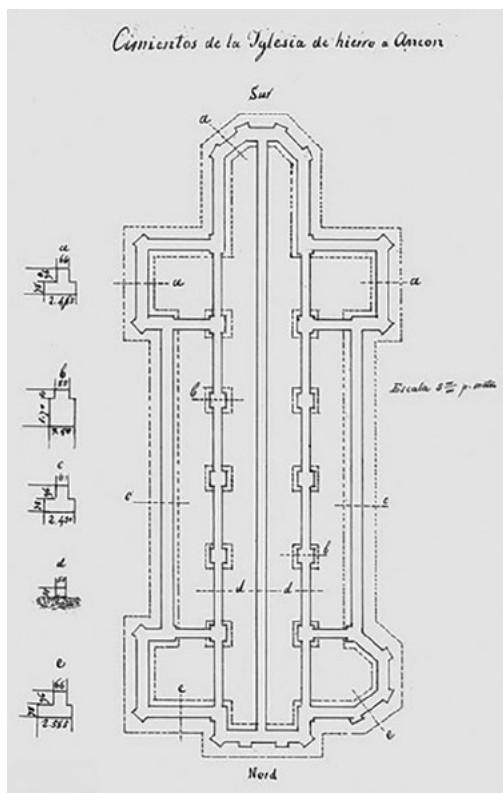


Plate 5. Foundations plan of the Ancón church.

Source: Transport, Communications, Housing and Construction Ministry, File No. 29, 3 April 1872, p. 4.

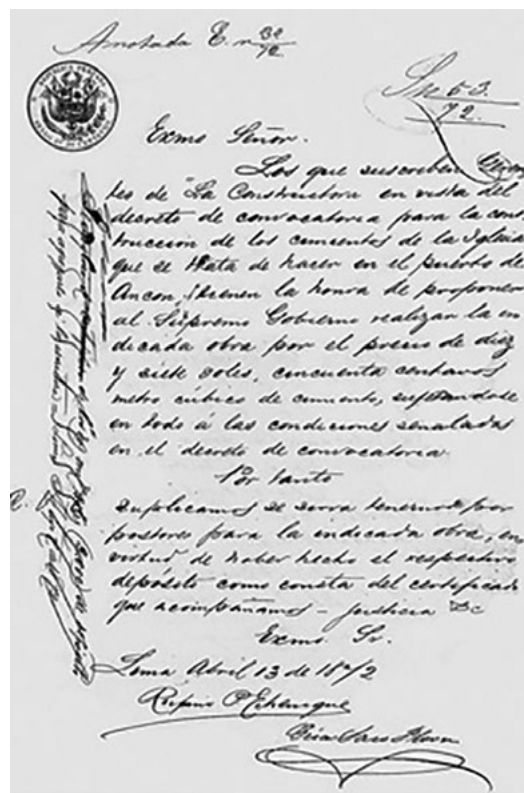


Plate 6. Proposal on the summons for the foundations works of the Ancón Church, signed by Rufino Echenique and Cesar Saco on 13 April 1872.

Source: Transport, Communications, Housing and Construction Ministry, File No. 30/72, Year 1872.

92 ANALES DEL CUERPO DE INGENIEROS.

Presupuesto aproximado de costo, para la colocacion de la nueva Iglesia en el puerto de Arica.

1 Demolicion de las ruinas de la antigua Iglesia, 2,400 metros 3 aproximadamente de la mampostería, muros, pilares, bóvedas etc, y al mismo tiempo la preparacion del terraplen 1,250 metros 3.....		S 2,500
2 Apertura de las zanjas para los cimientos de los muros de sostenimiento, 500 metros 4.....	S 1 20	
3 Muros de sostenimiento 119 metros 3 de largo, de piedra bruta, con cadenas de piedra canteada, y en la parte superior una coronacion de piedra dura, siendo las partes, entre las cadenas, enlucidas 250 metros 4 S 26.....	3,900	
4 Cimiento de 0 metros 0 60 ó de 0 metros 0 51 para colocar la Iglesia 150 metros 3 4 S 26.....	3,900	10,400
Escalera de la entrada de 1 metro 80 de alto, sobre 6 metros de ancho.....		600
5 Piso beton de 0 metro 0 80 con una capa en forma de enlosado de 0 metro 04-150 metros 4.....	3	1,350
6 Armazon de la Iglesia, transporte 4 plé de otra (aproximadamente por falta de datos suficientes).....		5,000
7 Reja ó balaustrada al rededor de la Iglesia 125 metros 4.....	20	2,500
8 Empedrado del terraplen de la Iglesia con veredas 800 metros 3 4 S 2 50.....	2,000	
Dos escaleras para subir el terraplen.....	400	2400
Total.....		25350
A deducir el valor del material de la antigua Iglesia, poco mas ó ménos.....		1000
		24350

Lima, Febrero 5 de 1873.

Firmado — E. HANICH,
Ingeniero de Estado.

En copia.—T. ELMORE,
Ingeniero.

The Project Memoirs

Plate 7. Approximate cost budget table for the placing of the new church in the Arica port.

Source: Perú Engineers Corps Annals, Tome I, History Archive Universidad Nacional de Ingeniería. Lima, Perú.

The following description refers to the development of the temple works in Arica. It is clear, at this stage, that it was the same designed for Ancón. To carry out this project the budgets for costs were first drawn up, shown in Plate 7. One of them corresponded, precisely, to the placing of the building, which required to have the baseline ready, where the new temple would be located, to replace the old one. This other document is published in *El Peruano* newspaper, in the Public Works section, and it is quite clarifying and explicit, and there we can see that they refer to the same works:

Iglesia de Fierro de Arica. Painting work for the same temple. By means of this thank-you Record from the Municipal Town Hall of the Arica Province, dated 22 February 1873, addressed to the Minister of State in the Government, Police and Public Works Office. Thank you to President Manuel Pardo for the spontaneous gift of an iron temple. Eduardo Rodriguez, Mayor of the Arica Province. (Transport, Communications, Housing and Construction Ministry, 1878, p. 454.)

In the previous document (Plate 7), which is kept in Perú's Engineer Corps Annals, details are also found such as the terrain topography and the surrounding spaces: stairs and surrounding lands; but, in the next one their architectural description is also described:

Its floor plan is drawn cross-like, in a double crossing, geared from West to East, made up of a longitudinal body 38 m long by 15 m wide. The lateral naves [are] set up based on a 4.80 m by 5.45 m structural module. The fundamental structure is made of iron, in laminated sheets and tracery-like ornamental details that conform squares between pillars and beams [...] outstanding is the use of the neo-gothic ogival arch to join pillars and beams, ornamental motifs of vegetal character which stand out because of their sobriety and lightness; elsewhere [are] beautiful stained-glass windows that decorate the façade and regulate the passage of light creating a warm environs of peace and spiritual quiet. (Transport, Communications, Housing and Construction Ministry, 1878, p. 455).

In spite of the above, there does not exist any seal or mark in the structures certifying Gustave Eiffel authorship, which was the company's practice as seen in the elements of the Aduana de Arica building (in the bricks). This temple was completely built with iron and sheets of the same metal. Because of this, we can literally assure that the construction belongs to another type notwithstanding the fact that it was built in the same time period. More so, the style and additional architectonic characteristics are completely different from the constructions made by Eiffel in the same years, buildings where there was always a combination of stone, brick and iron structures, all of it joined to a light material, such as glass. It is known, therefore, that the temple was constructed, according to newspaper references of that time, by the United States Government, and that its destination at first was the Ancón port as mentioned already. The Central Board of the State's Engineers and Architects, when supervising it conclusively ratifies our certainty, according to the following document:

In Arica also a new church is being built or, more properly, in that port it is being erected what was asked of the United States for Ancón by the past administration. The works, which were started in the month February of 1872 are being ended today; a master worker was directly in charge of the material part of the work, sent from the United States by the Construction Firm. The Board pointed out to the Supreme Government the place where the Church should be placed in the Arica port and the nature and cost of the additional works which had to be executed at the base and around it to facilitate its execution. 22 November 1872. (Central Board of the State's Engineer Corps, 1984, p. 55).

In the 1874 memoir already mentioned, which coincides with the newspapers, the advancement of the construction was reported, under the direction of the Ministry of Public Works, through communiques issued according to supreme decree authorizing public expenditures:

As the mechanic builder D. Francisco Ichl needs the tools and utensils listed in this file to build the iron church that has been ordered to be located in the Arica port, and whose cost as budgeted by the Central Board of Engineers is for the amount of 1,237.20 soles, it is approved,

and it is proceeded to purchase [them]. (*Diario Oficial El Peruano*, 9 November 1872, Tome II)

Likewise, the payments corresponding to the personnel in charge of the building construction were also mentioned:

It is certified in this file that D. Francisco Ichl was hired by the Minister of the Republic of the United States so that he would come to this capital in order to place the iron church that was brought for the town of Ancón, apportioning 150 American gold pesos, which would be paid thus: half the amount in New York and the other in this capital, [...] Rosas (*Diario Oficial El Peruano*, 15 February, 1873, Tome I)

In addition to the above, payments due are quoted for the transport of the structures, which initially arrived in Callao, and then were sent again in a different ship from the one that had brought them to that place, to be transported to their final destination, Arica port.

To be sent to the Ministry of Finance so that it orders that through this department's fiscal cashdesk, the English vapor agency be paid the amount of 3,854.82 soles, the transportation cost, from Callao to Arica, of the iron Church that must be placed in this port [...] Rosas. (*Diario Oficial El Peruano*, 19 April 1873, Tome I).

On the other hand, payments are certified to the different enterprises that were in charge of the transportations and other lesser works.

"Payment to the vapor Company that imported the unloading of the iron church [...] Rosas. (*Diario Oficial El Peruano*, 6 September 1873, Tome II)

"Payment to Merchant y Cía, for the cost of the tools for the work of the Arica Church" [...] Rosas. (*Diario Oficial El Peruano*, 27 September 1873, Tome I)

Besides, reference to the construction of the temple under the charge of the North American company demands further research, and thus, the only document related to the issue is found, which points out:

To be paid by this department's Fiscal Cashdesk to Bryce Grace y Cía., the amount of 5,673.02 soles which, according to the enclosed bill, is the amount of the freightage of 1,700 bags containing articles belonging to the State, which were transported on the "Canada" ship from New York down to the Callao port [...] Rubrica, Rosas. (*Diario Oficial El Peruano*, 19 April 1873, Tome I)

The enterprise *Bryce & Grace* above is mentioned several times in the papers of that time since they had background related to other works, but it cannot be ascertained that they were builders. In the Ministry of Foreign Affairs files there are letters from the plenipotentiary minister in the United States at that time, Mr. José Antonio García y García, who kept personal correspondence with Mr. William Russell Grace, whose address was 110 Wall Street New York.

It is worthwhile to note that Mr. Grace was an important contributor to the cause, intent mainly

on collecting money for the victims of the 1868 earthquake in southern Perú, and who, together with sympathizers and Peruvian descendants, created a kind of partnerships of a purely benefic inspiration to collect resources.

In these partnerships to assist Perú can also be found the name of Francisco Bryce who, together with J. H. Hurtado, had relations with Perú. It is known that there were letters from Callao's *Casa Bryce & Cía.*, but they did not mention any specific work; nonetheless, in 1871 the purchase of an iron bridge is noted down for Barranca for the British engineer company *Casa Brice y Grase*, with the specific date 22 August. The different spelling of the names ("Bryce" and "Brice", "Grace" and "Grase") seems to be merely typo misspellings, so it is quite probable that the said gentlemen Bryce and Grace were the owners of the famed enterprise through which, in later years, the *Grace Contract* was signed for exploitation of guano on the islands.

The history of the Grace brothers in Perú goes back to the time when one of the brothers, William Russel Grace, arrived from Ireland in Peruvian soil in 1852. Upon arrival, William starts working in a small import enterprise called *Bryce Brothers*, located at the Callao port, and which was prosperous in the business of serving the customs fleet anchored in the Chincha islands. Grace joined them in 1852, and just four years later, the enterprise changes its name for the *Bryce-Grace Co.* Grace's trajectory and entrepreneurial background took him to the top and led him then to the New York town hall and to found an enterprise: *W.R. Grace & Co.*, which became the symbol of the businesses and trade between Perú and the United States. During that time, William Grace expanded his business towards other fields, such as merchant ships and the railroad business. Thus, in 1873 he founded the *Merchants Line*, Grace Line's immediate predecessor:

In 1866 Grace moved his family and his enterprise's headquarters to New York, leaving his brother Michel in charge of the Perú businesses. At that time, Henry Meiggs was negotiating the first of several important railroad businesses with Perú, which naturally brought Grace's attention. Towards the end of this decade, the Grace brothers were the main North American suppliers for Meiggs' railroads, and a strong friendship was born between William Grace and Joseph Spinney, Meiggs' agent in New York (Clayton, 2002, p 341).

The enterprise's headquarters were located in New York, and from there came the structures for the Arica temple. New York was, in addition, one of the main shipping possibilities since it was part of the sailing route (the other one was Panamá, when the Canal still did not exist as the sailing venue we know today). At that time the trip was made by land down to the Pacific coasts, which would explain the confusion regarding the place

of origin of the cargo which, according to some authors, would arrive from Europe.

The importance of the construction of the Arica temple lies, mostly, in the fact that it was made to be ensembled or dismantled in a way similar to the Arequipa railroad station, and using for its construction iron beams, brass sheet roofing, small iron windows and wood, all of which differ considerably from the architectural style and conception of the Aduana neo-classic style of construction as executed by Eiffel. In spite of the fact that both edifications were made almost during the same epoch, we must add, by the way, that both the Arica temple and the Arequipa railroad station are presently well preserved.

In the photographs of both constructions, Plates 8 and 9, the great similitude is shown between the iron elements⁶, such as beams and columns both in the temple and the station, both sent directly from the United States. On the contrary, the constructions of the Arica temple and Aduana have fully dissimilar constructive characteristics, in spite of the fact that they were made with just a year difference.

Conclusions

Acknowledgement is made of the great amount of information gathered from primary sources or official documentary sources of the time (review of newspapers with ample public readership, from 1850 through 1900), together with official documents obtained from historical archives at the Transport, Housing, Foreign Affairs, Industry and Public Works Ministries, which has allowed us to follow the tracks of one of the most polemic

⁶ Here is also viewed a matter under similar terms: sometimes we find the word *hierro* (iron) and others the word *fierro*, used indistinctly; but in spite of the fact that they are things completely different, there authors who use them to refer to the same material.

works in the history of Peruvian (presently Chilean) architecture.

Another important source, also a historical one, is the official legacy of the Eiffel Fonds, presently kept at France's National Library, private files where there is a great amount of information in listings, plans, letters, etc. (primary sources also) through which many conclusions can be reached: for example, the mistake is made clear on the belief that all iron materials arrived from France, forgetting the fact that England and the United States also had an extraordinary manufacturing potential, especially when referring to railways, stations and iron bridges, data which was detailed in an official Fonds catalog, which was kept previously at the Orsay Museum.

Another conclusive fact refers to the chapter on communications and transport, to the enormous advancement in navigation, which permitted, firstly, diplomatic connections to hire foreign architects and engineers, as well as to get materials, techniques and constructive systems, a fact that was replicated in our territory by our own professionals, and was reflected in other works of domestic manufacture. As an example: to shorten transporting enormous loads of iron maritime-wise before the Panamá Canal was built, which arrived first in New York and were carried by land to the Pacific, and from there by sea down to the Peruvian ports, which was a historical achievement.

On the other hand, no conclusive documents were found, such as a contract or some similar one, which can generate concrete assertions on the true authorship of the temple. It is worthwhile to mention that we are referring to events taking place more than 140 years ago, in the XIX century specifically. The Pacific war had ended and there was huge destruction in our country, many archives were obliterated, and the guano boom was over, and, with it, the State's public works.

After having presented the facts proposed as of the verification of the history, we can conclude that the San Martin Temple in Arica was not made by Eiffel nor by his enterprise. Such

Plates 8 and 9. Detail of the Arequipa station beams, whose widely acknowledged authorship is confirmed by the North American fact.

Source: by the author (2003)
Public Domain



an assertion is deduced from the vast number of documents consulted, a fact that could become polemic with the southern country [Chile] since they declared the Arica temple (iglesia matriz) a national monument and mentioned Eiffel as its author in the plaque placed on the building frontispiece.

It is also an acknowledgement of architect J. A. Meakin, who drafted the plans and details of the foundations, as stated in the file related to the construction of the bases for the Arica temple, whose plant corresponds to the present plans, which are found in the internet on the temple's reconstruction (Pfenniger, s. f.)

Another important fact, an outcome of the research about Gustave Eiffel in the country is that it showed that his works were not neces-

sarily requested through catalog but that, better still, there was a professional's intervention, as it has been found in other Eiffel edifications in the world, as long as it dealt with the project for a building; he worked with a well-known architect, as it was done in Arica's Aduana and the Governorship House, with Engineer Eduardo Habich, engineer from the Peruvian State.

It has also been concluded that constructing buildings at the time was done not only with imported materials, but that quite an advanced technology for the time was used, and it was for the service of the Peruvian State in an epoch when the greatest number of public buildings was constructed, and that many foreign engineers and architects worked in our country, and that it is necessary to acknowledge their contributions and presence in Latin American architecture.

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