



One hand to school them all: the Society for the Construction of Educational Facilities in Chile (SCEE)

Maximiano Atria

To cite this article: Maximiano Atria (2018) One hand to school them all: the Society for the Construction of Educational Facilities in Chile (SCEE), *The Journal of Architecture*, 23:2, 207-224, DOI: [10.1080/13602365.2018.1443277](https://doi.org/10.1080/13602365.2018.1443277)

To link to this article: <https://doi.org/10.1080/13602365.2018.1443277>



Published online: 14 Mar 2018.



Submit your article to this journal [↗](#)



Article views: 82



View related articles [↗](#)



View Crossmark data [↗](#)

One hand to school them all: the Society for the Construction of Educational Facilities in Chile (SCEE)

Maximiano Atria 

Facultad de Arquitectura y Urbanismo, Universidad de Chile, Santiago de Chile

(Author's e-mail address: maxat1@uchilefau.cl)

The experience of the Society for the Construction of Educational Facilities (SCEE; initials from the Spanish title) is a unique case in Chile of a public agency dedicated to a single task: designing and building the schools of the whole country. It lasted for fifty years, delivering a final product that constitutes the presence of the State throughout Chile to this day, even if its participation in public education has decreased dramatically in recent years. Totaling more than four thousand schools throughout the country, the SCEE's production shows, from its creation in 1937 to its final closure in 1987, the leading tendencies that oriented the discipline of architecture during its most active and polemic years. From the initial modernity of massive, brick-and-mortar buildings to the prefabricated and modular systems (in wood, steel or prefabricated concrete) of the 1960s and 1970s, the SCEE's production can be considered to be a showcase of modern heritage. But although most of its schools are still in use, they are subject to modifications and threats from the dynamics of the expansion of contemporary society.

Introduction

The Society for the Construction of Educational Facilities (SCEE; initials from the Spanish title¹) was the public agency in charge of building all the State's schools in Chile, starting in 1937. It ended in 1987 with the programmed closing of its activities, the dissolution of its organisational structure and, unfortunately, the disaggregation of its archives. Up to 1981 the SCEE had produced an estimated 4,150 primary and high schools throughout the country,² as well as a number of other buildings.³

The idea behind this ambitious and far-reaching institution was born at a time rich with the sense of State-consolidation and the desire to set the rules that would give order to the Chilean nation after the tumultuous years around the world financial crisis of 1929. In Chile, a demand for higher

wages in 1924 set in motion a political crisis that eventually led to the resignation of President Arturo Alessandri, elected to office in 1920, and the installation of a military junta. A subsequent coup reinstated Alessandri with a mandate to produce a new Constitution and to finish his term of office. The 1925 Constitution was the first in Chile's history to declare the separation of the State and the Catholic Church, until then representing the officially recognised religion. However, political unrest continued until 1932, when Alessandri was elected for a second term, initiating a period of democratic maturity that continued until 1973.⁴ It was during this period (1932–1938) that Chile consolidated its administrative and productive bases, with the creation of several of the crucial institutions that gave form

to the core of its public structure. Even if it no longer exists, the SCEE still constitutes one of those institutions.

In the realm of education, the separation between Church and State established by the 1925 Constitution meant that the State would have to implement a policy to extend the reach of public education, and that the means to secure funding and technical abilities had to be established by law, no longer being dependent on the activities of private organisations (mainly religious) that until that time dominated the educational system.

The scope intended when creating the SCEE was larger than the mere construction of buildings. As in every policy oriented towards a specific action, there was a broader vision intrinsic to concentrating the erection of schools in a single agency. At the moment of its creation, the goal of the SCEE was seen as an opportunity to rethink the structure of the educational system as well as the standards that defined the characteristics of the classroom and the school building in its relationship to its environment. That goal was not literally expressed in the text of the law, but it clearly inspired the way in which the SCEE's structure was organised, and the relevance given to design and research in what could have been a mere technical orientation. This broader vision can be deduced from its architectural production, and it can be related to two key features.

The institutional dimension

The first of these features is the close identification of the SCEE with the idea of a strong State and the centralisation of decision-making that would characterise the Chilean administration from 1932

onwards, once the 1925 Constitution was fully operational.⁵ The SCEE was to represent the presence and the aims of the State in securing the definition of modernity as a means to improve the condition of its educational system, expressed in new typologies, new materials and a new approach to the structure of the educational building, starting in the classroom and extending to its urban role.

Even if it was strongly inspired by the modernising intentions of the Alessandri government, SCEE also took account of educational traditions in Chile and in the rest of the world to identify when it was necessary to innovate and when to learn from previous experiences. Since final independence from Spain in 1818, primary education in Chile had been organised around the operations of the Catholic Church (the first Constitutional documents enshrined Catholicism as the official religion to the exclusion of all others) and of several privately run charitable institutions. Although formally independent from the Church, these institutions approached education with a strong identification with the rigidly moralistic orientation of nineteenth-century society and its dependence on religious guidance from 'official' church institutions.

It was at the turn of the twentieth century that the idea of a modern State produced the impulse to define the actions of organised institutions. In this period—marked by the consequences of the War of the Pacific⁶ and the First World War, whose ripples were felt even in a context as far removed as South America—the advent of a new world order became evident, and modernity dominated all public actions, orienting the direction of the new State. Thus official institutions were to be

involved in every aspect of life; and where there were no such institutions, they had to be created from nothing.

At the end of the 1930s, Chile found itself transformed by a set of new laws and institutions paving the way to modernity. These included the Labour Code, (1931), introducing the 8-hour working day and protection for the unions, with other pro-worker regulations; a collection of laws and institutions that promoted the country's industrialisation (by 1939: especially after the earthquake that destroyed the southern city of Chillán that year); a new Constitution (1925) that granted universal suffrage (although women's suffrage would not be effectively introduced until 1934, for municipal elections, and 1949, for presidential and parliamentary elections: the first presidential election with women's votes was in 1952). The 1925 Constitution, which remained in place until the 1973 *coup d'état*, also stated that education should receive the 'preferential attention of the State'.⁷ Since 1920, however, with the promulgation of the Primary Education Law, education had been declared compulsory and free of charge for children between the ages of six and sixteen enrolled in public schools.

Thus it became the State's obligation to provide education for all children. No longer could it rely on private institutions to provide this 'preferential attention', even though some bodies could 'collaborate' in the task, such the Society of Primary Education [*Sociedad de Instrucción Primaria*; SIP], which would have an important role in the future creation and operation of the SCEE.⁸

This was the context in which the decision was made to establish a public agency whose main purpose would be to create the public educational infrastructure. The law that created the SCEE (effective on 18th January, 1937) established capital funding in two types of share, 30% owned by the State and the rest offered in the market. The law set a fixed annual interest rate of 8% and provided for loan contracts between the State and the SCEE for the future use of the buildings, hence ensuring a rent to pay for the latter's costs. The law also defined an initial 30-year lifetime for the existence of the SCEE.⁹

Despite its specific name, the intention was to expand the SCEE's reach to cover the development not only of educational buildings but also of other typologies, together with the research and study dedicated to generating new and more appropriate educational facilities regarding the climate, latitude, local settings and the internal quality of the educational space. For this reason, the society had a Studies Department which was not limited to the generation of working blueprints and documents, schedules and budgets for buildings. A research team was in charge of designing better classrooms and was tasked with studying existing standards to define the requirements of school projects: from the standards of the physical space (offices, circulation, courtyards, classrooms) to the technological development of construction systems and typological structures that had to answer to radically contrasting environments and programmatic requirements.

In those years there was already a view that identified education as a tool for promoting the 'common

good' and the social mobility that would be necessary to fulfill the intentions of the State in modernising its structure and forming the ideal citizen that would live in that modernised country. Efforts were directed to reforming the educational system, which included modifications in the curriculum, in the structure of primary and high schools, and in the shape of the educational space where all this would occur. One sign of the relevance of education in those years was the 1938 presidential election, won by the leftist candidate of the Popular Front, Pedro Aguirre Cerda, whose motto was *gobembar es educar* [to govern is to teach]. President Aguirre Cerda had died in office in 1941, but his social programme lived on in several institutions and in the spirit that guided the SCEE.

The study of technological and architectural standards can be seen in the progressive development of the buildings produced by the Architecture Workshop, a subsidiary of the SCEE's Studies Department: in the beginning the schools were compact, following a unique typology, whereas later they were made with prefabricated systems to lower costs or increase production speed. This widening of construction systems became particularly important after the 1960 earthquake in the country's southern regions, when the SCEE was charged with reconstruction tasks in parallel with those oriented towards its original function.

An interesting realisation of what the SCEE represented in terms of this extended view can be found in the experience of another public agency, inspired by the SCEE, dedicated to the health infrastructure: the Society for the Construction of Health Facilities (SCEH). The aims were the same,

perhaps with a more complex system regarding the requirements of hospitals as distinct from schools, but its existence is a useful demonstration of similar intentions, concentrated in a similar agent. It was partially financed by the state-run Lottery and was responsible for the construction of hospitals and first-aid health centres.¹⁰ The SCEH launched a nation-wide programme to build different health facilities, from small primary attention centres in small towns to big hospitals in regional capitals. Its existence shows a similarity with the SCEE in understanding the role of the State in planning the provision of a basic service, but its history and its particular functioning was different from the SCEE, health facilities being radically different from educational, together with a faster obsolescence of technical features, which resulted in a less uniform production: in contrast with the SCEE, there was not a single design office, and the hospitals it built lack architectural uniformity compared to the schools built before the 1960s by the SCEE.

Regarding the relationship of the State with what have been called its 'collaborative institutions', the role of a private and much older institution is worth mentioning. If there is some continuity in the creation of the SCEE, it must be connected to the Society of Primary Education (SIP). It was founded in 1856 by a group of young liberal intellectuals from the Chilean *élite*¹¹ with the intention of promoting education in order to lower Chile's 86% illiteracy. A key figure in its development was the philanthropist millionaire Claudio Matte, who was its President between 1892 and his death in 1956. Worried by the poor quality of education in

Chile, and seeking treatment for a liver disease, he travelled to Germany in 1881 where he attended primary schools as an observer and realised that teaching to read had more to do with thinking than with repeating words. He then created a learning methodology for children called the Matte Syl-labary, which was published in Leipzig in 1884. On his return to Chile Matte donated it to the SIP and started working there. One of his first successes was the declaration, by the government, of his Syl-labary as the official teaching book for children, to be used in every school in the country. Matte financed the construction of several schools and dedicated the rest of his life to promoting good education, based on the trilogy 'good teachers, good buildings, good educational programmes'. This trilogy would eventually be the keystone of the SCEE.

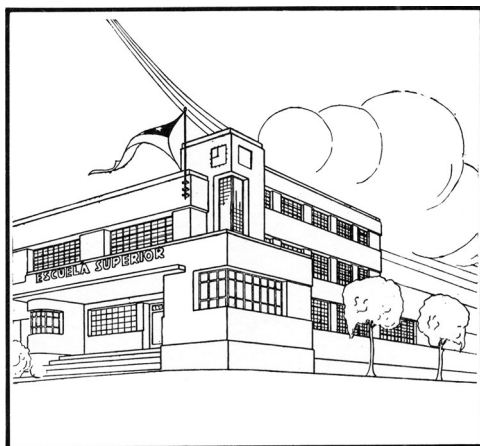
The political impetus came with Matte's appointment as Director of Primary Education in the second Alessandri administration: from that position he promoted the creation of the SCEE, based on his experience at the SIP and knowing that only through a public agency would it be possible to reach a nationwide scope. The institutional continuity from the SIP to the SCEE was also expressed in its architecture, since the chief architects of the private society were part of the group that conceived the structure and the methodology for the new agency, and started working there as heads of the Architecture Workshop.

In general, the SCEE's success and continuity can be explained by Chile's stability after 1932 and the Society's internal organisation as a mixed enterprise, with an independent directing commit-

tee that with the sole aim of planning and building schools throughout the country. It continued under several governments with different and conflicting ideologies, and it closed during the 1973–1989 dictatorship because it was defined as such in its constituting law, not because it was opposed to the economic orientation of the Pinochet regime (although that was the case). The dominant position of modern architecture, and the clarity and unity of architectural thinking at the time, at least during its first 25 years, also helped in securing a regular working system, as is evident in the astonishing uniformity of its buildings until around 1960, when standardised pre-fabricated systems were introduced in different materials, and the successful outcome of its typological systems from then on.

At the end of the 1970s the Pinochet dictatorship introduced strong economic reforms to bring about a free-market system, led by a group of young economists strongly influenced by the teachings of Milton Friedman and the University of Chicago. This was accompanied by the promulgation of a new Constitution in 1980 that strongly limited the role of the State and promoted private initiative in almost every field of the economy. The social shock of these changes produced a huge economic crisis in 1982. Among the measures taken by the government was the municipalisation of public education. This process transferred the administration of State schools from the Ministry of Education to each municipality, ending a long tradition of centralised management, which was the basis for the existence of an institution such as the SCEE. The first half of the 1980s coincided with the predefined deadline for the existence of the SCEE: one of its last activities

Figure 1. Original drawing of a typical school, by José Aracena, 1938 (source: Sociedad Constructora de Establecimientos Educacionales, *50 Años de Labor*, 1987).



in the service of the State involved reconstruction work after the 1985 earthquake, which affected hundreds of public schools as well as other buildings, and it was dissolved two years later.¹²

The architectural dimension

The architectural character of the SCEE's buildings can be identified as the second key feature that distinguishes its broader vision. It established itself as the leading producer of a set of public facilities (mainly schools, but also museums and other public buildings in its later years) by following a recognisable aesthetic pattern identified with modern principles of design.

One of the main branches of the SCEE's structure was the Architecture Workshop, charged with the planning and design of the buildings. From the start, it was directed by two architects: Gustavo

Mönckeberg (1884–1944) and José Aracena (1890–1971).

Mönckeberg, who received his architectural degree in 1908, was commissioned in 1910 by the Society of Primary Education to travel to Germany to study educational architecture there in order to design new school buildings. Back in Chile he set up his own studio and won several competitions, also securing a position as professor at the Catholic University's School of Architecture, where he had studied. He had an active career, and was a strong supporter of the SIP, of which he was the chief architect in charge of projects. José Aracena worked in Mönckeberg's studio and became his partner in 1928.¹³

Soon the two architects were receiving important commissions from the Chilean *élite* as well as from public and private institutions. Since the beginning of the 1930s they had designed schools for the SIP, and had developed a typological design inspired by modern ideas on education: clean surfaces, wide open spaces and corridors, functionality in the design of classrooms and collective halls, together with a strong urban image, usually based on the use of a vertical volume for the staircase. This unity of design provided the identity that the State was seeking in promoting public education as a tool for creating the basis of a modern sense of citizenship. When the SCEE was created under the influence of Claudio Matte and the institutional backing of the SIP, Mönckeberg and Aracena transferred to their new job the principles that they had already developed. While Mönckeberg took more administrative responsibilities, Aracena was directly in charge of design as *chef d'atelier*.

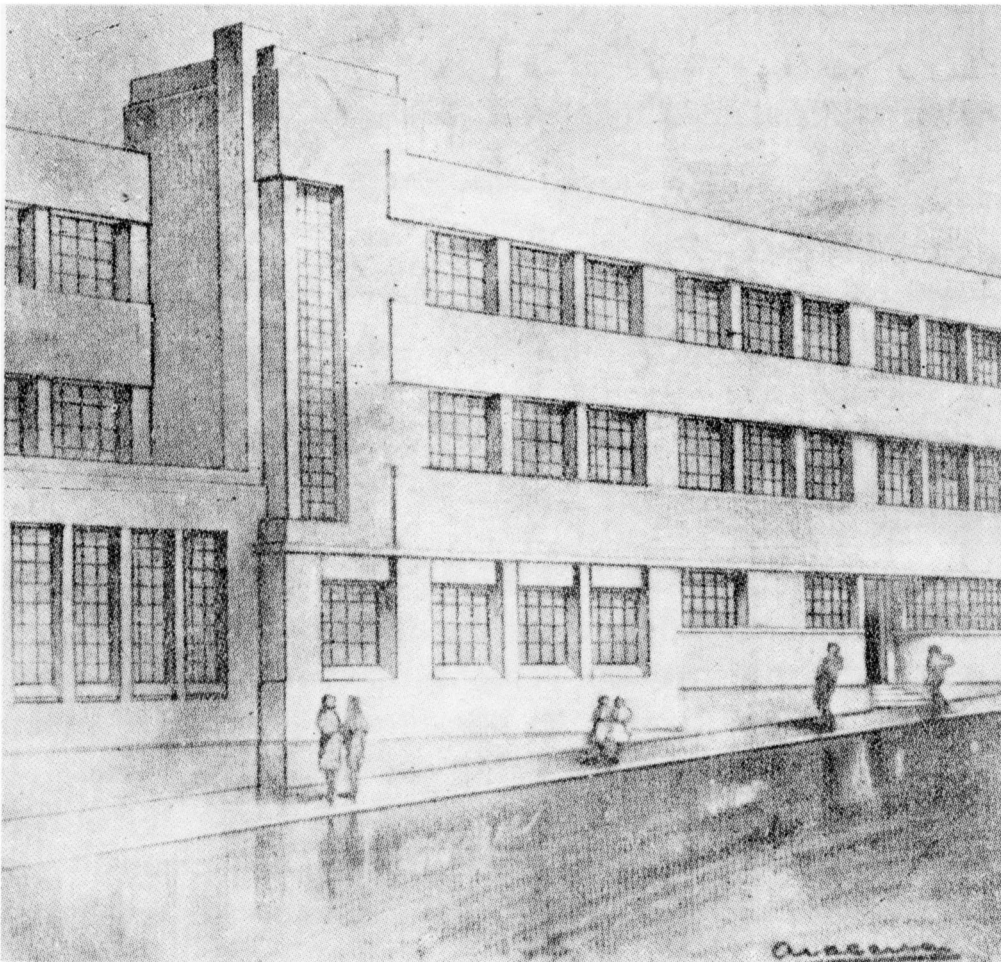


Figure 2. Girls school in Valparaíso, School D-259, 1945 (source: Sociedad Constructora de Establecimientos Educativos, *50 Años de Labor*, 1987).

In 1938 Aracena fixed the typology that would be used—with minor changes—in all the buildings, looking for a strong image that would represent the

ideals of austerity, honesty and timelessness that were promoted by the State (Fig. 1). It expressed, in concrete and steel (more concrete than steel), the

Figure 3. Grouped schools in Cartagena, School A-44, 1940 (source: Sociedad Constructora de Establecimientos Educacionales, *50 Años de Labor*, 1987).

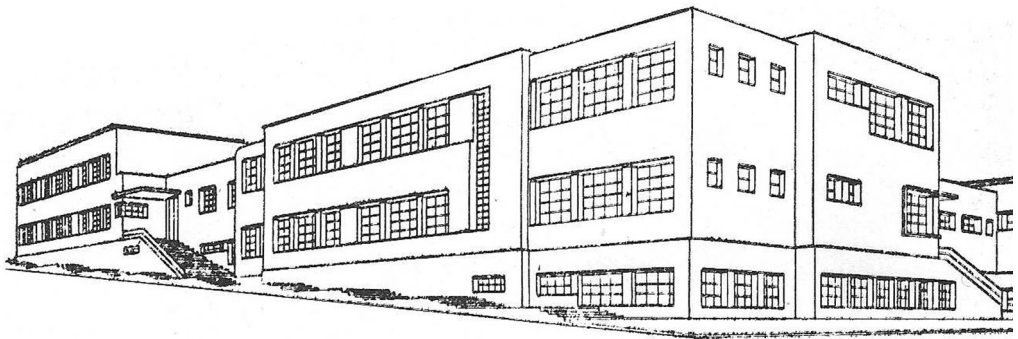


image of an institutional apparatus dedicated to complying with the constitutional obligation to give preferential attention to education. Until the development of prefabricated systems around 1960 (when the Valdivia earthquake forced the SCEE to find faster, more adaptable systems),¹⁴ all the buildings designed by the Architecture Workshop had the signature of Mönckeberg and Aracena, at first, and, later, only the latter's.¹⁵ And they all had the same image, unifying the idea of the State school from north to south throughout the country (Fig. 2).

The SCEE school consisted, in general terms, of an elongated body, one or two-storeys high, comprising the classrooms, usually with wide windows towards the street and with an open corridor towards the inner court. Initial access was marked by special features, such as a mezzanine over the entrance, or a tower containing the stairs, with a clock on top. The school building had to be adapted for different settings, climates and urban conditions (Fig. 3): the ideal plan of an open court surrounded by the classroom wings was modified

for different locations and geometries in the available sites (Fig. 4).

Following the custom in public education in Chile in those years, there were separate schools for boys and girls, and sometimes two schools were built side by side, separated by a wall or by shared common facilities such as gymnasias or dining halls in the centre. There were several models, from the urban isolated school (for boys, for instance), the combined schools for boys and girls, and even small rural schools for both sexes, with a repetitive design comprising three classrooms, an office and a small utilities room, that could also be used for meetings, lunch or sports in winter (Fig. 5). In every city or mid-sized town there was an SCEE school, usually in very central locations and, in some cases, representing the sole image of the presence of the State.

Aracena's overall design was not singular or especially innovative: it was closely related to what, from the 1920s onwards, were proposed as new forms for new needs in Europe, mainly related to the purity of volumes and the plastic

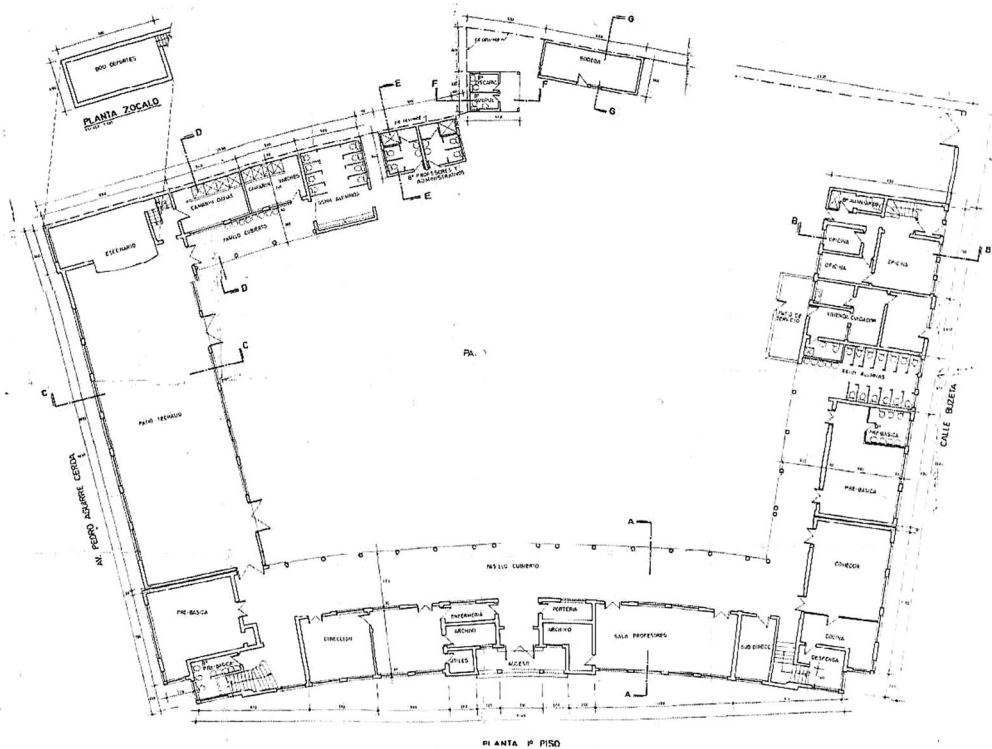
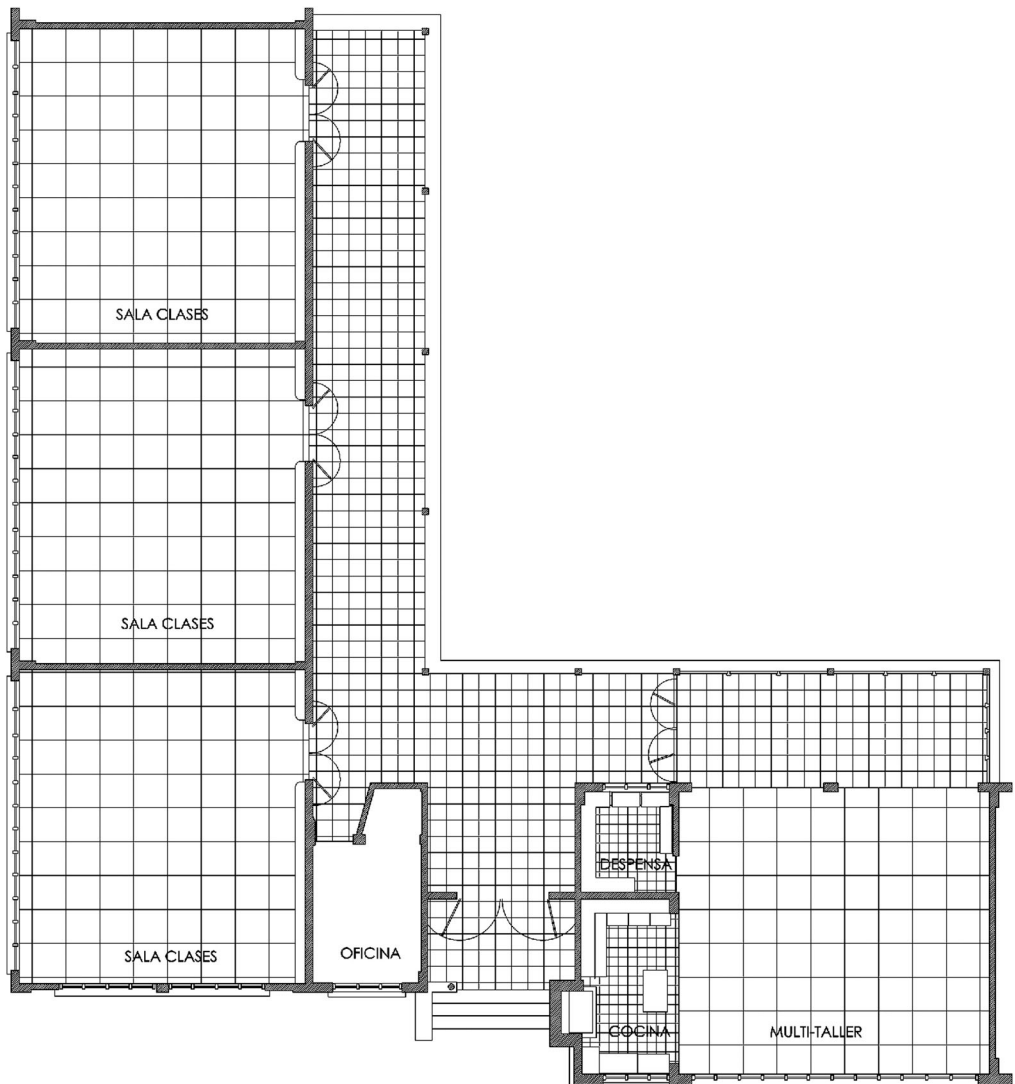


Figure 4. Pedro Aguirre Cerda School, plan, 1946 (source: C. Torres, S. Valdivia, M. Atria, *Arquitectura Escolar Pública como Patrimonio Moderno en Chile* [Santiago, FAU, 2015]).

composition and interaction of the different parts of the building. As an ideal for the modern school in Chile, this was all very much in harmony with the rationality of programmes designed according to their use, following a functional syntax of recognisable elements. Aracena's abstract design (see Fig. 1 above) condenses the elements of that syntax, revealing the far-reaching aims set by the architects in order to develop a

coherent image for the new educational building form, as well as its close relationship with, for instance, Willem Dudok's designs for schools in Hilversum in the 1920s. In that regard, Aracena's design inserts itself in an architectural tradition that takes some of the leading currents of design, mainly the deep study of functional necessities as a source of new forms,¹⁶ and adapts it to the Chilean context.

Figure 5. Typical rural school plan, 1955
(source: C. Torres,
S. Valdivia, M. Atria,
*Arquitectura Escolar
Pública como
Patrimonio Moderno en
Chile* [Santiago, FAU,
2015]).



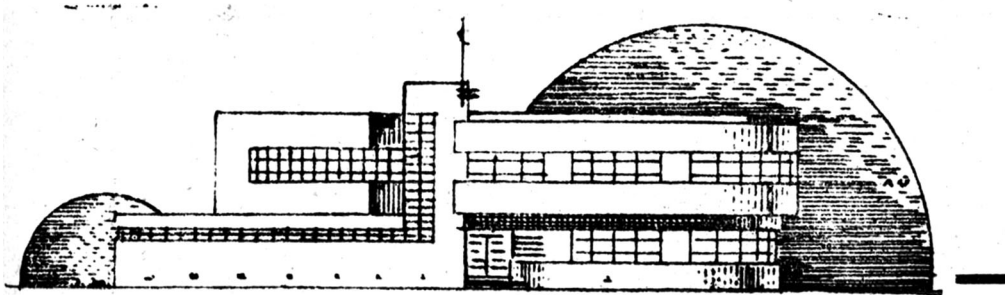


Figure 6. SCEE logo, designed by José Aracena, 1940 (source: Viviana Fuentes, *Expediente Técnico para la Declaratoria Patrimonial de las Escuelas Concentradas de Talca*, 2010).

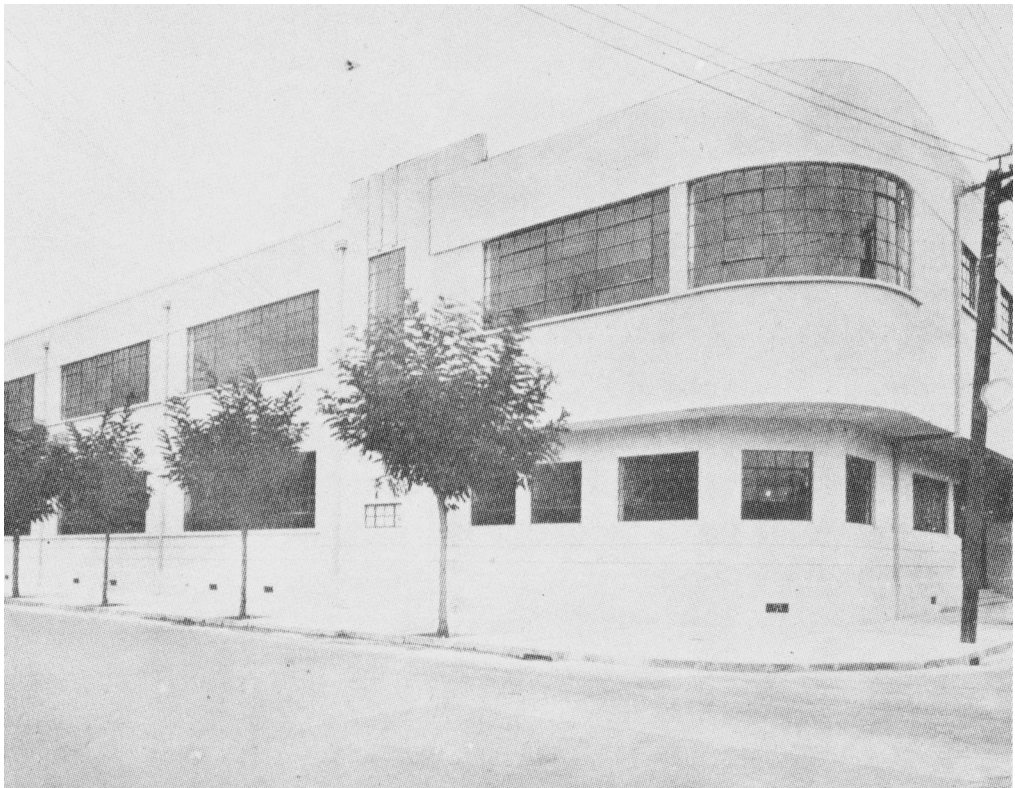
Beyond concerns about a lack of originality, what is relevant in this case is the appropriateness of an aesthetic model for serving the purpose of giving

an image to the idea of the State school in Chile. Aracena even used an abstract school design as the SCEE's logo (Fig. 6). He single-handedly



Figure 7. Girls school in Santiago, School D-24, 1938; the first school built by the SCEE (source: Sociedad Constructora de Establecimientos Educativos, *50 Años de Labor*, 1987).

Figure 8. Girls school in Viña del Mar, School D-316, 1938 (source: Sociedad Constructora de Establecimientos Educativos, *50 Años de Labor*, 1987).



designed every school for a quarter of a century, and in doing so left a trail of uniformity and identification with the ideals promoted by the State.¹⁷ This concentration of the designing task in the hands of two architects was received with suspicion by the professional organisations. The Chilean Architects' Association published several articles in architectural magazines denouncing the fact that all the schools

were designed by Aracena, leaving no scope for other architects who wanted some of the work and raising concerns about the uniformity and lack of innovation in the designs.¹⁸ The fact that the SCEE was, at the same time, a public and a private agency, justified its independence in taking charge of the commissions as 'internal jobs' and avoiding the usual requirements for transparency and open

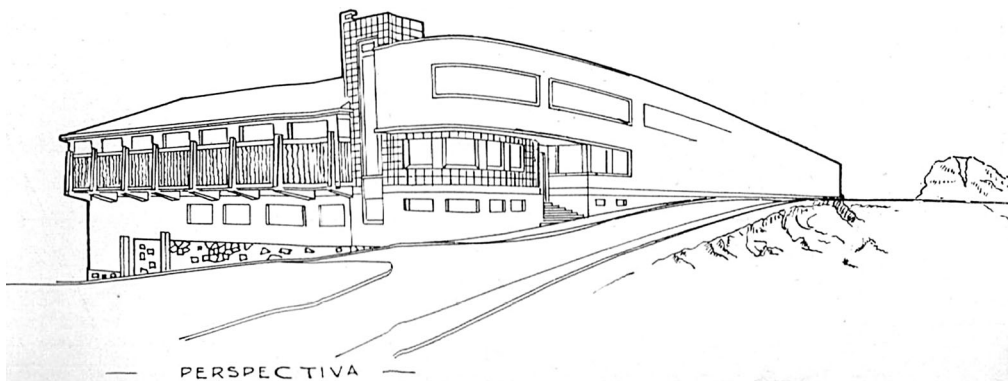


Figure 9. Project for a Boys school in Mesilla Hill, Valparaíso, ca. 1940 (source: 'SCEE: Realizaciones', in *Arquitectura y Construcción*, n°5, pp. 40–43).

selection by competition usual in the public sector. It maintained this approach, ignoring lobbying by other architects, for the rest of its existence, which put it in permanent conflict with the wider profession.

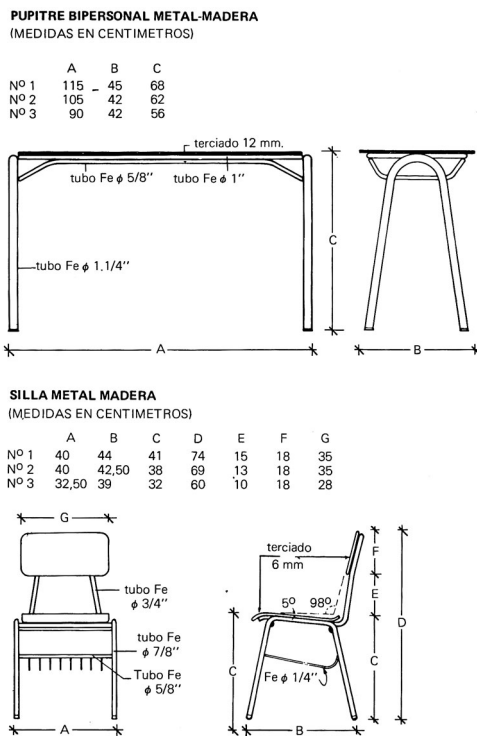
The first two schools were opened in 1938 in Santiago (Fig. 7) and Viña del Mar (Fig. 8). The SCEE worked on a total of 29 buildings during its first year, building some while other projects awaited. Its first decade saw the opening of 189 buildings, with on average thereafter a further 20–30 followed each year. When the SCEE closed its doors, more than 4000 schools had been built.

The typological building designed by Aracena not only represented the idealised form of the modern building, but also the simplicity of the process of adapting the original design to different settings and climates. In Valparaíso, for instance, it had to adapt to the complex topography of hillside sites, while keeping the streamlined aesthetics of the white and straight volumes proposed as the

neutral and theoretical design (Fig. 9). The result of the SCEE's action would be successful only in the possibility of extending a certain standardisation to the design and construction of the hundreds of schools to be built in very different cities. It established a process that incorporated the study, design and construction of the schools, and managed the building sites with its own workers, reducing intermediary costs and promoting the creation of local units that would systematise the work. This meant that the time between making the initial decision to build and opening the finished building would be counted in months rather than in years.

Until the beginning of the 1960s, the construction system was traditional, with conventional brick walls reinforced with concrete columns and beams. Finishing used white stucco, the windows were made of thin strips of rolled steel, with simple glazing, and the doors were standard wooden units available in the market. Furniture was also designed by the SCEE, and the standardisation of tubular steel

Figure 10. Furniture designs by the SCEE's technical department (undated—source: Sociedad Constructora de Establecimientos Educacionales, *50 Años de Labor*, 1987).



chairs and desks with Formica finishing, for instance, allowed the development of a local industry that served the whole system with lower costs and uniformity of measures and materials (Fig. 10).

Current assessment

Today, hundreds of SCEE schools are still in use. Almost all of them have been modified: due to damage by earthquakes or for local needs; reforms in the way State schools are managed and the

decreasing participation of the State in the educational system; the emergence of private schools,¹⁹ the necessity to integrate schools by gender or the need to add classrooms or other facilities according to contemporary requirements.²⁰ Most of them are still relevant urban objects in respect of the contemporary standards of urban development. Others are at the centre of strong campaigns for preservation, such as the so-called 'Concentrated schools' (one for girls, the other for boys) in the city of Talca (Fig. 11).

The building in Talca is located in the central area of the city, two blocks from the main square, but was severely damaged by the 2010 earthquake. The municipality saw this as an opportunity to sell the building to a retail company and to build a new school on the city's periphery. This attempt saw strong opposition from students and their parents, as well as other concerned citizens, who did not want to lose this precious location, particularly since a structural report revealed that it could be easily repaired. Following a process led by the local community, and supported by the Chilean chapter of Docomomo International, the Council for the National Heritage approved its listing and made a recommendation to the Ministry of Education for the building to receive special legal protection. In 2015 a fire almost completely destroyed the building, but despite being left in a semi-derelict state, it still stands, waiting for a restoration project (Fig. 12).

What this case shows is that even if about half of the schools built by the SCEE are nowadays unused or under direct threat to their survival, their serial existence as an architectural *corpus* can be looked

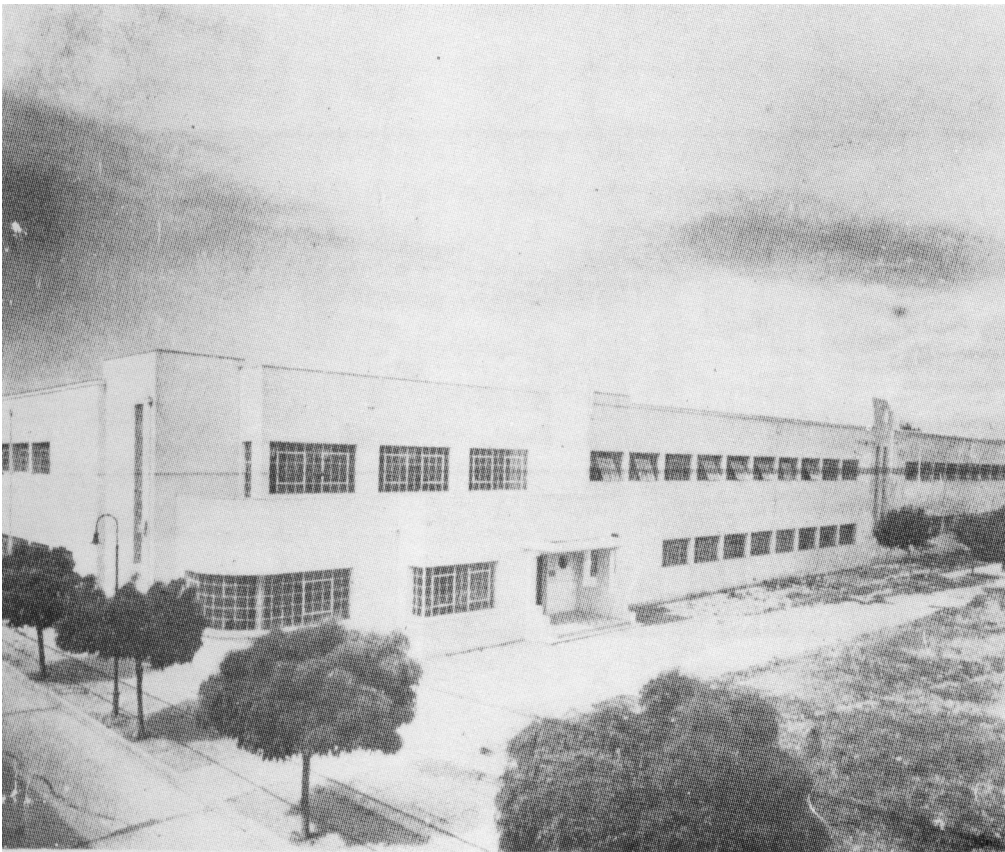


Figure 11. Grouped schools in Talca, called the Escuelas Concentradas, Schools D-147 and D-164, 1939 (source: Viviana Fuentes, *Expediente Técnico para la Declaratoria Patrimonial de las Escuelas Concentradas de Talca*, 2010).

at from two points of view: as single elements with a value on their own, some of them masterpieces of modern architecture; or as a collective achievement that transcends their individual architectural value. Understood in the latter sense, they can be read as an historical or serial cultural asset, identifying them-

selves with the modernising values of the 1930s and 1940s, a sign of a past that represents the configuration of a modern country in search of its own values and the efforts it took to make it happen.

The evaluation of the SCEE's role in that process, regarding the extension of public education and its

Figure 12. Detail of hall in Talca schools, 2010 (source: Viviana Fuentes, Expediente Técnico para la Declaratoria Patrimonial de las Escuelas Concentradas de Talca, 2010).



correlation with a collective mass of buildings, is open to historians. The idea behind a serial production that can be evaluated in terms of the single unit or of the full set is an interesting possibility for reviewing the role of the architect as a player in a broader game, beyond considerations of authorship or personal taste. What is unique in the case of the SCEE is the close identification with José Aracena's designs and an identifiable aesthetic

unity lasting until the 1960s. After the 1960 Valdivia earthquake, the SCEE had to embark on an enormous reconstruction task because it was the only organised public agency that could assume that job. The need to rebuild and repair hundreds of buildings in Chile's southern regions, which had been devastated by the earthquake,²¹ led to the development of standardised systems and diminished Aracena's role.

This development provoked a displacement of the unity of production from the building itself (the one identified with Aracena's original, abstract design) to the institutional operation of the agency as a relevant actor in future years.

Now that education is once again at the centre of cultural and political discussion in Chile, the perspective of this successful endeavour from the past could inspire a vision that projects what architecture is capable of when it is used as an instrument for the common good.

ORCID

Maximiano Atria  <http://orcid.org/0000-0002-4978-2774>

The underlying research materials for this article can be accessed at <http://www.docomomo.cl/documentos-y-publicaciones/> at the Documents section of Docomomo Chile's website, under the entries relating to "Arquitectura escolar pública".

Notes and references

1. Its Spanish name was Sociedad Constructora de Establecimientos Educativos.
2. Due to the dispersal of the SCEE's archives, there is no exhaustive record of its production. This figure is taken from the publication related to the SCEE produced for the Latin American section of Unesco in 1981: *Las construcciones escolares en Chile—1980*.
3. SCEE, *50 Años de Labor 1937–1987* (Santiago, SCEE, 1987).
4. The 1925–1932 period is rather complex. In order to give a succinct presentation, I summarise here the political details of these tumultuous years. Alessandri signed the new 1925 Constitution but, under pressure from his Minister of War, Colonel Carlos Ibáñez, resigned the Presidency two months before the general election that chose his successor, Emiliano Figueroa. Figueroa would also rule under the influence of Ibáñez, who forced his resignation in 1927, starting a personal dictatorship that lasted until his fall in 1931. Ibáñez's successor, Juan Esteban Montero, was overthrown by a military coup which instituted a junta and proclaimed the so-called Socialist Republic of Chile, which lasted only twelve days, until another coup led by Carlos Dávila, himself a member of the junta, who governed for 100 days. Dávila's fall was followed by two short intermediate rules by ministers until a new general election was called for October 1932. The winner was Alessandri again, who would start an orderly process under the 1925 Constitution with elections every six years.
5. During the twentieth century Chile was governed by successive strong presidential administrations called the *decenios* (ten-year periods: two consecutive terms of five years with a mid-term election), which ended with the 1891 Civil War and the suicide of President Balmaceda (1886–1891). After the civil war, a semi-presidential system was established, called *parlamentarismo*, characterised by unstable governments and social and military unrest until the crisis of the 1920s.
6. The War of the Pacific was a conflict between Chile and an alliance of Perú and Bolivia over the Atacama and Tarapacá territories which contained huge reserves of nitrate. The war started in 1879 and ended in 1883 with Chile's victory and an enormous territorial gain with natural nitrate resources which produced a huge development of mining industrialisation and the settlement of hundreds of company towns together with the extension of the railway network. It can be said that the outcome of the war started the modernisation process in Chile, until the world crisis of 1929 and the collapse of the nitrate-based economy due to the development

- of artificial nitrate by Germany after the end of the First World War.
7. A Spanish full-text version of the 1925 Constitution can be found in <http://www.leychile.cl/Navegar?idNorma=131386> [accessed 15/06/17].
 8. The creation of the SCEE as an inspiration derived from the experience of the Sociedad de Instrucción Primaria (SIP) explains the hiring of the two architects that worked as designers of all the architectural production in the first decades, and the similarity between the buildings of the two institutions.
 9. The initial lifetime of 30 years (1937–1967) was extended eventually to 50 (until 1987).
 10. The Sociedad Constructora de Establecimientos Hospitalarios (SCEH) was created in 1944 and was incorporated in a similarly to the SCEE: different types of shares for the State, the public and the office charged with the administration of hospitals. It was closed in 1982.
 11. This group included such people as the future intendent and urban reformer of Santiago in 1872, Benjamín Vicuña Mackenna, the historian and political figure, Miguel Luis Amunátegui, the historian Diego Barros Arana, the politician and diplomat Aniceto Vergara Albano and the future President of Chile, Domingo Santa María (1881–1886).
 12. SCEE, *50 Años de Labor*, *op. cit.*
 13. From 1928 onwards they both signed all their designs, as Mönckeberg & Aracena, Architects.
 14. A. Jünemann, *Arquitectura del Inicio del Modernismo: Oficina de Gustavo Mönckeberg y José Aracena, Arquitectos: La Arquitectura Educacional en Chile 1920–1970* (Santiago, DIPUC 99/09C, 1999; unpublished).
 15. Gustavo Mönckeberg died in 1944 and José Aracena was the sole architect in charge from that year on.
 16. W. J. R. Curtis, *Modern Architecture Since 1900* (London, Phaidon, 1996; 3d ed.), pp. 265–266.
 17. H. Eliash, M. Moreno, *Arquitectura y modernidad en Chile 1925–1965, una realidad múltiple* (Santiago, ARQ, 1989).
 18. See, for instance, the magazine *CA* (edited by the Colegio de Arquitectos de Chile, the Chilean Architects' Association), n°20, p. 45.
 19. After the implementation of a privately-oriented economy in the 1980s, enrolment in public schools has decreased dramatically in Chile. In 2016 the percentage of children attending State schools was 37%, the lowest rate in OECD countries, whose average is 82%. (Source: OECD, *Education at a glance*, 2016; <http://dx.doi.org/10.1787/eag-2016-en>.)
 20. C. Torres, S. Valdivia, M. Atria, *Arquitectura Escolar Pública como Patrimonio Moderno en Chile* (Santiago, FAU, 2015).
 21. The Valdivia Earthquake or 'Great Chilean Earthquake', as it is commonly called, occurred in May, 1960, and is the strongest earthquake ever registered in history, with a 9.4-9.6 magnitude on the Richter scale.