

CLARENCE S. STEIN IN THE OFFICE OF BERTRAM GROSVENOR
GOODHUE: PANAMA-CALIFORNIA EXPOSITION OF 1915 AND
TYRONE, NEW MEXICO

A Thesis

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Master of Arts

by

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ABSTRACT

Clarence S. Stein, renowned architect and city planner, began his career in the office of Bertram G. Goodhue. His first projects included a world exposition in San Diego and a copper-mining town in Tyrone, New Mexico. This work indicates that the Panama California Exposition of 1915 resulted in the commission of the company town in Tyrone, New Mexico and delineates the history behind this occurrence. In addition this work divulges the involvement of Clarence S. Stein on these two projects and suggests their influence, as well as the influence of Goodhue, over Stein's later career.

BIOGRAPHICAL SKETCH

Natalie F. Lord was born in Greeley, Colorado on September 8, 1982. Her passion for architecture began at the age of seven when she would sketch house plans and elevations with her brother Nathan Walter. She attended high school at Union Colony Preparatory School in Greeley, graduating in 2001. She first pursued her interest in architecture at the University of Colorado at Boulder in the Environmental Design Department, later transferring into the NewSchool of Architecture and Design in San Diego, after marrying Andrew T. Lord in 2003, to receive her Bachelor of Architecture in 2006. Lord's interests in historic preservation began during her undergraduate degree where she explored the ideas of restoration and adaptive reuse. To pursue this interest, Lord entered Cornell University in 2006, where she engaged in the pursuit of a M.A. in Historic Preservation Planning.

To my dedicated husband,

Andrew Lord

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INTRODUCTION

Much has been written about the influence of Clarence Samuel Stein on the profession of city planning and civic reform. Stein was a proponent of social reform to improve the plight of the working class. He accomplished his visions in projects including Radburn, Hillside Homes, and Sunnyside Gardens, to name a few. His legacy has touched the life and work of many architectural and planning professionals since. But what of his early career? Kermit Carlyle Parsons edited the best known reference work on Stein – a compilation of his correspondence to friends and family -- *The Writings of Clarence S. Stein*. This book of more than six hundred pages has only twenty five related to Stein's early career after he left the École des Beaux Arts.¹ These first years after his return from Europe remain a mystery in the life of Clarence Stein, yet it is the period that most influenced his later career and the development of his professional beliefs because there is correlation between projects he worked on during this period and his later interests.

Stein's first position upon his return from Europe was in the office of Cram, Goodhue and Ferguson in New York City where he was supervised by Bertram Grosvenor Goodhue. The first two projects that Stein was assigned were the Panama California Exposition of 1915 in San Diego and the copper-mining company town of Tyrone, New Mexico. Further analysis of these early projects raises an interesting question. Did the world's fair lead to a company town, and if yes, how so? The architectural typology is certainly not similar for temporary entertainment-based structures and permanent corporation-owned buildings. The purpose of this thesis is to address the missing piece of Clarence S. Stein's early career. In particular, the author

¹ Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg 1

intends to illustrate the story behind each of these commissions, Goodhue's influence over the design, and any correlations and differences between the two projects.

After studying for several years at the *École des Beaux Arts*, Clarence Stein returned to New York City to pursue a career in an architectural firm. Stein chose not to remain at the *École* long enough to receive a degree from the institution, but felt that he had obtained all the technical skills and instead chose to find work under the direction of a master. The New York branch of the firm Cram, Goodhue and Ferguson was Stein's first interview and it is unknown whether it was in fact his first choice as well. Perhaps this choice was due to the recent acclaim the firm had received for the completion of West Point Academy, or perhaps there was another reason. To fully understand Stein's initial professional endeavors it is useful to understand his own personal history as well as the history of the first firm he worked for, this is done in Chapter 1.

Stein returned to New York at a time of much economic anticipation. The construction of the Panama Canal left much of the western world excited with the prospects of increased commerce between countries as well as increased commerce between the east and west coasts of the United States. Every city along the Atlantic and Pacific Oceans as well as the Gulf Coast was anticipating an economic boom upon the canal's completion. When San Diego officially decided to hold a world's fair to mark the opening of the Canal, fair proponents were soon met with opposition, not only from San Francisco, but also from New Orleans.

During Stein's interview with Bertram Goodhue he mentioned that he had just received the commission for the Panama-California Exposition in San Diego and that Stein's help would be needed on that project. Stein's position quickly progressed from assistant to being placed in charge of the entire layout of the Fair buildings and the design of the California State Building, one of the most prominent structures on the

site. The story of how Goodhue was awarded the commission for the Fair is interesting in that the Fair Committee did not approach Goodhue about the position and he was not asked to participate in a design competition. In fact, an architect for the Fair had already been chosen when Goodhue inquired about the position. Chapter 2 will focus on the history of the Panama California Exposition of 1915, including the means by which Cram, Goodhue, and Ferguson was awarded the commission and Chapter 3 will focus on the design for the Exposition and the events that followed closing day.

Bertram Goodhue was well known for his skills of persuasion and negotiation. They were said to be the primary reason behind him obtaining the commission for the Fair. However, with the widespread attention he gained from the opening of the Panama-California Exposition, his need to negotiate commissions all but disappeared. The New York office became inundated with work, the first of which was the design for a copper mining town for the Phelps Dodge Corporation. As the office was booming with other work and Goodhue was required to travel a great deal, Clarence Stein was put in charge of the design for the company town. Chapter 4 will look at the history of Tyrone and the company that commissioned it, followed by a discussion of the layout and design of the buildings in Chapter 5.

Finally, after the stories behind these two intriguing projects have been told, the commonalities and differences between them are explored to find connections between them. In the 1960s Stein's interest in these early projects resurfaces through his writing and correspondence. As San Diego was preparing a master plan for Balboa Park, Stein wrote to city officials concerned about the future of his early work. Similarly when an article surfaced in *American Institute of Architects Journal* about Tyrone, New Mexico, Stein wrote to the editor concerned that his involvement was unknown. Stein's return to these projects years later signifies their importance to him. The Panama-California Exposition of 1915 was the only world fair that Stein worked

on. However Tyrone was not the only company town project for Stein. In 1951 Stein was asked to consult on the master plan of a mining town at Kitimat, British Columbia. It is the purpose of this thesis to illuminate his involvement with these two projects, which will be discussed in Chapter 6. Additionally, Chapter 6 will briefly look at the mining town of Kitimat to determine Stein's work on Tyrone in anyway influenced the work there.

Methodology

This study is based on primary research from various sources. The author embarked on several research trips to distant as well as local archives, libraries, historical societies and organizations. The first trip to New York City was carried out in late summer of 2007 to collect information from the Avery Archives at Columbia University. Avery Archives has a notable collection on Bertram G. Goodhue, however only a few items were discovered regarding these projects and the years this thesis focuses on. Another trip in November of 2007 was taken to find sources in New Mexico and southern California. In New Mexico, the author collected data at the Silver City Historical Museum and the Silver City Public Library regarding the Tyrone townsite. In addition to research, photographs were taken of the Phelps-Dodge open-pit mine of Tyrone, the current landscape, and the 1960s Tyrone that was constructed closer to Silver City. In San Diego, the author visited the archives at the University of California in San Diego, the San Diego Public Library, and the San Diego Historical Society. These sites had abundant and varied information on the Exposition of 1915, which the author found very useful. In addition to research, a current photographic survey of Balboa Park was conducted.

Additionally, a significant amount of the research was gathered in Kroch Library of Rare Manuscripts at Cornell University where the Clarence S. Stein Papers

reside. Secondary research is based on literature in the Cornell University Libraries; architectural periodicals; and newspapers, scrapbooks and other clippings.

CHAPTER 1

CLARENCE S. STEIN AND BERTRAM G. GOODHUE

After almost four years at the École des Beaux Arts, Clarence Stein chose to approach Bertram Grosvenor Goodhue of the newly famous architecture firm Cram, Goodhue, and Ferguson. Fortuitously the firm had just the year prior opened a branch in New York City with Goodhue in charge of all operations. The reasoning behind Stein's choice to approach Goodhue may have been the recent publicity for the completion of the firm's commission for West Point Academy, but perhaps there was more to his decision. Many sources say that Bertram Goodhue was a very good teacher. Ralph Adams Cram, his partner, stated:

*....not only was Bertram Goodhue a very great genius in his own right as a creative artist, he was also a dynamic source of immense inspiration....*²

In order to better understand Stein's first professional activities his background and education are considered first, followed by the background of the men who established Cram, Goodhue and Ferguson.

Clarence Samuel Stein

Clarence Samuel Stein was born in Rochester, New York on June 19, 1882. The son of Leo and Rose Stein, Clarence was one of five children. In 1890, Leo Stein moved the family to the Chelsea district of New York City where he worked as the vice president of the National Casket Company. Felix Adler, a close friend of the Stein family, was the founder of the Ethical Culture Society which was responsible for establishing the Workingman's School in New York City in 1878. The Workingman's

² Alexander, Hartley Burr; Ralph Adams Cram; George Ellery Hale; Lee Lawrie; C. Howard Walker; Charles Harris Whitaker. *Bertram Grosvenor Goodhue- Architect and Master of Many Arts*. Press of the American Institute of Architects, Inc. New York City. 1925. Pg. 32-33

School was first established as a free kindergarten (later to become a full primary school) for poor children in New York City, but to offset the costs of running the school, they admitted a handful of tuition-paying students. Rose Stein enrolled Clarence and his sister Gertrude in 1890.³ It was here at the school that Stein received his first exposure to working class families.



Figure 1.1 Clarence Samuel Stein circa. 1884.

The Ethical Culture Society believed that social change could only be achieved through education. It was their thought that to improve the plight of the poor it was necessary to educate their youth. At the school arithmetic and geometric concepts were introduced through play, drawing, building blocks, and other hand work.

³ Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg. 1

In 1898, Clarence sustained a head injury that resulted in almost complete loss of his vision. His family withdrew him from the Workingman's School and sent him to Florida where he remained for two years while he regained his vision. After returning to New York City his education took on an alternative form. While other children his age were in high school, Clarence chose to pursue his education through the study of the urban city. He worked with the Elliott's Boys Club in Chelsea, but spent much of his time taking trips with his father to neighborhoods all around New York City.⁴

Clarence went to work in his father's casket factory, but after a few years he became restless. In 1903 he enrolled at Columbia University to study architecture. Without a high school diploma Stein was ineligible to receive a degree from Columbia. Stein had learned of the École des Beaux Arts on a previous trip to Europe and in 1905 his parents allowed him to go to Paris to attempt to gain admission into the École. The entrance examinations proved to be very difficult for Stein and he failed his initial attempt. He then did what most prospective École students did, which was to first join an atelier, a design studio directed by a master, where students tuned their skills of drafting, design, mathematics, etc. in preparation for the entrance exams. After two years of preparation, Stein passed the examination and gained admission into the École. Although Stein received outstanding marks during his study at the École, he chose not to remain there long enough to receive the diploma. In 1911, after a European excursion with his friend Ely Jacques Kahn, Stein decided to return to the United States to start his career.⁵

Although there was little correspondence between Stein and his family at this point, he wrote later about the fears he had of coming back to the United States and

⁴ Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg. 2

⁵ Ibid. Pg 75-76

putting his education to use. In an essay, Stein wrote of the worries he and Ely shared, “What chance have we of getting a job? Our studies at the Beaux Arts might be of help in an architectural office it might, we didn’t know.... We had much competition not only from the many who had studied and traveled as we had, but also from the unemployed draftsmen who had spent years in practical office work.”⁶

Despite his worry, he obtained a job at the first firm with which he interviewed, Cram, Goodhue and Ferguson. Stein was interviewed by Bertram Grosvenor Goodhue. Known best for their Gothic style churches, the firm was established on January 1, 1898. Stein wrote of his interview with Goodhue:

*Mr. Goodhue, after a short period of questioning, looked at my sketch books which I had brought with me. I showed him a book or two of my drawings of English and French medieval churches and towns. He asked “Is that all?” So I brought out my latest book, careful drawings made on my trip with Ely Jacques Kahn through Spain. “That’s most interesting”, Mr. Goodhue said. “I am about to start work on the design of the San Diego World’s Fair,” He proposed to do that in the style of the buildings left by the Spanish conquerors. “See if you can perhaps help on that”. So I entered the architectural office of Bertram Goodhue, and there I stayed for some seven years.*⁷

One would think the fact that Stein never completed any of his educational endeavors would make him a poor candidate for employment. This fact never seemed to bother Goodhue. Bertram Grosvenor Goodhue was avidly opposed to formal education in the discipline of architecture. Goodhue was born on April 28th, 1869 in Pomfret, Connecticut.⁸ America’s first formal program for the study of architecture was established at MIT in 1865 just a few years before his birth.⁹ Despite the growing

⁶ Stein, Clarence S. “Home Again”. c. 1911, Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.

⁷ Ibid.

⁸ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 1

⁹ Cuff, Dana. *Architecture: The Story of a Practice*. The MIT Press. Cambridge, MA. 1991. Pg. 23.

number of formal programs, the battle between those who believed in formal architectural education and those who believed in apprenticeship continued throughout Goodhue's lifetime, with Goodhue promoting the latter. As it played a key role in Goodhue's life, it becomes necessary to explore the history of this argument between apprenticeship and education. The development of formal education programs began with the pressure to establish architecture as a regulated profession.

The *École des Beaux Arts* in Paris was one of the major influences of the professionalization of Architecture in the United States. Richard Morris Hunt attended the *École des Beaux Arts* from 1845-1853 and was the first American to do so. He was soon followed by Henry Hobson Richardson, Charles McKim, John Galen Howard, Louis Sullivan, and other significant figures in American architecture. Upon their return to the United States Richardson and Hunt were the first practitioners to establish American ateliers which set the stage for the movement toward professional education in the United States. The ateliers at the *École* were a unique system of education. They were primarily student-run with the supervision of a *patron* or master. The students would engage in competition projects and the *patron* would then critique the work.¹⁰

It was often very difficult for Americans such as Clarence Stein to gain admission into the *École des Beaux Arts* because the school had set aside only a few spaces for foreign students. Therefore only the students with the highest level of technical and artistic skills were admitted. Clarence Stein struggled to gain entrance into the *École* in part because of the space restrictions, but also because he possessed no high school diploma and could not speak a word of French. Although the *École* had no pre-requisite for these things it did require all students to pass an examination that covered several topics including: mathematics, geometry, drawing, architectural

¹⁰ Cuff, Dana. *Architecture: The Story of a Practice*. The MIT Press. Cambridge, MA. 1991. Pg. 27-28

theory and history, and design.¹¹ These examinations were in French; therefore it became necessary for Stein to learn to master all these techniques in French.

For Stein, entrance into the École would take years. Upon arrival in Paris, he quickly found work with Monsieur Figarol helping him with some drafting. Figarol was an “ancien”, or older student, of the Atelier Lambert, but it seems that Stein was simply filling the position of office assistant at the time.¹² The exposure to this atelier, however initiated his education in the Beaux Arts system despite remaining an outsider of the school. When not working in the office, Stein filled his days by sketching the city and taking French lessons.

Although he was assisting Figarol, Stein was able to prepare with other students for the upcoming École examinations. He found his first design problems very manageable because they were “very similar in character to those I had in college last year...”¹³ However, in contrast to Columbia’s curriculum, the design problems at the atelier were required to be solved at a rapid pace. The first few months the students would have one week to complete each design task, but as it grew closer to the examinations in addition to these tasks the students would be given what was called an *esquisse*. A problem was given and the students had twelve hours to produce a design. This *esquisse* was in the exact format as the examination at the École and they were quite arduous. During his first one, Stein noted that he left his seat only to grab a few bites to eat before pushing on.¹⁴

Despite his preparation for the examination, Stein did not pass his first attempt. Over four hundred students arrived to take the examinations. Each was given a space divided off by wooden partitions and a design problem written in French. Just as at the

¹¹ Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg. 4.

¹² Ibid. Pg 10-11.

¹³ Ibid. Pg 13.

¹⁴ Ibid. Pg 17

preparatory atelier they had twelve hours to complete their designs and turn them in.¹⁵ His failed first attempt was most likely due to the limited amount of space for foreigners and the large number of applicants. Although Stein did not get accepted he immediately commenced preparation for the next examinations.



Figure 1.2 Clarence S. Stein studying in his apartment in Paris circa 1908.

¹⁵ Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg 20-21

Convinced Figarol had something to do with his failure, Stein left the Atelier Lambert to join the atelier of Mr. Umbdenstick, who was popular among American students. After another six months of preparation he attempted the examinations again.¹⁶ A second attempt and failure at the examinations left Stein discouraged but not deterred, his supportive family and his own persistence never faltered. He spent the months after the second examination traveling around Europe and sketching everything he saw. In December 1907, Stein attempted the examination for a third time and finally passed. It is only after his third attempt that the arduous process of the examinations becomes fully illuminated. The examinations at the École were structured so that a student could not continue on to the next test until they had passed the previous. A series of five tests were given: architecture, freehand drawing, modeling, mathematics, and history. After each test the list of students who passed was posted. When Stein took the exams, the top one hundred and fifty moved on to the next test.¹⁷

After the twelve hour architecture exam, the students were given eight hours to reproduce a drawing in freehand. Then came the modeling exam, Stein wrote that these exams were "...not overdiffficult [sic]...but it is hard manual labor, and we are good and tired by four o'clock."¹⁸ After these exams Clarence Stein was ranked twenty-fifth among the foreigners and there was only space for fifteen in the École. He entered the mathematics and history examination nervously, but showed confidence. The mathematics written examination took two hours followed by the written history examination, which had to be carefully put into comprehensible French. The next day they were asked to put their geometry skills to the test by producing a mechanical

¹⁶ Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg. 23

¹⁷ Ibid. Pg. 46

¹⁸ Ibid. Pg. 46

drawing of a building. After these tests came the difficult one, the oral math examination. Stein wrote that the content was not difficult, but forming the answers quickly in front of an amphitheater full of people was trying.¹⁹

A great sense of relief passed over him and the other students as they moved on to the final examination, the oral history exam. This test is somewhat of a relief to the students as Stein writes “This one oral test has always been one of the greatest jokes here. It counts so much less than any of the others that almost no one spends more than a few hours in preparation for it...” Although this was the case for most students, Stein recognized his chance to pull ahead and took special care to prepare for the oral examination. In the end this proved successful because he “...received about as high a mark as is given in the subject.”²⁰ Stein’s perseverance in his last few tests moved him into one of the top fifteen spots, although it is unknown where he actually placed.

After passing the exams each student applied to an atelier associated with the École. Clarence Stein chose the atelier Laloux to study under and after being accepted was initiated by the senior members, like any fraternity organization. Stein’s initiation involved being stripped naked and painted from head to toe. He was then dressed up with a mustache, hat and plaster for his nose and he was made to march through the streets and buy cakes at a bakery. At a café the atelier drank while Stein serenaded them with songs and then he was asked to give a speech. Upon completion of these tasks he was officially initiated into the atelier and dismissed to clean himself up.²¹

¹⁹ Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg. 46-48

²⁰ Ibid. Pg. 46-48

²¹ Ibid. Pg. 49



Figure 1.3 Drawing of Victor Laloux the leader of the atelier Stein joined after gaining admission into the École.

As is similar to apprenticeships, the first few months at the atelier were spent running errands and answering to the senior members. Stein writes "...[the nouveau²²] is required to be at the atelier one day a week for this purpose....The theory that underlies it is not entirely wrong; the new member of the atelier should be kept in contact with the work going on....The 'nouveau' not only gives, he receives quite as much in the way of assistance from the 'anciens.' These constantly criticize his work and show him how....The first law of the atelier is that of mutual assistance". It was more common for new students to learn directly from their peers than from the architect running each atelier. Work in the École ateliers mirrored that of the

²² "nouveau" was the name given to new members of the atelier.

preparatory ateliers in that the projects were numerous and were required to be complete in a short period of time.²³



Figure 1.4 Celebration at the Atelier Laloux. Clarence Stein is the second in from the right on the top row, he is turned to the side.

Stein stayed at the École des Beaux Arts for almost four years. Although he chose not to complete the degree at the École he felt that he was prepared to practice architecture in the United States. In the fall of 1911 he returned to New York City, took up residence with his family in their apartment on the upper West Side, and began working in the New York office of Cram, Goodhue & Ferguson.²⁴ From Stein's account, Goodhue was very interested in the sketches from his travels around Europe.

²³ Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg 51

²⁴ Ibid. Pg. 75

Bertram Grosvenor Goodhue

Bertram Grosvenor Goodhue's early education took place at home. His parents, Charles and Helen, exposed Bertram to music, art, history and architecture. Around the age of ten he converted a room of their house into his studio: painting the windows to look like stained glass and decorating with images and things that inspired him. At the age of eleven, Goodhue attended the Russell's Collegiate and Military Institute in New Haven. It is most likely a result of his experience at Russell's that Goodhue began to develop a disdain for formal education. Up until this time Goodhue had been fortunate enough to study what captured his interests. At Russell's he was required to participate in sports and study subjects that he felt were dull. In 1883 he returned to Pomfret to resume his home schooling.²⁵ His hatred of formal education was possibly amplified by the fact that his parents did not have the money to send him to college. Although his parents only made a meager living, his ancestors were by no means destitute.

Bertram's mother was the sixth generation of her family to live in Pomfret. The family had moved from Cheshire, England in 1688 and joined a group of settlers to purchase 15,000 acres of land in Connecticut. Goodhue's great-grandfather Colonel Thomas Grosvenor constructed the mansion where Bertram would later live with his parents and siblings. Colonel Thomas Grosvenor had fought at Bunker Hill, Princeton, Manmouth, and Trenton during the Revolutionary War and was also involved in the construction of the first fort located at West Point. West Point was significant to Bertram G. Goodhue because it provided him and the firm of Cram, Goodhue and Ferguson wide acclaim.²⁶

²⁵ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 2-13.

²⁶ Alexander, Hartley Burr; Ralph Adams Cram; George Ellery Hale; Lee Lawrie; C. Howard Walker; Charles Harris Whitaker. *Bertram Grosvenor Goodhue- Architect and Master of Many Arts*. Press of the American Institute of Architects, Inc. New York City. 1925. Pg. 11

Bertram's father, Charles Wells Goodhue was the son of a wealthy Vermont banker.²⁷ The Goodhue family came from England in 1635 under the head of William Goodhue, who was successful at creating a great deal of wealth for the family. The family moved to Battleboro, Vermont in the late eighteenth century where the following generations of Goodhue heirs were successful entrepreneurs. Charles Goodhue however had little interest in work and was denied his share of the family estate. In 1857, Charles married Mrs. Elizabeth Eldredge Larned, a widow, and together they had one son, Wells, who was born in 1859. Elizabeth died a short time later and Charles then married her cousin Helen Grosvenor Eldredge. After their union Charles chose to move into the Grosvenor mansion in Pomfret where the two were able to sustain themselves, but by no means in the high style of the time. Charles and Helen had four sons: Bertram Grosvenor, Henry Eldredge, Edward Eldredge, and Donald Mumford (who only lived four months). It seems that Helen's zeal for art and painting was passed on to not only Bertram, but Henry as well, because he started his own stained-glass design and manufacturing business. Edward seems to have lacked the artistic aspirations of his older brothers and instead chose a career as a naval officer.²⁸

Bertram appears to have been sure of his future early on, because at the age of nine he announced his plans to become an architect. Although a year later he was sent to the Russell's Institute, the two years there were not able to squelch his artistic side. Most of his time at Russell's was spent drawing caricatures of his classmates and creating dream cities. Although it was apparent that Bertram Goodhue disliked formal classroom-oriented education he was not adverse to knowledge. He was "an avid

²⁷ Alexander, Hartley Burr; Ralph Adams Cram; George Ellery Hale; Lee Lawrie; C. Howard Walker; Charles Harris Whitaker. *Bertram Grosvenor Goodhue- Architect and Master of Many Arts*. Press of the American Institute of Architects, Inc. New York City. 1925. Pg. 12

²⁸ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. 1983. Cambridge, MA & London, England. Pg. 1.

absorber” and many of the things he learned were self-taught: “he sought and studied, read and remembered” and this tendency continued throughout his lifetime.²⁹

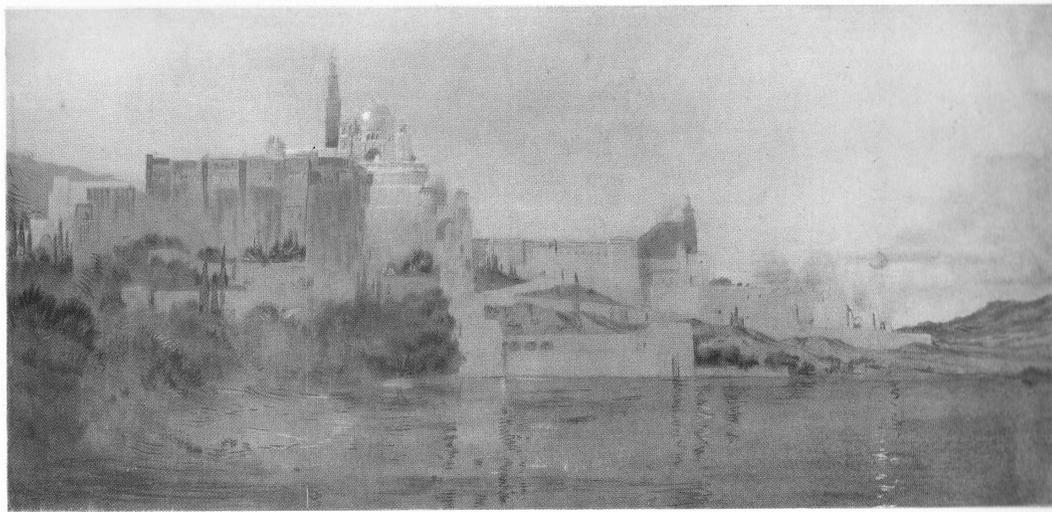


Figure 1.5 Fantasy city drawn by B. G. Goodhue. Although it was conceived prior to both West Point Military and the Panama California Exposition of 1915.

His surroundings in Connecticut also offered significant inspiration to young Bertram. Many of the mansions around Pomfret had been designed by Howard Hoppin, a renowned architect of the time. Goodhue later produced a series of sketches of the buildings which undoubtedly were a study of their intricate massing. When Goodhue returned from Russell’s, he resumed his studies through tutoring and reading in the family library. He loved the outdoors and took great joy in fishing and hunting in the wilderness around his house. Life at the mansion was meager, but intriguing. Goodhue was surrounded by family members that helped expose him to thoughts and ideas not otherwise learned in a country lifestyle. His mother was educated at the Emma Willard School in Troy, New York and offered endless inspiration for Bertram.

²⁹ Alexander, Hartley Burr; Ralph Adams Cram; George Ellery Hale; Lee Lawrie; C. Howard Walker; Charles Harris Whitaker. *Bertram Grosvenor Goodhue- Architect and Master of Many Arts*. Press of the American Institute of Architects, Inc. 1925. New York City. Pg. 12.

Her sister Francis Harriet Eldredge (Aunt Hattie) lived with the family in the mansion and is noted as being an influential to Goodhue as well. Helen's other siblings, Mary Ann and Edward Eldredge were both born in Brazil when their father had run a merchant company and they exposed Bertram to many worldly ideas.³⁰ Although the family had limited means, they were by no means living in a closed-off world common to people of similar resources.

Whether it was due to the lack of his family's funds or the hatred of the education system, Bertram Goodhue soon became aware that his journey to becoming an architect would not be through a formal institution. Therefore, in 1884, he left Connecticut to become an architectural apprentice in New York City in the office of Renwick, Aspinwall & Russell. James Renwick, Jr. was the principal of the firm at the time, and took great pride in the education of his apprentices. The connection between the Goodhue family and the firm of Renwick, Aspinwall & Russell, is not completely clear. However it is thought that General W.H. Russell of New Haven may have known of Goodhue and wrote to the firm recommending Bertram as an apprentice. W.H. Russell, a partner in the firm, wrote a letter to the General discussing Bertram's employment and therefore it has been assumed that the General was responsible for the introduction of the idea (it is unknown how General Russell was acquainted to the Goodhue family). In the letter to the General, Russell reveals that the partners have decided to pay \$5.00 a month for Goodhue's work at the firm. In the letter Russell states "...we do not want to pay him more salary as the other boys would think we had not treated them well...[but] if you consider him really in want I will be glad to help him personally."³¹

³⁰ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 3

³¹ Ibid. Pg. 6

Although his exact tasks in the office are unknown, it was common that an architectural apprentice would start out as an office assistant, responsible for organizing and storing the drawings and running any errands the principals might have needed. Exposure to the drawings would have allowed an apprentice to study the standard methods utilized in the office. After a period of time in this position Goodhue would have moved to a drafting board where he would trace drawings to learn the techniques of drafting. When this work satisfied the principal, Goodhue would have been allowed to work on aspects of the firm's projects such as creating details of ornament or perhaps even creating the perspective drawings of the buildings.³²



Figure 1.6 Bertram Grosvenor Goodhue

³² Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 6

To supplement the education he was gaining at the firm, Goodhue joined a sketch club and it was here that his skills as a delineator began to be realized. Many times the sketch club would gather to produce drawings for theoretical projects. Then when each member finished their design they would present them and receive critique from the other members. Goodhue was a popular member of the club, but he was also extremely outspoken and stubborn. A friend, Charles H. Whitaker recalled that he was ‘very fond of having his own way....[and] he was known as one who seldom agreed with the other fellow....’³³ These traits continued to characterize Goodhue throughout his lifetime and although he was talented, his personality often got in the way of his relationships and made him a difficult colleague.

Traditionally, architectural work is awarded to a firm through reputation and referral. However for a young professional attempting to make a name for himself there was another means of acquiring work: design competitions. These were a way for a client to get a variety of proposals for their project without great cost and they were a way for even a young architect to secure a large project or to gain recognition in the field. Goodhue submitted designs for several competitions, many for ecclesiastical projects. In 1889, Goodhue submitted a design for the Cathedral of Saint John the Divine to be built in New York City. Although he did not win, the competition resulted in the recognition of two significant designs: Goodhue’s and the submission by Cram & Wentworth. This competition may have been where Goodhue first learned of Ralph Adams Cram.³⁴

In 1891, at the age of 22, Goodhue entered and won the competition for the Cathedral of St. Matthews in Dallas, Texas. He traveled to Boston to meet with Cram and Wentworth about the commission. The firm of Cram & Wentworth was renowned

³³ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 7

³⁴ *Ibid.* Pg. 9-10

in the world of cathedral design and as it was Goodhue's first commission he most likely wanted the input of an experienced firm. It is unclear whether Goodhue intended to enter into a partnership with the firm, but after their meeting Cram and Wentworth proposed just that. Goodhue left New York City for Boston in the fall of 1891 and on January 1, 1892 the firm of Cram, Wentworth and Goodhue was officially established.³⁵

Ralph Adams Cram and the office of Cram, Goodhue & Ferguson

Ralph Adams Cram was born in Hampton Falls, New Hampshire on December 16, 1863. Five years Goodhue's senior, Cram was also an eldest son. His father, William Cram, was a Unitarian minister and credited with Cram's early exposure to ecclesiastical endeavors, although the younger Cram later rejected his Unitarian background. Like Goodhue, Cram began life drawing and painting; he decided on a career in architecture after first considering becoming an artist. He became an apprentice in the firm of Rotch & Tilden and worked for them from 1881 to 1886. Following his apprenticeship he held a series of jobs loosely related to architecture. He accepted a handful of interior design commissions, wrote several articles for *The Decorator and Furnisher*, designed wallpapers for George K. Birge, and worked as an art critic for *The Boston Evening Transcript*.³⁶

Cram's early work afforded him the opportunity to travel to Europe several times. During a trip to Rome, Cram attended mass and became inspired by the "Roman Catholic tradition with its social, cultural, and architectural implications".

³⁵ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 12-13

³⁶ *Ibid.* Pg. 13

Although he did not convert to the Roman Catholic faith he did leave the Unitarian church for the Anglo-Catholic faith (also known as the Oxford Movement).³⁷

The firm of Cram & Wentworth was formed in 1889 and the partnership began with a series of small remodeling jobs. Charles Wentworth married a young socialite who was instrumental in securing several commissions for large estates; however, the firm also began exploring other types of projects to bring in revenue. Cram was enthusiastic about pursuing church projects as a result of his new-found faith. They submitted their first design in 1890 for the Church of the Messiah in Boston. Although it was an unsuccessful entry they gained a certain amount of recognition for the project and in 1891 they were hired to design the All Saints', Ashmont in Boston. Goodhue traveled to Boston to discuss St. Matthew's just as the firm was completing the plans for All Saints'. The commission for All Saints' and the Cathedral of St. Matthew, although, due to the lack of financial support from the patrons, the latter was never built, launched the firm into the realm of ecclesiastical architecture and resulted in several subsequent commissions.³⁸

After the death of Charles Wentworth in 1897, Frank William Ferguson, one of the firm's employees, was asked to join the partnership. Ferguson was noted as possessing considerable engineering skills and his talents were seen as a good fit with the other two partners. On January 1, 1898 the firm was renamed Cram, Goodhue & Ferguson. Despite their renown in the realm of religious architecture, the firm designed projects for a plethora of building types and in styles including Spanish and Tudor. It was most likely a result of Goodhue that the Spanish-style was introduced into the office of Cram, Goodhue, & Ferguson. He had traveled to Mexico in 1892 and wrote a book *Mexican Memories*. His book must have caught the eye of Sylvester

³⁷ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 13

³⁸ *Ibid.* Pg. 14

Baxter because in 1899 he was invited to travel to Mexico again to help produce impressions and collect data for Baxter's multi-volume book *Spanish-Colonial Architecture in Mexico* which was published in 1901.³⁹

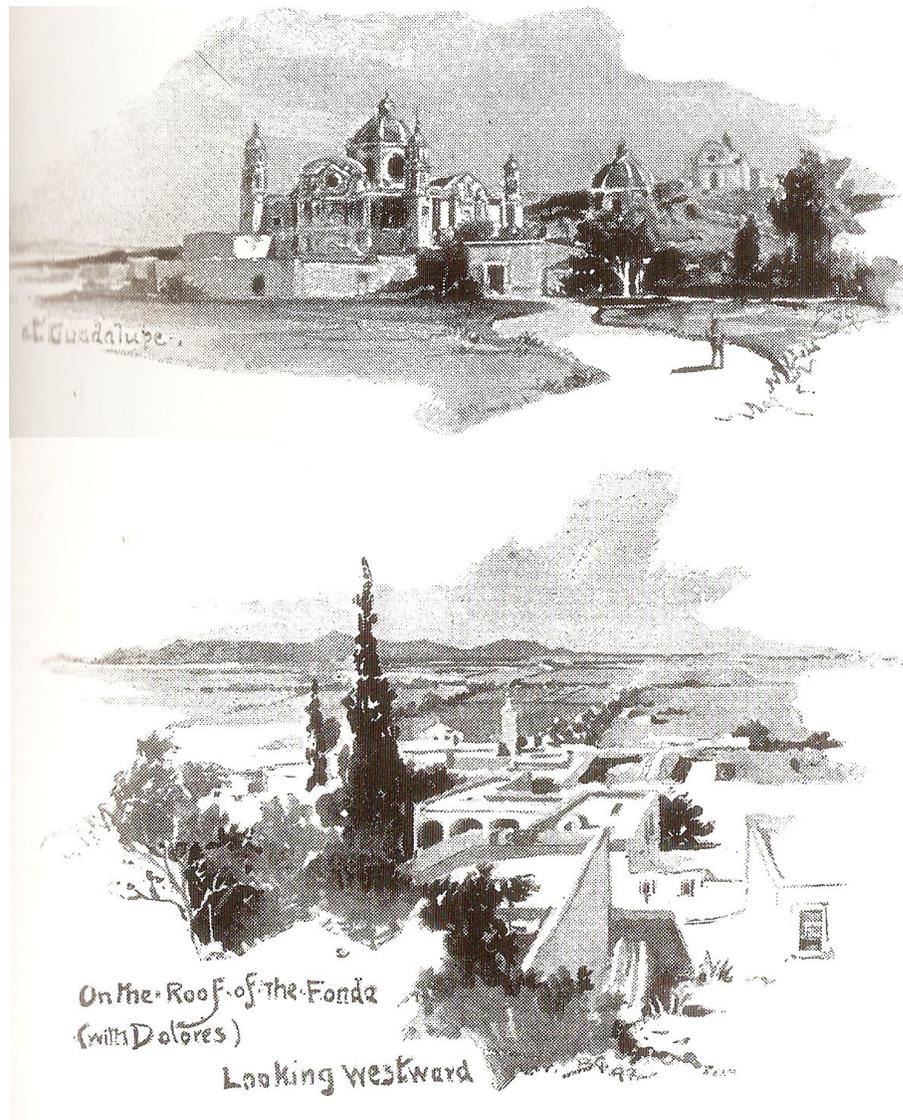


Figure 1.7 Sketches from *Mexican Memories* by B.G. Goodhue.

³⁹ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 25

Since the first years of the firm produced few commissions, the partners turned to their other talents to survive. As a delineator Goodhue was able to translate his talent into other outlets. In Boston, he found work designing books and typography. Many times the commissions they won for churches would take years to materialize so the firm helped to produce booklets to be handed out to patrons to attract financial support. Cram's talents as a writer would capture the guarantor when he spoke of the revitalization of the Christian faith. In addition to these types of publications, Cram and Goodhue produced some personal work. Together they created a magazine called *The Knight-Errant* where they were able to express new and experimental ideas through essays and drawings. Goodhue created the cover art and the intricate lettering at the beginning of Cram's essays.⁴⁰

On April 8, 1902 Bertram Goodhue married Lydia Thompson Bryant and the couple departed on their honeymoon to Spain and Tangier. Upon their return Goodhue began the plans for Sweet Briar College in Virginia. The college was a result of the will of Fletcher Williams, the last heir to the Sweet Briar Plantation in western Virginia. Fletcher had wanted to establish a women's college on her property. Goodhue's trip to study Persian gardens for a client, James Waldron Gillespie, supplied ideas for the college scheme. The designs of his landscapes and his site planning abilities resulted in several later commissions including a plan for Rice University in 1909 and the Panama-California Exposition in 1911.⁴¹ But as previously mentioned it was the commission at West Point that gave the firm of Cram, Goodhue & Ferguson national recognition. Ironically it can be said that this commission also led to the beginning of the end of the partnership between Goodhue, Cram and Ferguson.

⁴⁰ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 27

⁴¹ *Ibid.* Pg. 44-45

An act of Congress on June 28, 1902 set aside \$5,500,000 to improve the United States Military Academy at West Point, New York. The improvements included the construction of several new buildings as well as the rehabilitation of existing buildings and landscapes on the grounds. Of the nine firms that produced

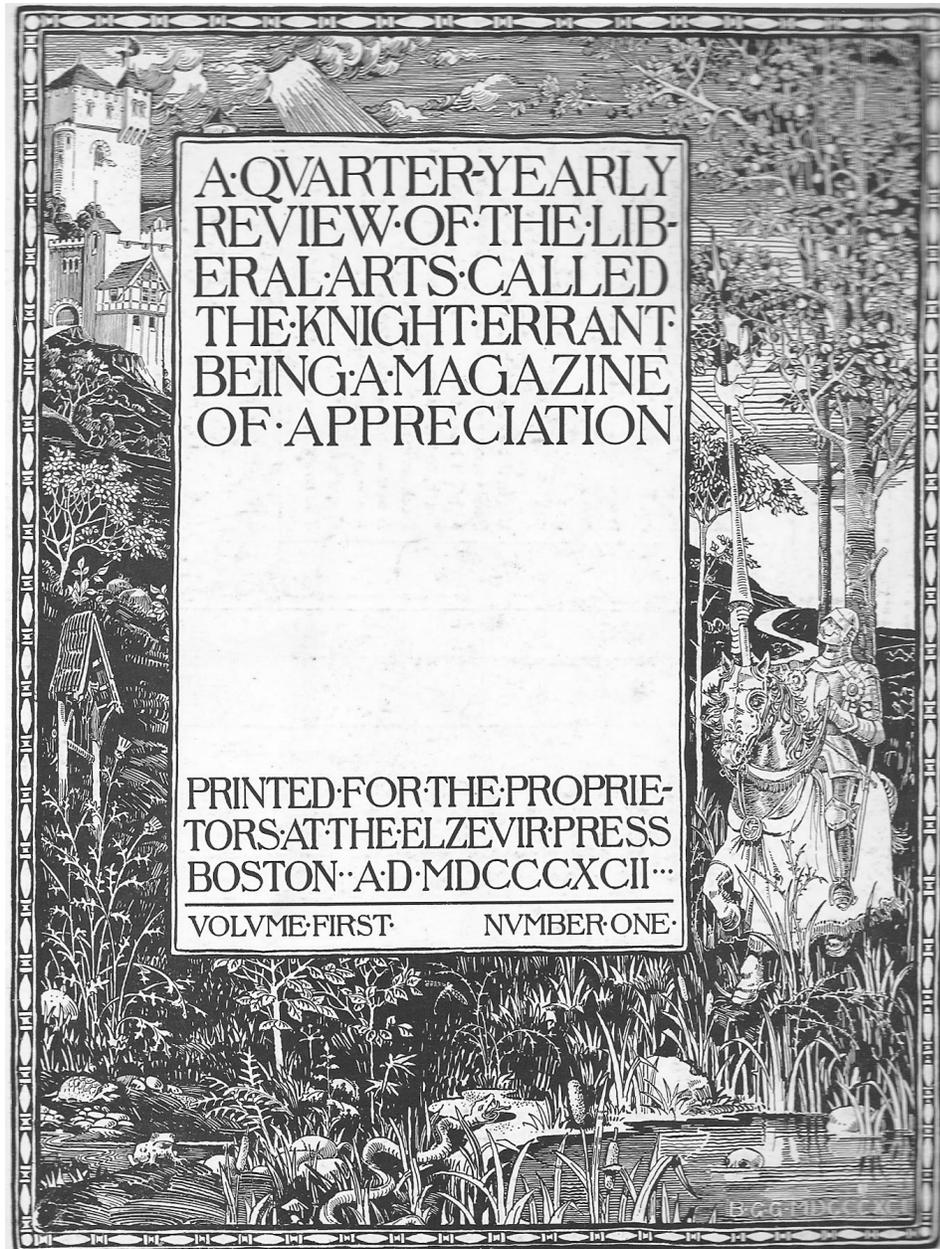


Figure 1.8 Cover of the Knight Errant designed by Bertram G. Goodhue.

designs for the academy, that of Cram, Goodhue & Ferguson was chosen for its monumentality. The design was able to respond to the call for new buildings in a way that tied them to the past engrained in the site. As a requisite of receiving the commission, the firm was required to open an office in New York State where the working drawings would be produced and construction on the site could be managed. As he was already familiar with New York City, it was natural that Goodhue be the one to open a branch of the firm there.⁴² However this separation began to drive a wedge between the members of the firm.



Figure 1.9 Drawing of the front gate of West Point Military Academy by Cram, Goodhue & Ferguson.

⁴² Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 46-48

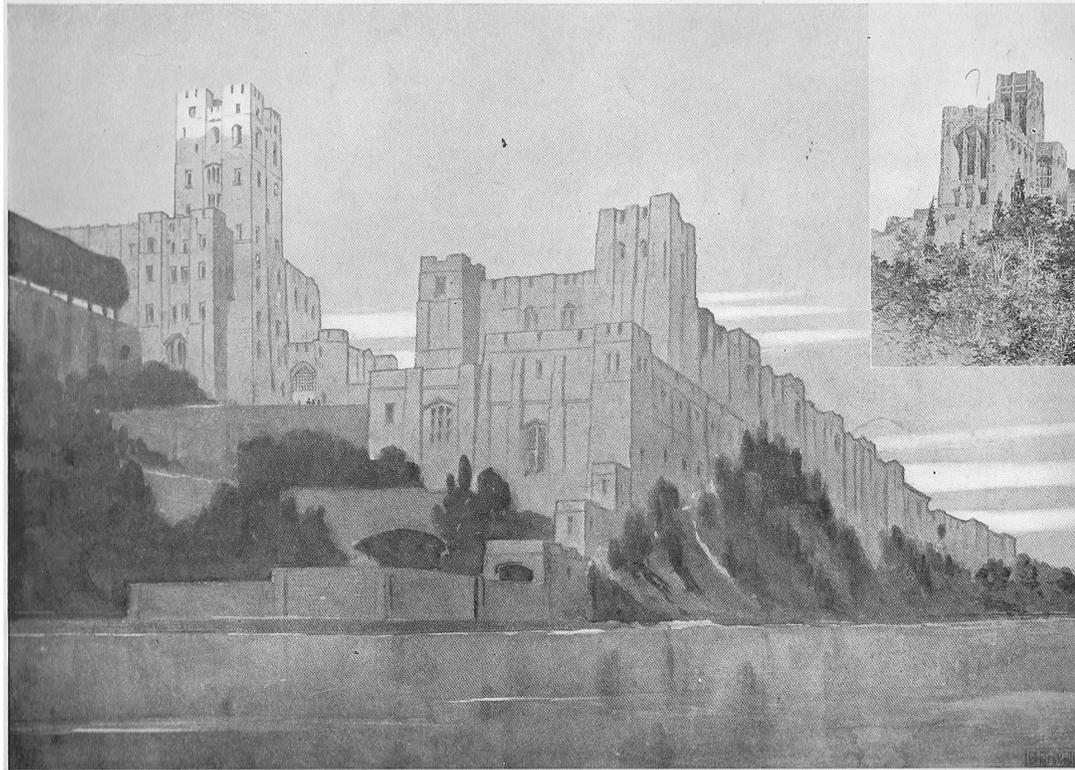


Figure 1.10 Rendering by B.G.Goodhue of West Point Military Academy.

At the completion of the buildings in 1910 the *American Institute of Architects' Journal* published an article about the significance of the site plan and the buildings. Almost immediately commissions from around the country arrived in the office.⁴³ However, as the head of the office in New York City, Goodhue had developed recognition as an individual in the architecture world. He began to revel in the attention he was receiving and began to feel that the structure of the firm as it had been established decades earlier was restricting his own potential. In 1910 he wrote to his partners to ask that the charter be changed so that the firm and its work in New York are recognized as under his individual supervision and that the work in Boston is recognized as under the direction of Cram and Ferguson. He was sure to state that all

⁴³ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 49

profits would be divided equally among the partners. He asked that a statement be added allowing any partner to revoke his interest in the partnership at any time. The partners agreed to Goodhue's revisions and the charter was updated.⁴⁴ But this did not satisfy Goodhue for long.

In 1911 the office was awarded the commission for the Panama-California Exposition in San Diego. As Goodhue was instrumental at winning the commission, all the drawings were produced in the New York office. At the same time in Boston, Cram was asked to become the consulting architect of the Cathedral of Saint John the Divine. However, Cram's choice to accept this position resulted in a great deal of embarrassment for Goodhue in New York City and in turn, pushed Goodhue further away from the partnership. The original design for the cathedral was awarded to Thomas Heins and Grant LaFarge. Unfortunately Heins died before the cathedral could be completed and the Cathedral trustees inexplicably asked LaFarge to step down from the project. LaFarge was highly regarded in the New York City architectural scene and the choice to dismiss him and employ Cram was highly unpopular amongst Goodhue's peers.⁴⁵

At the time Goodhue was being proposed for membership into the Century Association, a professional and distinguished club that he wanted to join very much. Goodhue was concerned that Cram's work on St. John's would in some way jeopardize his admission into the Century Association. At the same time, Goodhue felt Cram was attempting to move into the New York social circuit that he had worked to secure. On July 18, 1913 Goodhue sent a letter stating that he wished to leave the firm. Although their professional relationship had officially ended, the division of the assets of the firm took several years. Ferguson and Cram remained partners and were

⁴⁴ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 120

⁴⁵ *Ibid.* Pg. 121

awarded several significant commissions in the years that followed Goodhue's departure.⁴⁶

Although the commission for the Panama-California Exposition was awarded to the firm of Cram, Goodhue & Ferguson, the firm dissolved during its construction. The recognition received from the opening of the Fair in 1915 was awarded almost exclusively to Bertram Goodhue. The Exposition was significant in that it resulted in several commissions in California and the Southwest. These commissions included a campus for the Throop College of Technology, later renamed the California Institute of Technology, in Pasadena; a company town in Tyrone, New Mexico; and a Marine Corps base and Naval air base in San Diego.⁴⁷

Clarence S. Stein had begun his career in the office of Cram, Goodhue & Ferguson, but because he worked in the New York office his loyalties belonged with Goodhue. As mentioned, when Stein was hired, Goodhue had just received the commission for the Panama-California Exposition. Goodhue asked Stein to develop the overall plan for the Fair and put him in charge of the designs for the California State Building.⁴⁸ As far as Stein was concerned the dissolution of the firm of Cram, Goodhue & Ferguson, had little impact on the organization of the New York office.

By 1914 Goodhue's office employed between twenty and thirty people and was busy preparing work for projects all around the United States. Francis S.L. Mayers, his office manager, was fully successful at managing the everyday aspects of the firm leaving Goodhue to take care of other things. As he was often out of the office traveling and meeting with clients, it was important that the employees could

⁴⁶ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 122-123

⁴⁷ Ibid. Pg. 151-152.

⁴⁸ Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg 76.



Figure 1.11 Images of B.G. Goodhue New York Office. The upper photograph is the drafting room with employees hard at work. The lower photograph is the highly ornamental “Receiving Room” where guests would wait to meet with Goodhue and his associates.

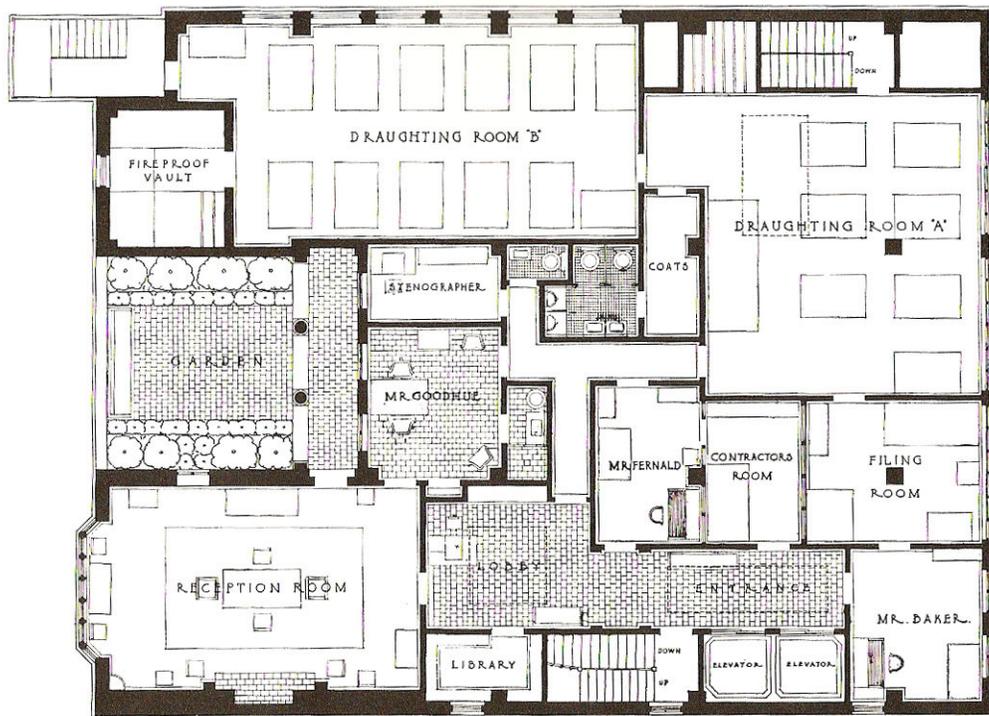


Figure 1.12 Plan of the New York Office of B.G. Goodhue.



Figure 1.13 Christmas Eve celebration in the Goodhue office. This was one of the many theatrical celebrations in the office. B.G. Goodhue is fourth from the right.

maintain things on their own. This is not to say that Goodhue was fully removed from his projects; he spent mornings in the office moving through the drafting room and critiquing work. Although Goodhue continued to sketch his ideas in notebooks, he lacked the time to sit at the drafting table⁴⁹, so that many times these sketches were given to the draftsmen in the office. Stein himself wrote that Goodhue “was a sensible boss. He gave his first draftsman just as much responsibility as they were capable of carrying.”⁵⁰ This was certainly the case with Clarence Stein because he quickly rose through the ranks of the firm and was given the title of “chief designer”.⁵¹



Figure 1.14 Clarence S. Stein in the office of Bertram G. Goodhue circa 1911.

⁴⁹ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 171.

⁵⁰ Stein, Clarence S. “Home Again”. c. 1911, Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.

⁵¹ Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg 76.

The working environment of the firm was very energetic and engaging. Goodhue's office was structured very similarly to the ateliers in the École des Beaux Arts.⁵² The fact that Clarence Stein was promoted quickly to the position of head draftsman and the fact that Goodhue appointed him on several of his most significant projects, demonstrates that Goodhue was confident in Stein's abilities.⁵³

⁵² Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 171.

⁵³ *Ibid.* Pg. 171

CHAPTER 2

THE HISTORY OF THE PANAMA-CALIFORNIA EXPOSITION 1915

The Panama Canal was completed in 1915 at a cost of almost half a billion dollars after years of arduous work. Governments hoped that through the exchange of commerce, peace would be found between nations. Each coastal city in the United States from Washington, D.C. to Washington State were anticipating the benefits of the canal and preparing for its completion. An Exposition was planned to celebrate this great feat of engineering, but the story of this event and the city that was to host it, is very complex.⁵⁴

San Diego, California, the southernmost city on the west coast of the United States, was confident that the opening of the Panama Canal would put it on the map. With an impressive bay and beautiful scenery, it was bound to attract merchants and sightseers from around the world. The Panama-California Exposition opened on January 1, 1915. It was intended to only last one year, but the officials were encouraged by the amount of attendants who came first year and it was decided that the exposition should continue through 1916. As is the case for exposition architecture, most of the buildings at the San Diego Fair were made of temporary construction. After the closing of the Fair in January of 1917, the citizens of San Diego quickly moved into the temporary buildings to protect them from demolition. This was quite surprising to the designers of the exposition since the temporary structures were not meant to be permanently occupied. The impact of the architecture of the Panama-California Exposition of 1915 was so great that the site and buildings remain the highlight of San Diego to this day. What was so special about this

⁵⁴ Benton, F. Weber. *Semi-Tropic California*. 1915. (Memorial to Woodrow Wilson). Department of Special Collections. University of California San Diego. Accessed 21 November 2007.

exposition? The story starts with the early efforts of the citizens of San Diego to establish a city park.

Early History of San Diego

The history of most American cities begins with a story of conquest; the history of San Diego is no different. The early native inhabitants of the area were the Kumeyaay, or as the Spaniards called them, Digeños. The Spanish conquistador, Juan Rodriguez Cabrillo (for whom Cabrillo Canyon and the main bridge of the exposition was named) entered San Diego Bay on September 12, 1542. Cabrillo anchored his ships near what is now Point Loma and proceeded to chart the area. He named the bay San Miguel Archangel and claimed it and all of Alta California in the name of Spain. Cabrillo and his crew were the first expedition to venture north of the Isla de los Cedros in Baja California and they brought back the first maps of the area. The expedition also brought back the first knowledge of the native tribes inhabiting the area. In Cabrillo's travel journal it describes a group of natives that his landing crew observed as they made their way to the shore in search of provisions.⁵⁵

As the crew approached the shoreline they saw canoes and many natives near the shore watching them. However, when they reached the shore, all but three natives had fled. The Spaniards greeted the natives and gave them gifts. This first contact was considered a success. However, when the crews returned that evening several members of the tribe waited with bows and arrows and wounded three of Cabrillo's men. Cabrillo advised his crew not to retaliate against the natives and instead suggested that their trust must be won with gifts and the display of holy faith.⁵⁶

⁵⁵ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 2-5.

⁵⁶ Ibid. Pg. 5.



Figure 2.1 View of Coronado Island and San Diego from Point Loma. Although this photograph was taken in 1892 it gives an idea of what Cabrillo and his party saw when they arrived in San Diego.

Cabrillo and his party were the last Spaniards to touch the land until in 1602 Sebastián Vizcaíno landed in the area. Vizcaíno's party arrived on November 10 which happened to be near the Spanish holiday of San Diego de Alcalá and therefore he renamed the area San Diego de Alcalá.⁵⁷ The Spanish monarchy had asked Vizcaíno, a merchant and mariner, to take a second look at the area that Cabrillo had discovered and advise them on its prospects as a pearl-fishing outpost. On the second day a party went to shore in search of food and water. Much to their surprise they were greeted by more than one hundred armed natives, most likely from the Kumeyaay tribe. The group was yelling and flailing their arms most likely to signal that the Spaniards should leave. Vizcaíno, Admiral Toríbio Gomez de Corvan, and Father Antonio de la Ascensión made contact with a group of two men and two women. "Vizcaíno embraced the men and gave them gifts". The group of natives then approached the Spaniards to greet them. After that point Vizcaíno's stay remained uneventful and on November 20, 1602 the group left. Vizcaíno reported back to the

⁵⁷ Hendrickson, Nancy. *San Diego Then and Now*. Thunder Bay Press. San Diego. 2003. Pg 5.

crown that the bay would be perfect for an outpost and that the natives were peaceful, believing that they would be willing to coexist with a Spanish colony.⁵⁸

Unfortunately Vizcaíno's perceptions of the natives were incorrect because when Spanish colonization of the region commenced the Kumeyaay tribes turned out to be "some of the most militant in the Californias". More than 150 years passed without much activity in the region until in 1767, José de Gálvez, the inspector general of New Spain, ordered that a series of missions should be established in Alta California. Under the leadership of Juan Pérez, an expedition landed in San Diego Bay on April 30, 1769 where they awaited the arrival of two land parties under the command of Captain Fernando de Rivera y Moncada and Gaspar de Portolá. Coming with the land party was a Franciscan priest, Junípero Serra.⁵⁹

Of Pérez's ninety men, only sixteen were healthy enough to land on shore. Scurvy had overtaken the crew and Pérez chose to keep the sick men on board for their protection. When the land parties arrived they expected to see a mission and a presidio completed, but due to the sick crew and the resistance they were facing from the natives, the only thing they accomplished on land was to create a cemetery and a camp for the sick and wounded sailors. After the expeditions united, the construction of the mission and presidio began. Progress was slow due to repeated attacks by natives.⁶⁰

In the last half of the eighteenth century the mission at San Diego experienced continuous conflict between the Spanish soldiers and the natives. Fray Luís Jayme, the priest placed in the San Diego mission, wrote often to Junípero Serra about the conflict and difficulties he faced at converting the native tribes. One of the largest problems

⁵⁸ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 6

⁵⁹ Ibid. Pg. 7

⁶⁰ Ibid. Pg. 7

with his progress was that the Spanish military, under the command of Lieutenant Pedro Fages, would raid native villages stealing livestock and raping the women. These transgressions ignited a great deal of hatred between the natives and the Spaniards. On November 5, 1775 nearly eight hundred native warriors attacked the mission and presidio hoping to force the Spaniards out of San Diego. Despite his attempts to stop them, the warriors killed Father Jayme.⁶¹

When news of the attack reached Junípero Serra he wrote to Viceroy Antonio Bucareli urging him to place more soldiers in San Diego but to refrain from retaliating against the natives. He recommended that the natives be forgiven for their transgressions so as to not lose all efforts at converting the “heathens” to Catholicism. It is thought that the native converts to the mission were often a test for the Spaniards. The tribe liked to “overwhelm the friars with converts to test the meager resources of the Franciscans and gain inside knowledge of the mission compound”. It is thought that this might have occurred before the attack so the tribes could gain access into the compounds. Despite the attacks, Franciscan efforts continued undeterred.⁶²

After the 1790s, agriculture in San Diego prospered and the Spanish military overpowered the Kumeyaays. When the Mexican War for Independence began the mission had just completed a renovation and expansion of its facilities. In the years following the beginning of the war, San Diego remained neutral. There was no economic prosperity or decline. In 1821 Mexico declared independence from Spain and San Diego fell under the reign of Mexico.⁶³ During this time the Mission at San Diego fell into disrepair due to the change of the economy from mission to ranch production. In 1824, Mexico passed legislation allowing both citizens and foreign

⁶¹ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 8

⁶² *Ibid.* Pg. 9

⁶³ Hendrickson, Nancy. *San Diego Then and Now*. Thunder Bay Press, 2003. San Diego. Pg. 5

nationals in Alta California to own land. Officials in Mexico believed that land ownership would encourage natives to integrate with the Spanish and Mexican settlers in the area. This quest for social unity continued even when Governor of California José María Echeandía called for the secularization of the missions. This transition was continued with Governor José Figueroa who issued the Secularization Act of 1833.⁶⁴



Figure 2.2 The Mission San Diego de Alcalá photographed here in the 1880s. It has clearly fallen into disrepair at this point.

The Secularization Act removed mission domination over the “land, labor and production.” Although this legislation appeared to give power to the people rather than the church, in reality it redistributed the wealth to public officials and military commanders and removed the authority the Catholic Church had strived to establish. Mexico’s reign was unsuccessful at improving the social relationships of San Diego’s

⁶⁴ Bokovoy, Matthew F. *The San Diego World’s Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 10

residents.⁶⁵ Racial tensions remained high, but it would not be long until Mexico was pushed out of what is now the American Southwest.

Under President James K. Polk, the U.S. declared war on Mexico in the 1846 after a small conflict with Mexican troops in Texas. The Mexican-American War ended with the signing of the Treaty of Guadalupe Hidalgo on February 2, 1848. Under this treaty most of California, New Mexico, and Arizona became part of the United States. The areas not obtained with the Treaty of Guadalupe Hidalgo were purchased in 1853 in what is known as the Gadsden Purchase.⁶⁶ The transfer of San Diego from Mexico to the United States resulted in the loss of almost half of the population and the number of residents remained low until Alonzo Horton, a wealthy merchant from San Francisco, came in 1867 and transformed the town forever.⁶⁷

Alonzo Horton moved to California for the same reason many residents of the northeastern United States came, for his health. Residing in San Francisco, he made his fortune in the ice business. He would travel up to the mountain regions in the Sierras and cut ice to be shipped back to the coastal areas. On one trip in April of 1867, Horton landed in San Diego. The center of San Diego at the time was located a few miles north of its current location, in what is called “Old Town”. The land which is now downtown was mostly swamps and slums in 1867 but, realizing its potential, Horton purchased it for less than thirty cents an acre. He promptly returned to San Francisco to inform his wife and friends that he was going to sell his stocks and build a city in San Diego. Naturally everyone thought he had gone mad, but Horton returned and began building his city.⁶⁸

⁶⁵ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 11

⁶⁶ Murphy, Dan. *New Mexico: The Distant Land*. Windsor Publications, Inc. 1985. Pg. 71-73

⁶⁷ Hendrickson, Nancy. *San Diego Then and Now*. Thunder Bay Press. San Diego. 2003. Pg. 5.

⁶⁸ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. San Diego. 1988. Pg. 35.

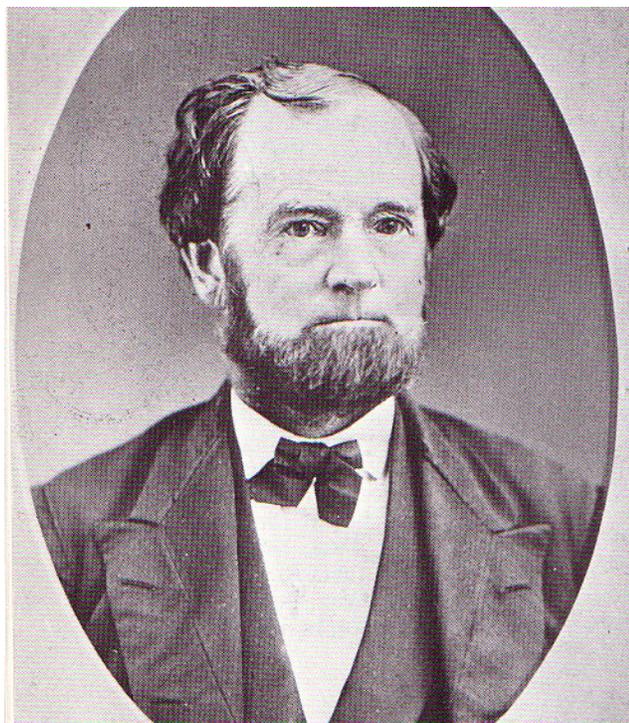


Figure 2.3 Alonzo Horton c. 1867.



Figure 2.4 Downtown San Diego in the 1880s. This view looks east along what is now Broadway with Horton Plaza on the right.

The first municipal government in San Diego was established in 1834 when the area was the property of Mexico. A strong local government has existed ever since. By 1867 this municipal government took the form of the Board of Trustees and in that year Alonzo Horton asked the Board to set aside 320 acres to establish a city park. The president of the Board, J.S. Mannassee, and Board members, Thomas B. Bush and Ephraim W. Morse, immediately approved the proposal. Horton and Morse were charged with locating the potential park. Land at the time was selling for as little as seven cents per acre in some areas of San Diego. When looking at the minimal costs and the fact that 320 acres would in no way be adequate as a city park, Horton and Morse set out to choose a much larger piece of land. On May 26, 1868 the Board approved Morse's request for a 1,400 acre park to be established just outside of the new downtown.⁶⁹

The park in San Diego was the second large park to be dedicated in the nation (the first was Central Park in New York City). The area chosen was almost perfectly square apart from the southwest corner of the park that had already been developed. The only unfortunate aspect of the site was that three significant canyons divided the land into several mesas. As the development of the park progressed during the years after its dedication, these natural dividing lines made creating one cohesive park almost impossible. It should be noted that at the time of its dedication, the park was nameless. In fact it was not until years later that the name Balboa Park was chosen.⁷⁰

Although the establishment of the park was quick and met few hiccups along the way, its development took a very long time. A water company drilled a well in Palm Canyon in 1873; a halfway house took up residence in the park in 1882, but was later moved; and a tree planting club was established in 1889. Perhaps as a result of

⁶⁹ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. San Diego. 1988. Pg. 35

⁷⁰ Ibid. Pg. 35



Figure 2.5 Aerial view of Balboa Park. Although this image was taken in the late 20th Century the outline of the 1,400 acre park stands out. Despite a few non-public uses within the park boundaries, the majority of the original acreage has been retained.

the tree club, the citizens' interest in the future of the park came to the forefront in 1889. It was in this year that the planting of Balboa Park began much to the credit of Miss Kate Sessions.⁷¹

Kate O. Sessions has been called the "Mother of Balboa Park". She was born in San Francisco on November 8, 1857 and graduated from the University of California at Berkeley in 1881 with a degree in Natural Sciences. After graduating from Berkeley, Sessions enrolled in business school in San Francisco where she

⁷¹ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. San Diego. 1988. Pg. 35

became close friends with Miss Rosa Smith. Smith's father was on the school board in San Diego and wrote to his daughter with the hope of finding a high school teacher. Although Sessions had no experience, she took the job and became vice-principal of Old Russ School. She taught for a year and a half before a health issue prevented her from continuing. In 1885 she started a nursery on the newly developed island of Coronado.⁷²



Figure 2.6 Katie O. Sessions. Photograph taken around 1900.

⁷² Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. San Diego. 1988. Pg. 35.



Figure 2.7 Coronado Island in the foreground and downtown San Diego across the bay.

Coronado Island was a piece of land across San Diego Bay. Originally it was simply referred to as the Island of San Diego. It was granted to Don Pedro Carrillo presumably for his military service, who sold it in 1846 to two Americans for \$1,000. After a period of time, the island was purchased by the Coronado Beach Company who renamed it in honor of a cluster of islands just south of San Diego. In the 1880s the land was cleared and divided into lots for sale. Transportation to and from the island was provided by a ferryboat service making it inconvenient for most at the time.⁷³

⁷³ Hendrickson, Nancy. *San Diego Then and Now*. Thunder Bay Press. San Diego. 2003. Pg 38.

Less than a decade later the price of property on Coronado skyrocketed and Kate Sessions could no longer afford the lease. She petitioned the City Council for permission to move her nursery into the park. In exchange for the land she would plant 100 trees in the park each year, as well as provide the city with 300 trees to be planted wherever they wished.⁷⁴

The trees that came from Miss Sessions' nursery were started from seedlings and came from a multitude of locations including: Australia, Asia, South America, Spain, Baja California, and the eastern United States. Miss Sessions had a contagious affect on the people of San Diego. Her interest in horticulture enlightened citizens and inspired a general interest in improving the appearance of the city. In 1904 the park development expanded into the area of the nursery and Kate had to relocate once again.⁷⁵

The early landscape of the park was nothing like how it would appear during the 1915 Fair. The dry desert mesas were scattered with only cactus and chaparral for vegetation. The need for water was a huge issue for the park and San Diego as a whole. By the 1890s many of the trees planted in these early efforts were dying in the arid earth. In response, the San Diego Flume Company (water company) volunteered to ship water onto the site at no expense. In 1903 a water system, extensive plantings, and a grading plan were initiated.⁷⁶

⁷⁴ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. San Diego. 1988. Pg. 35.

⁷⁵ Ibid. Pg. 35

⁷⁶ Ibid. Pg. 35



Figure 2.8 This is the natural landscape of Balboa Park prior to any planting efforts by Kate Sessions, the City, or the Exposition. It is hard to imagine this dry, desert land transformed into a fair ground full of horticultural specimens from around the world.

As the city of San Diego developed, there was increasing interest in connecting to its history. Beginning in the 1890s, this effort to interpret and create a local history began to assume fantasy like character.⁷⁷ White Californians began to interpret the legacy of the native tribes, Spaniards and Mexicans with an idealistic romanticism and were not based on historical reality.⁷⁸ This invention of a romantic history was the basis for later city celebrations, including the Panama-California Exposition of 1915.

⁷⁷ McWilliams, Carey. *North from Mexico: The Spanish-Speaking People of the United States*. J. B Lippincott. 1949. Philadelphia. As referenced in: Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. xv

⁷⁸ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. xv

The celebration of Spanish colonial heritage in San Diego began in 1892 with the “Cabrillo Celebration”. The event promoted San Diego after an economic recession that occurred between the years 1888 and 1889. The celebration commemorated Cabrillo’s discovery of San Diego 350 years before and introduced the idea of a common history uniting citizens of American, Spanish and Mexican heritage.⁷⁹

In 1881 the Atchison, Topeka, and Santa Fe (AT & SF) Railroad announced that it would make a transcontinental terminal in National City, just a few miles south of downtown San Diego. The prospect of this economic hub resulted in a real-estate boom in the area. The threat of another railroad making the transcontinental connection first made the AT & SF nervous. Instead of opening the line south of San Diego, the AT & SF made the connection at their established hub in Los Angeles.⁸⁰ The loss of this economic prospect for San Diego citizens was disappointing, although the AT & SF eventually built a line from downtown up to the transcontinental line at San Bernadino. Inflation and nation-wide labor unrest resulted in an economic bust in 1888 propelling the United States into a depression. The loss of economic vitality in San Diego resulted in a mass exodus from the city. From 1887 to 1890 the city declined in population from forty thousand residents to sixteen thousand.⁸¹ It was businessmen from outside the city that brought it out of recession and restored economic stability.

In the late 1890s, San Francisco scion John D. Spreckels came to San Diego and invested his fortune in the city.⁸² John D. Spreckels was the son of Claus

⁷⁹ Bokovoy, Matthew F. *The San Diego World’s Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 13

⁸⁰ Bryant, Keith L. *History of the Atchison, Topeka and Santa Fe Railway*. Macmillan Publishing Co. New York. 1974. Pg. 95-96.

⁸¹ Bokovoy, Matthew F. *The San Diego World’s Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 19

⁸² *Ibid.* Pg. 19

Spreckels, “the Sugar King”. Claus was born in Lamstedt, Germany in 1828, the eldest of six children in an extremely impoverished family. In order to survive, the Spreckels’ children were sent away to work for their room and board on nearby farms. When he turned 18, Claus immigrated to Charleston, South Carolina on borrowed money. He began working in a grocery store, eventually purchasing the business six years later.⁸³ Claus married his childhood love, Anna, and in 1853 John D. was born.⁸⁴

In 1856 Claus moved the family to San Francisco where he started a grocery store and a brewery. Nearly a decade later, Claus and his family returned to Germany to learn the techniques of sugar production and refining. John D. having completed some schooling in San Francisco entered a school in Germany for a short period, until the family returned to California to begin their sugar business. Claus’ business boomed and he built his own sugarcane plantation on the island of Maui which ultimately reached 55,000 acres; his innovation turned the dry low lands of Maui into acres of harvestable fields.⁸⁵ After completing school, John D. worked for his father for several years. In 1880 he started his own business, the John D. Spreckels & Brothers Shipping Company.⁸⁶

John D. sailed in to San Diego in 1887 and was instantly captivated by the booming metropolis; he immediately began to invest in local businesses and enterprises. Along with Elisha S. Babcock, Spreckels commissioned the Hotel Del Coronado, and in 1901 he initiated the resurrection of the San Diego street car system which had all but disappeared.⁸⁷ In addition to the street car system, Spreckels, along

⁸³ Barr, E.S. “John D’s Roots: a historical perspective”. *In Focus*. (1996, Summer Edition) Pg. 8-9.

⁸⁴ Crawford, R. *Spreckels*. Written for a 1982 Showcase. San Diego Historical Society Research Library.

⁸⁵ Barr, E.S. “John D’s Roots: a historical perspective”. *In Focus*. (1996, Summer Edition) Pg. 8-9.

⁸⁶ Crawford, R. *Spreckels*. Written for a 1982 Showcase. San Diego Historical Society Research Library.

⁸⁷ *Ibid*.

with several other businessmen, invested in a rail link across the southern United States. The hope was that this link would result in the industrialization of San Diego.⁸⁸

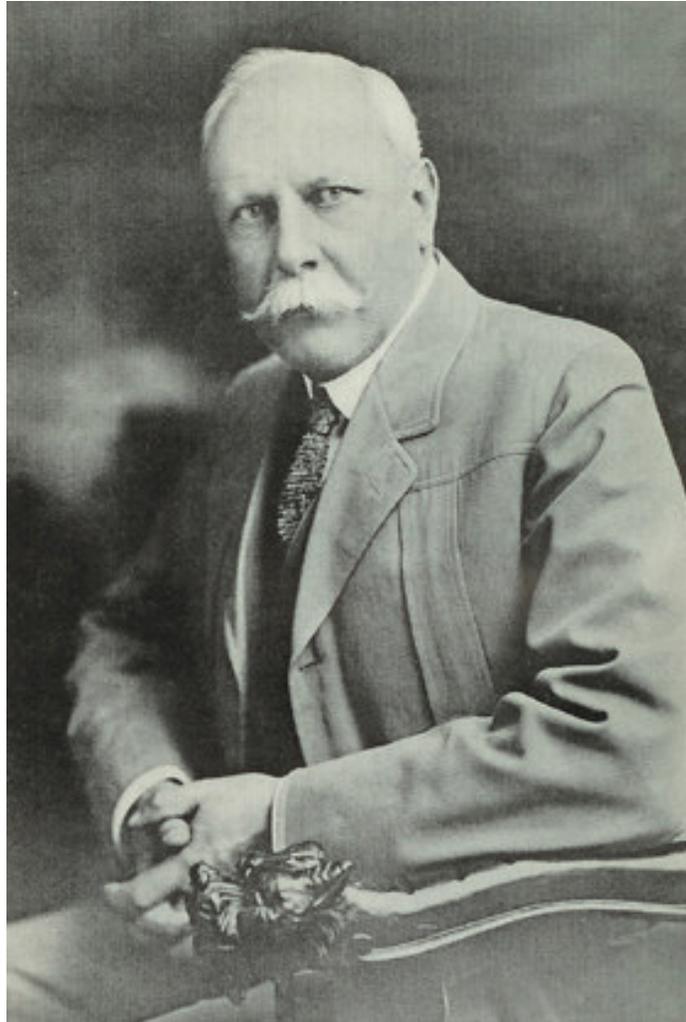


Figure 2.9 John D. Spreckels. One of the early investors in San Diego and a major benefactor to the Panama California Exposition of 1915.

⁸⁸ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 19

With the return of economic stability, thanks to Spreckels' and similar investments in the city, San Diego slowly revived itself and resumed development. During the economic hardship, local interest in the city park was minimal. After the depression ended, the push towards investment in a city recreational area was revived. On March 17, 1904, the San Diego public schools organized a city-wide arbor day. School children planted thousands of seedlings in the park. This massive planting resulted in the mature cypress and pine trees that remain in the park to the present day.⁸⁹

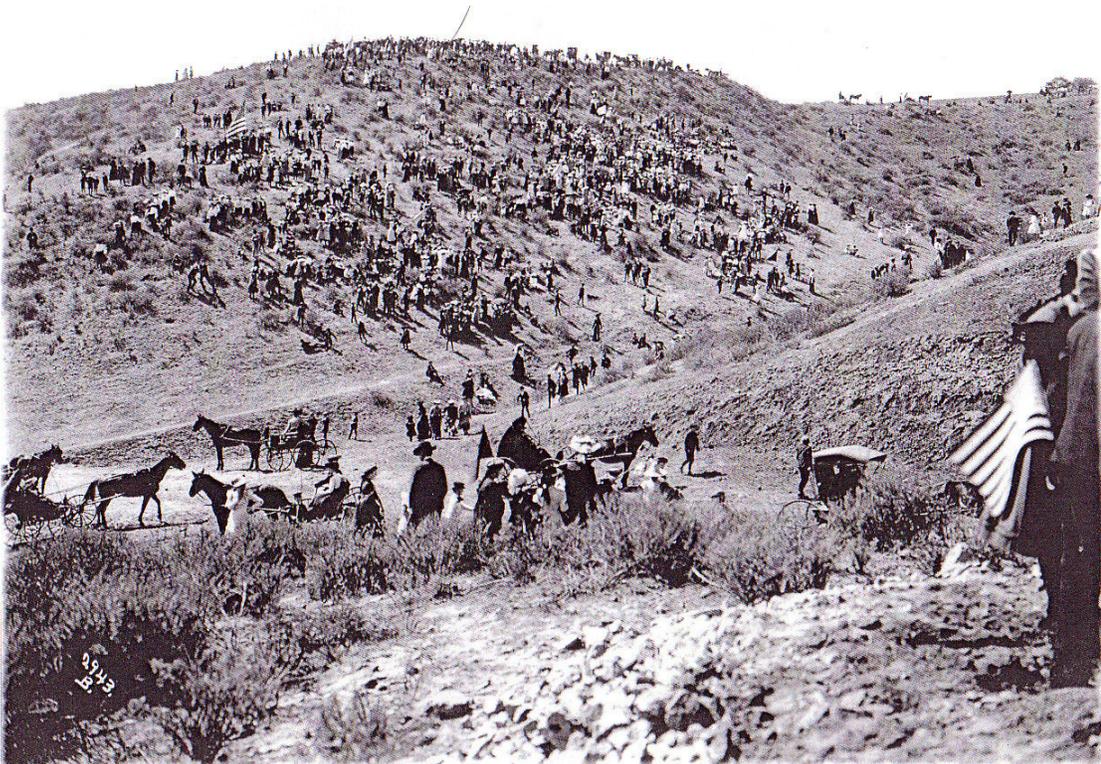


Figure 2.10 Arbor Day- May 17, 1904. Residents and students from the San Diego Public schools came to the park to plant trees.

⁸⁹ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. San Diego. 1988. Pg. 31.

On April 17, 1905, the first Park Commission was established after the city approved a tax levy to support the park. George W. Marston was appointed as president of the Commission with Ernest E. White as secretary.⁹⁰ In 1907 the city realized the need for a comprehensive plan and the Chamber of Commerce hired John Nolen, a Boston planner, to come up with a design. Nolen, an advocate of the City Beautiful Movement, envisioned San Diego as a “neoclassical Renaissance city, much like the grand urban cores of colonial New Spain under the guiding principals of the Laws of the Indies.” His plan connected the downtown core with the city park stressing its importance as an asset to the city. Although his principals incorporated the heritage that San Diego officials desired to portray, local politicians rejected Nolen’s plan.⁹¹ Little activity occurred in the park, save the construction of a few roads, until 1909 when the much-anticipated completion of the Panama Canal inspired the idea of a world’s fair.

The Panama-California Exposition

In 1909, at the suggestion of Gilbert Aubrey Davidson, the president of the San Diego Chamber of Commerce, the business community decided that San Diego would hold an exposition in celebration of the opening of the canal.⁹² The Chamber proceeded to design plans for the Fair that would help to promote the region as a center for commerce. The Chamber established the Panama-California Exposition Corporation and the officials approached the California Congressional delegation to

⁹⁰ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. San Diego. 1988. Pg. 32.

⁹¹ Bokovoy, Matthew F. *The San Diego World’s Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 54

⁹² Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. San Diego. 1988. Pg. 35

request assistance for the Fair.⁹³ The officers for the Panama-California Exposition Corporation were former U.S. President, Ulysses S. Grant as President, John D. Spreckels as first Vice-President, A.G. Spalding as second Vice-President, L.S. McClure as third Vice-President, and G. A. Davidson as fourth Vice-President.⁹⁴ After sending word to the State Government, the leaders in San Diego were told that San Francisco would hold the official exposition for the opening of the canal. The exposition in San Francisco would be called the Panama-Pacific Exposition and they warned San Diego that an attempt to hold an exposition at the same time would be economically unwise.⁹⁵

San Francisco leaders had planned a celebration for the Panama Canal as early as 1904. However, the earthquake of 1906 brought the plans to a standstill. A handful of city officials returned to the idea of an exposition a few years later as a way to promote the reconstruction of the city. When it became clear that San Francisco and San Diego both wanted to hold expositions celebrating the opening of the canal, the state of California began dividing itself along loyalty lines. The Los Angeles Chamber of Commerce, seeing that the San Diego Fair would provide a great deal of publicity for their city, lent its support to San Diego. The two battling cities were successful at dividing the “state legislature and Congressional delegation between north and south.” The two camps then went to Washington, DC., to lobby at the House Committee on Industrial Arts and Expositions and the State Department.⁹⁶ However, soon the aspirations of both cities faced a new threat.

⁹³ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 20

⁹⁴ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. San Diego. 1988. Pg. 35

⁹⁵ Ibid. Pg. 35

⁹⁶ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 21-22

New Orleans announced its plan to hold an exposition of its own in 1910. In defense of the State of California, San Diego banded together with San Francisco.⁹⁷ Although physically closer to the canal than any California city, the New Orleans exposition was defeated largely due to the pending reelections of a Republican legislature in Washington, DC, and the fact that Louisiana was a Democratic state. Another contributing reason was that both San Francisco and San Diego had raised large amounts of capital for their expositions whereas Louisiana was requesting full federal funding. Congressional hearings were held from May 1910 to June 1911 to establish the theme and purpose of the California fairs. It was during these hearings that San Diego officials decided to proceed with their plans despite the lack of federal recognition.⁹⁸ It was the efforts of D.C. Collier in Washington that gained the national recognition San Diego desired for their exposition.

D.C. Collier, called the “Colonel”, was instrumental in winning the hearts and minds of national officials. In May 1911, in Washington, DC, Collier convinced officials that the San Diego Fair would not interfere with the success of the San Francisco exposition. Instead of focusing on visitors from all over the world, San Diego would focus its attention on the Southwest, Mexico, Central and South America. Collier’s efforts were victorious and he returned to San Diego with national approval for the Fair.⁹⁹

With the construction of the San Francisco exposition well underway, the officials in San Diego decided that their fair would be much smaller, but would be different from previous world fairs. Traditionally world fairs showcased significant architectural styles of the past, honoring the masters of antiquity. In contrast to this

⁹⁷ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. San Diego. 1988. Pg. 36

⁹⁸ Bokovoy, Matthew F. *The San Diego World’s Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. 2005. Albuquerque. Pg. 25-26

⁹⁹ *Ibid.* Pg. 27

trend, the San Diego Fair would introduce a completely new style of architecture to the United States: the Spanish Colonial Style.¹⁰⁰

The Spanish Colonial Style and the Selection of an Architect

The Spanish Colonial Style was a result of the Spanish Renaissance when the Moors were expelled from Spain. At this time artists moved to Spain from other European countries. Soon the Spanish landscape was covered with Italian architecture. In a means to distinguish themselves from the other countries and to display their newly acquired wealth, much effort was put into inventing a Spanish architecture. The architect Churriguera and his sons developed an ornately floral style of architecture that quickly became popular. Named the Churrigueresque, the style was then brought over to New Spain with the soldiers who came to the new world to gain great wealth and recognition. As these soldiers had only a cursory knowledge of architecture, it was up to the natives to translate this style into buildings. As a result a style that is not quite native to Mexico, but not quite native to Spain, was created and it became known as Spanish Colonial Style.¹⁰¹

In 1904, Irving Gill, a local San Diego architect, designed a house for George Marston, then only a member of the Chamber of Commerce but soon to be the chairmen of buildings and grounds for the exposition. It was at the recommendation of George Marston and with the support of the Episcopal Bishop of Los Angeles that Gill was appointed architect for the exposition.¹⁰² Originally the committee of buildings and grounds petitioned Daniel Burnham to design the Fair. Burnham was the head architect for the Chicago Columbian Exposition of 1893 and the officials of the

¹⁰⁰ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 36

¹⁰¹ *Ibid.* Pg. 36

¹⁰² Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 109

exposition in San Diego were looking for an architect that would attract publicity for the Fair.¹⁰³ When Burnham responded that he was unavailable, the city turned toward Irving Gill to take the position.



Figure 2.11 The Church of San Francisco Javier in Mexico was completed in 1762. This church is an example of Spanish Colonial architecture and has distinct similarities to the asymmetrical composition of the California State Building of the Panama California Exposition.

¹⁰³ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 55

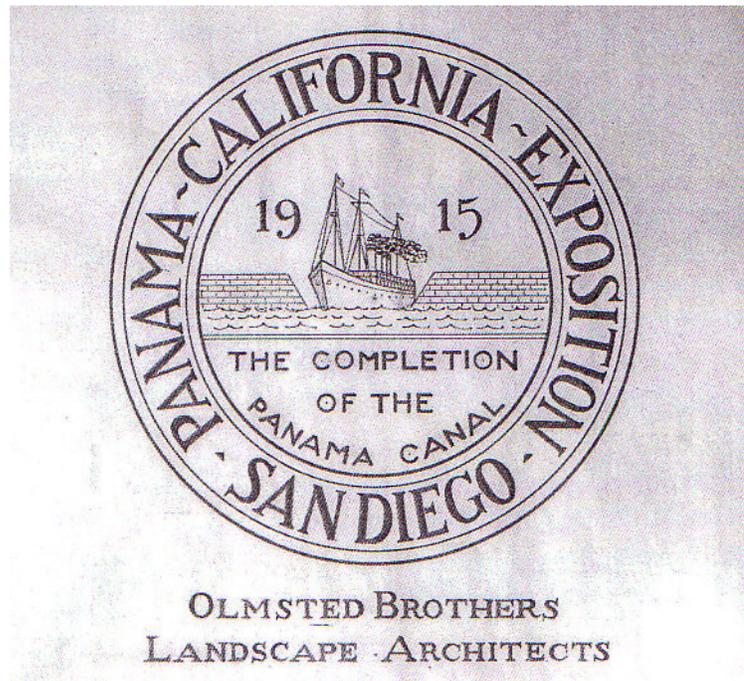


Figure 2.12 The Olmsted Brothers seal for the Panama California Exposition.

The exposition leaders had contacted the Olmsted brothers, landscape architects based out of Brookline, Massachusetts, in 1910 to design the landscape for the Fair. Officials were hoping that the Olmsted's English landscape techniques could help counter the "commercial taint of World's fairs". The Olmsted plan placed the Fair grounds in what was known as the Howard Tract, located in what is currently downtown San Diego. Their drawings showed "formal Moorish gardens with cascades and fountains, and broad avenues and plazas."¹⁰⁴ It is thought that it was through the Olmsted brothers that Bertram Grosvenor Goodhue caught wind of the San Diego Exposition.

¹⁰⁴ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 55

Goodhue attempted to obtain the commission for the Fair by contacting acquaintances in California, including a Los Angeles architect, Elmer Grey. Grey responded that he and his partner, Myron Hunt, were being considered for the job, as was John Galen Howard, and Irving Gill. Goodhue wrote to Bishop Johnson, Episcopal Bishop of Los Angeles, who responded that his loyalties lay with Gill.¹⁰⁵ Somehow, most likely with the help of the Olmsted brothers, Goodhue got an interview with the exposition officials in San Diego. His national recognition for West Point and his book on Spanish Architecture, made him a natural choice for the committee who desired someone a little more established than a local architect. It is thought that the original style for the Fair was intended to be mission style and that it was Goodhue who suggested that the committee go with the more ornamental style of Spanish Colonial.¹⁰⁶ However the decision of style was made, Goodhue immediately began work designing the buildings of the Fair.

Although several sources state that Irving Gill's involvement with the Fair ended when Goodhue was commissioned, the debate as to his involvement continued for more than a century. In 1985, Bruce Kamerling, curator at the San Diego Historical Society, responded to a claim made by Richard W. Amero, a local San Diegan who had written a book about the history of Balboa Park. Amero had stated that it was not Irving Gill who was responsible for the design of the Administration Building, but rather Carleton Monroe Winslow. In his response, Kamerling states that "the earliest architectural drawings for the exposition have an imprint listing Bertram Goodhue as Consulting Architect, Frank P. Allen as Director of Works, and Irving J. Gill as Associate". He defends the idea that Gill was responsible for the Administration

¹⁰⁵ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 110

¹⁰⁶ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 56

Building further by stating, “the drawings with Gill’s name on the imprint include those of the Administration Building”. Kamerling does not deny that Winslow had a hand in the design of the building, but rather states he “undoubtedly designed the Spanish Colonial frontispieces that was [sic] added to the building after it was constructed, and which has long since fallen off.”¹⁰⁷



Figure 2.13 Looking north at the Exposition from Palm Canyon. The California Building is in the center and the Administration Building is the white building to the left.

¹⁰⁷ Kamerling, Bruce. “Letter addressed to Readers Write, The San Diego Union”. Dated August 8, 1985. San Diego Historical Society Research Archives. Accessed November 21, 2007.

Although this letter appeared to explain the roles of Gill, Goodhue, and Winslow in regards to the design of buildings in the Fair, the heated debate continued in San Diego as to who was responsible for the Administration Building. On December 21, 1986, Carol Olten, a staff writer for *The San Diego Union* wrote an article entitled “One of Gill’s treasures will shine again in Balboa Park”. In the article, Olten states “the city of San Diego and the Museum of Man recently agreed to renovate the building designed by Gill for the 1915 Panama-California Exposition...the Administration Building is the only public structure that Gill designed for the exposition. He had hoped to receive the commission for all the park buildings, but after New York architect Bertram Goodhue was hired for the project with Carleton Winslow as his assistant, Gill reportedly left in dismay.”¹⁰⁸

A few days later Richard W. Amero responded to Olten’s article with his own entitled “Gill’s role in Balboa disputed.” Amero writes “Carol Olten is aware that I have disputed Irving Gill’s contribution to the design of the Administration Building in Balboa Park. To say that Gill designed this building is to say that Carleton Monroe Winslow was a liar for it was Winslow who claimed responsibility for the building”. Although Kamerling had seemingly disproved this statement in his letter, Amero goes on to write “no surviving documentary evidence indicates Gill designed the building.”¹⁰⁹

Although the debate was never fully resolved in the mind of architectural historians, it did result in some interesting realizations. In Kamerling’s letter, he discloses the specific role that both Goodhue and Gill played at the beginning by

¹⁰⁸ Olten, Carol. “One of Gill’s treasures will shine again in Balboa Park”. *The San Diego Union*. Sunday, December 21, 1986. Pg. F-4. The San Diego Historical Society Research Archives. Accessed November 21, 2007.

¹⁰⁹ Amero, Richard W. “Gill’s role in Balboa disputed”. *The San Diego Union*. Sunday, January 4, 1987. Pg. F-10. The San Diego Historical Society Research Archives. Accessed November 21, 2007.

stating “the contract between Goodhue and the exposition corporation dated January 30, 1911 (an unsigned copy of which is also at the San Diego Public Library) states that Goodhue’s office would provide ‘a detailed design of certain portions’ of buildings erected by the exposition corporation, while the working drawings and specifications for those structures would be prepared by Irving Gill at Goodhue’s expense”. Kamerling goes on to say that although Gill did leave the exposition prior to the completion of design for the majority of the buildings, the Administration Building was the first constructed which was “well within the time Gill was still active in the project.”¹¹⁰

The debate over Gill and the design of the Administration Building illustrates an interesting point in architectural history. When there is collaboration between several designers it is hard to give the credit to just one. Although Stein himself had claimed credit for the California Building and the overall plan for the park, it is probable that this issue could be disputed just as Gill’s involvement was. Kamerling brought up a significant point in his 1985 letter to *The San Diego Union* that stated “as far as identifying the designer of the building is concerned, any architect will tell you that most structures are the product of many hands. Heads of firms often get credit for the work of their associates and draftsmen.”¹¹¹

The Great Debate: Where to put the Exposition?

In June 1911, after a great deal of correspondence between Goodhue, John D. Spreckels, and Frank Allen Jr., the engineer of the exposition, it was decided that the exposition should be located in Balboa Park despite the fact that the committee had already adopted the Olmsted plan, which located the Fair downtown. The new location

¹¹⁰ Kamerling, Bruce. “Letter addressed to Readers Write, The San Diego Union”. Dated August 8, 1985. San Diego Historical Society Research Archives. Accessed November 21, 2007.

¹¹¹ Ibid.

placed the exposition on a much more prominent and dramatic site with views to the bay and to the city. When news of the change in site reached John Olmsted he became very upset. Olmsted felt that the purpose of the large city park was to retain its natural rugged landscape and that placing the exposition in the middle of it would ruin the effect of an urban park.¹¹² Despite the uproar, it was John D. Spreckels who successfully secured the location and settled the matter.

The site of the Olmsted plan had advantageous views of the ocean and easy access to the commercial and historic mission districts of San Diego. However, being located so close to the commercial core of downtown San Diego, the Howard Tract also had immense real estate potential and many businessmen realized this. Wanting to reserve this land for future use, Spreckels negotiated the relocation of the exposition into Balboa Park. When he met resistance from the exposition officials he simply withdrew himself and his financial support from the exposition committee. The committee quickly came around.¹¹³

On his way to Washington, D.C., Collier had stopped in Brookline to meet with the Olmsteds and promote the new site for the Fair. When the Olmsteds refused to accept it, Collier promised to endorse the original site upon his return to San Diego. While in Washington, Collier had told Congress that San Diego had obtained the services of the Olmsted Brothers and Bertram Grosvenor Goodhue, some of the most respected people in their fields.¹¹⁴ Although it is unknown whether the influence of the Olmsted name helped to win the national support, it does appear that the meeting in Brookline prior to his trip was a means of retaining the Olmsteds long enough to

¹¹² Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 56

¹¹³ Ibid. Pg. 57-58

¹¹⁴ Ibid. Pg. 27

present the design team of notorious members before Congress; for upon his return to San Diego, Collier voiced his support for the new site in Balboa Park.

Infuriated by the management of the situation the Olmsteds resigned from the project. The Fair officials refused to pay them for their work and in response to this unethical treatment, George Marston chose to resign.¹¹⁵ After the waves from the site debate settled, the plans for the exposition resumed. However, the site change was not the only setback the exposition encountered.

Almost immediately after the public announcement for the Fair, hoards of shady individuals flooded San Diego. Prostitutes and gamblers arrived in the region and began peddling on both sides of the U.S. Mexican border. In addition to the new inhabitants of the area, the Mexican Revolution and local labor unrest caused a great deal of distraction. At the forefront of the labor unrest was the exposition whose powerful financial backers refused to guarantee the use of labor unions in the construction of the site. D.C. Collier and the exposition committee members supported signing contracts with local union laborers, but they were unable to do so because John D. Spreckels threatened again to withdraw his funding.¹¹⁶

At the same time a Free Speech Fight erupted in San Diego as government officials and local merchants instigated an anti-street-speaking ordinance within the city limits in December 1911. The purpose of the ordinance was to keep city streets clear and open for businesses and property owners, but the result of its adoption was an eruption of working-class citizens who felt that the city elites were infringing on their first amendment rights. Members of the Industrial Workers of the World (IWW, also referred to as Wobblies), as well as thousands of Socialists, heard of the Free

¹¹⁵ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 60

¹¹⁶ Ibid. Pg. 31

Speech Fight in San Diego and came to the city to protest. Wobblies staged public demonstrations and filled the city jails, overwhelming the infrastructure.¹¹⁷



Figure 2.14 People gathered at the Tijuana border to see the capture of the Mexican town.

Wobblies, Socialists, and Mexican revolutionaries, under the direction of Ricardo Flores Magón and the Partido Liberal Mexicano, invaded and captured the border towns of Tijuana and Mexicali. When news of the capture of Tijuana reached citizens of California they flocked to San Diego to spy on the revolutionaries from

¹¹⁷ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 31

across the border. To make matters worse, border officials allowed tourists to cross and loot stores in Tijuana at a cost ranging from twenty-five cents to one dollar.¹¹⁸

Thanks to pressure from the Free Speech Fight and the Mexican Revolution, local unions were able to secure contracts with the exposition committee. Despite the turmoil surrounding the city of San Diego, the planning of the Fair continued and citizens began to believe that it would act as a means of uniting a fractured city.

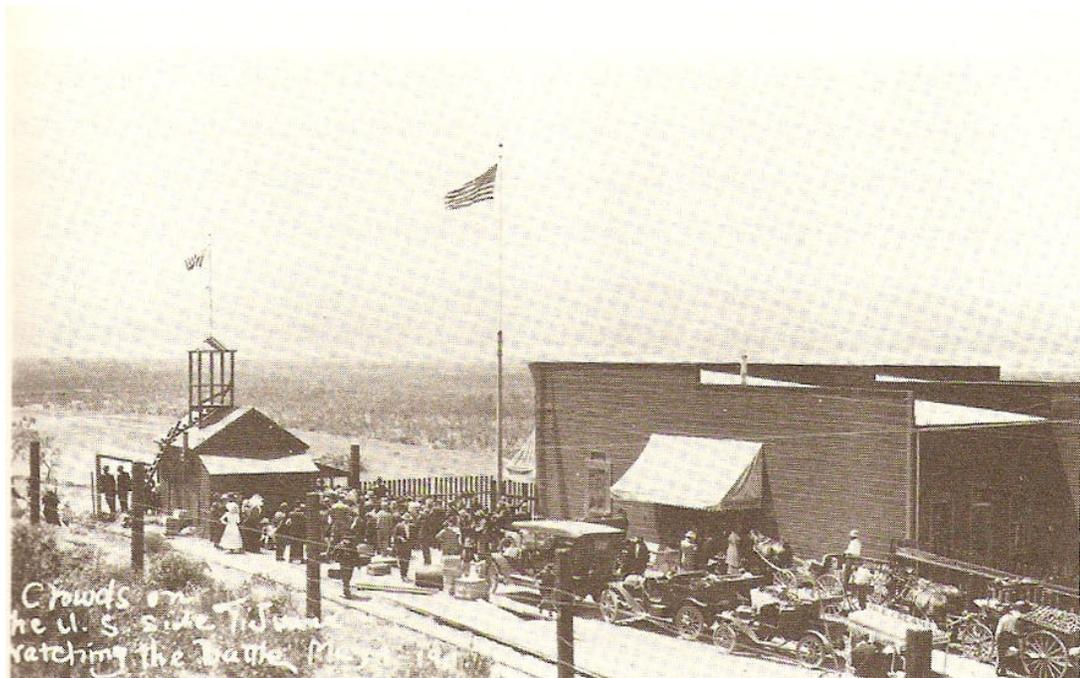


Figure 2.15 Americans waiting at the border to cross into Tijuana to loot the stores.

Starting on the 19th of July, 1911, the city of San Diego participated in great pageantry and celebration as the official site for the exposition was dedicated in the park.

¹¹⁸ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 30.

Residents of San Diego were joined by other Californians and visitors to watch the parades and events of the groundbreaking.¹¹⁹

The groundbreaking events, known as the *San Diego Pageant*, were intended to introduce the world to the theme of the Panama-California Exposition and the history of the area. Henry Kabierski, a pageant expert, and a writer, John Steven McGroarty, were hired to develop “historical dramas about mission-era California”. In the face of civic unrest the events were also intended to portray San Diego as a place of harmonious existence between all cultures and economic means. Thousands of people came to the city for the pageants and speeches. President William Howard Taft dispatched a representative to deliver an address. In the speech he mentions the importance of San Diego history as it connects America to Central and South American countries.¹²⁰

At the conclusion of the ground breaking the parades began. The initial floats depicted the first white settlers of California. An actor portraying Cabrillo was crowned pageant king and he proceeded through the streets to meet Queen Ramona. The native inhabitants were represented by actors dressed in sombreros and boleros riding horses through the streets. On the second day the “historical” parade was staged, depicting the development of the southwest and San Diego. On the 21st, an industrial parade took place displaying San Diego’s power as a commercial and industrial actor. On the final day of the celebration, John McGroarty presented his *Pageant of the Missions*. Twenty-one floats proceeded through the streets of San Diego, each representing one of the California missions along El Camino Real.¹²¹ At the conclusion of the dedication celebration, the construction of the exposition began.

¹¹⁹ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988, pg 37

¹²⁰ Bokovoy, Matthew F. *The San Diego World’s Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 37

¹²¹ *Ibid.* Pg. 40-41.



Figure 2.16 The ground breaking ceremony of the Panama California Exposition of 1915.



Figure 2.17 Queen Ramona of the San Diego Pageant.



Figure 2.18 The Pageant of the Missions.

Landscaping the Site

The landscaping of the site proved to be one of the most difficult aspects of the exposition. The hard pan below the soil had to be blasted and drilled to plant the large trees. In order to keep up with the fast pace of construction, a mill was erected on site. The mill provided wood for not only the construction of the buildings but it also produced more than 30,000 planter boxes ranging in every size from two inches to four feet square. Lath plant houses, similar in construction to the remaining botanical building, were built to house more than a million plants to be used throughout the gardens of the fair. The amount of planting was astounding. In 1912 alone records show that more than 50,000 shrubs were planted on the fair ground. Plants were brought from all over the world and were showcased with exhibits of what native life in these areas was like. Sir Thomas Lipton brought 200 young trees from Colombo to create a tea plantation. The trees were transported in glass boxes and workers from Colombo accompanied the trees to oversee their care. Visitors to the fair were served tea at the Japanese tea house where they could see the process of planting the trees, curing the leaves and preparing the tea.¹²²

The theme for the fair was to show the “progress and possibility of the human race” and this was the first time that physical man would be the main subject of a world exposition. Life in villages throughout time and from all around the world was showcased as a means of educating every visitor to how man has progressed. Hawaiian, Chinese and Japanese villages were built. Life in Panama before and during the construction of the canal was represented to show how this feat of engineering improved the area.¹²³

¹²² Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society, 1988. Pg. 42

¹²³ Ibid. Pg. 43

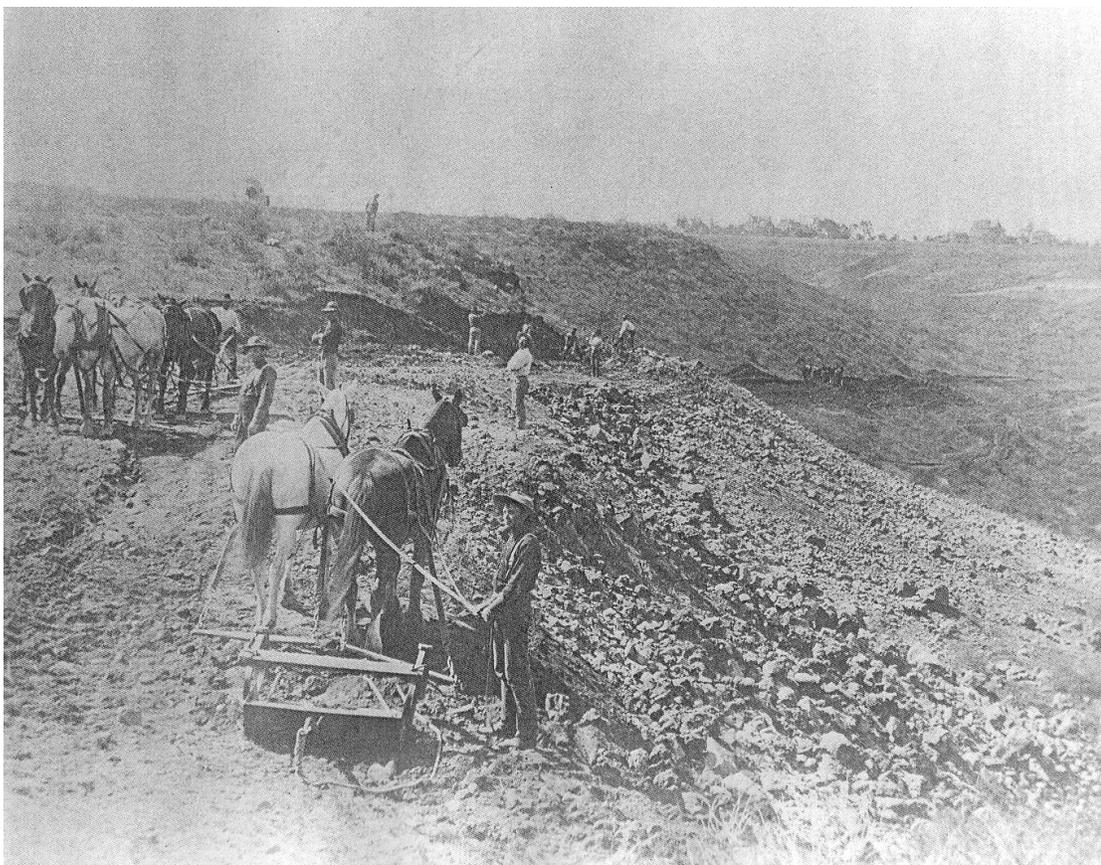


Figure 2.19 The site of the fair required a significant amount of grading. Teams of horses and men worked endlessly to move the soil around for the proposed buildings and plantings.

Model farms were created on one-acre plots. The farms began operation in 1911 so that when the exposition opened they could compile data on how farming one acre could pay for the land, buildings and plants over a certain period of time. Models of horticulture such as this could be found throughout the exposition.¹²⁴

The maintenance of the plantings during the Exposition was considerable. Crews worked through the night, every night, transplanting flowers and shrubs that showed signs of distress. At sunrise another group of workers would water the plants until the gates of the fair opened at 9:00 am. The day workers would dress in green

¹²⁴ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 45

sweaters and kaki pants so that they would blend in to the landscape and be scarcely noticed by visitors. There were over two million plants of 1,200 varieties at the Fair. Their arrangement and presentation received praises from everyone who visited.

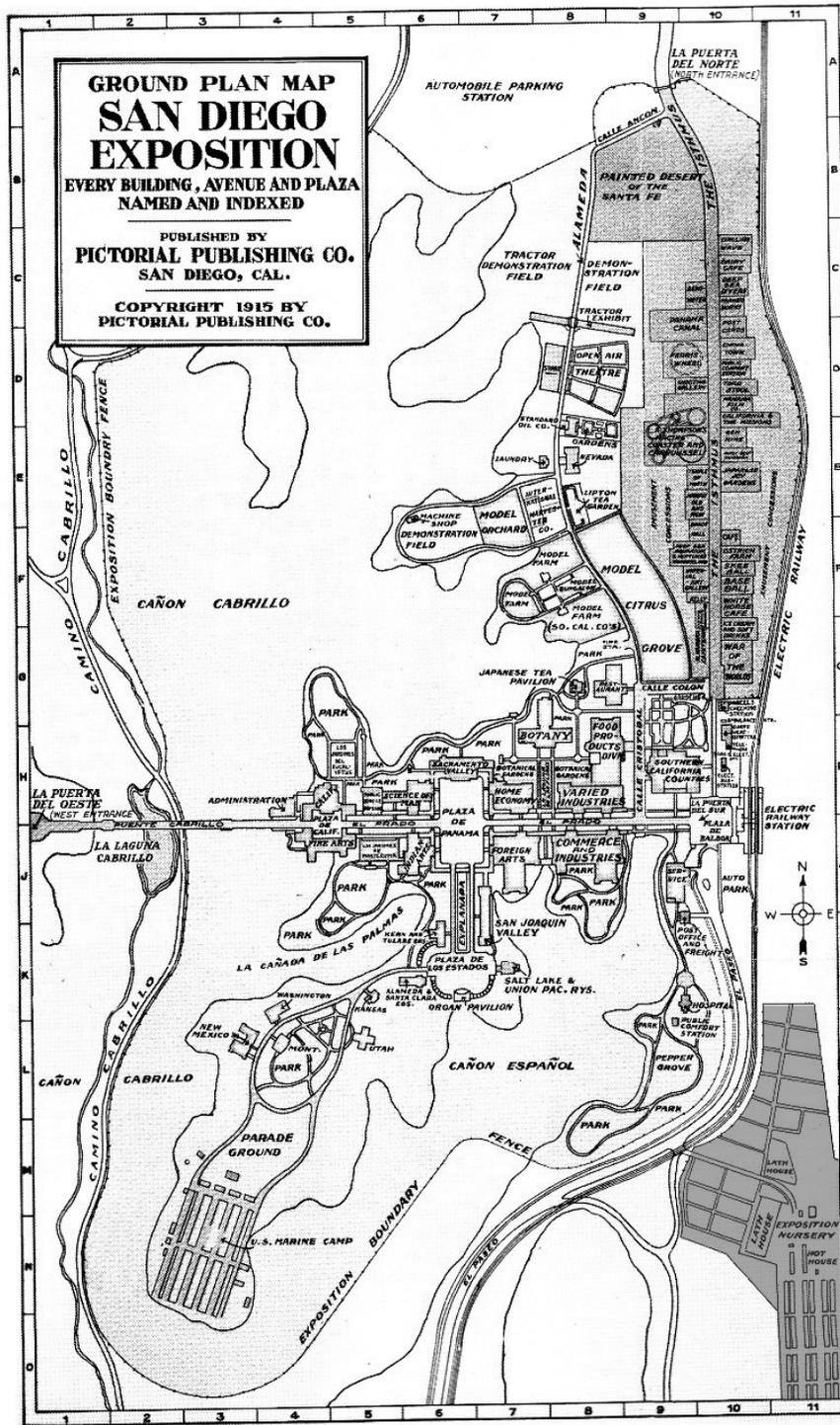
Visitors remarked that it was amazing how the master gardener blended the right flower with the shrubbery of a district; how he displayed plants and flowers of uniform growth on shady or sunny sides of the building, and how he could with such skill, transplant immense pepper, eucalyptus or palm trees so that they thrived as if they had been planted for a half a century.¹²⁵

There was no doubt that the presentation of this lush and thriving landscape was completely contrived and required constant supervision and maintenance.



Figure 2.20 The significant amount of plants that were transplanted regularly required dozens of lath plant houses such as this. Although this photograph was taken in the nursery in 1954 the style of the lath plant houses was comparable to this.

¹²⁵ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 46-48.



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Figure 2.21 Map of the Fair with the Exposition Nursery highlighted in the lower right. The area occupied by the nursery is almost as large as the area occupied by the buildings along El Prado.

The process by which the Panama California Exposition of 1915 came about was complex. The City of San Diego was adamant about hosting this Fair and was determined to make it happen. They were not deterred by the threat of other cities, even one as close as San Francisco, or the difficulty of their site. They were persistent through labor issues, the revolutionaries a few miles away, and shady people who came looking to exploit the city and Fair visitors. Exposition officials had to deal with influential investors, like John D. Spreckels, who liked to throw their weight around, and an architect who was known for his unpredictable personality. The result of all these trials and tribulations was a Fair unlike any that had been seen in the past. What was so special about these Fair buildings that made the citizens of San Diego want to keep them? The use of the Spanish Colonial Style set the San Diego Fair apart from all past expositions by introducing a style that was unknown to most Americans. To really understand its influence one must take a closer look at the design of the Fair buildings.

CHAPTER 3

THE DESIGN OF THE EXPOSITION

Although Stein recorded very little about his life between 1911 and 1918, it is perhaps one of the most intriguing pieces of his history in that its discovery can only be made through the examination of the projects themselves. As has already been mentioned Stein's involvement in the San Diego Exposition did not include every building on the site, but he has been attributed with the overall site plan and the California Quadrangle. Therefore the examination of the organization of the site and focusing on the design of the California Quadrangle will help to better understand his work. However, to understand the lasting influence of the Exposition it also becomes necessary to look at the other Fair buildings and how they integrated with Stein's buildings to create a cohesive architectural experience. Finally, a look at what transpired after the opening of the Fair and what remains of the 1915 buildings today helps to show the lasting influence of the Panama California Exposition.

The Layout of the Exposition

Goodhue often spoke of how the San Diego exposition was different from all previous expositions in that it was characterized by a strong architectural unity. Although the buildings were different from one to the next, there was an overarching style that connected them to one another making the fair one cohesive experience.¹²⁶ According to Clarence Stein's journal, Goodhue chose him to develop the overall plan of the exposition and to design the California quadrangle¹²⁷, one of the

¹²⁶ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 112

¹²⁷ Stein, Clarence S. Item dated 1911-1918, Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.

most significant pieces of the exposition because it was meant to be a permanent structure on the site.

The change in site from the Howard Tract to Balboa Park provided the opportunity to create a dramatic entrance to the exposition. Although Goodhue showed little interest in Irving Gill's work, the Cabrillo Bridge was designed in a manner that is reminiscent of Gill's simplistic style. Visitors to the Fair approached it via the bridge across Cabrillo Canyon.¹²⁸ On the west end of the bridge the Exposition loomed dramatically, as if it were a fortress rising out of the hillside.

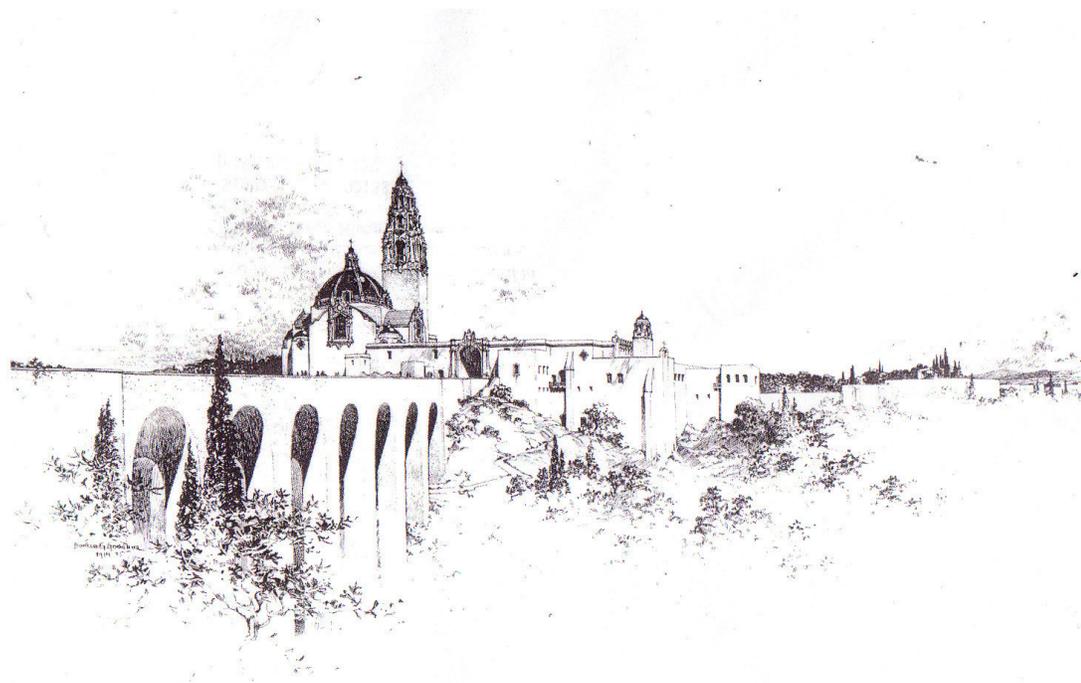


Figure 3.1 Rendering from the office of Bertram G. Goodhue. Look northeast from across Cabrillo Canyon at the main entrance to the Exposition.

The dominant buildings of the exposition were oriented around an east-west promenade which was named El Prado. This linear organization allowed for a formal

¹²⁸ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 113

procession of visitors from the end of the Cabrillo Bridge to the West through the California Quadrangle, intersecting with the north-south axis (called Explanada) at the Plaza De Panama, and culminating at the Plaza De Balboa and the south gate into the Fair. The buildings away from El Prado were grouped in a manner that responded to the topography of the mesa. It was the intention of the architect that the buildings should be arranged in a way that would “recall to mind the glamour and mystery and poetry of the old Spanish days.”¹²⁹ The layout of the Exposition was reminiscent of Spanish-colonial towns designed utilizing the Laws of the Indies.¹³⁰ Although, neither Stein nor Goodhue specifically mention the Laws of the Indies, their study of Mexican towns that were based on such principals was no doubt the manner in which they absorbed such techniques.

For main plazas, the Laws of the Indies require the length to be at least one and a half times the width. The length of the Plaza De Panama appears to be almost twice its width. Also following the Laws of the Indies, the pedestrian streets of El Prado and Explanada intersected the Plaza De Panama at the center of each side¹³¹. On the north side of the Plaza De Panama was the Sacramento Valley Building and to the south, at the end of The Mall, was the Spreckels’ Organ Pavilion.

¹²⁹ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 112

¹³⁰ The Laws of the Indies was established in 1573 by Philip the II of Spain. These Laws were meant to regulate the manner by which settlements were designed. Although some of these regulations were new many were techniques that had been previously standardized.

¹³¹ Reys, John. *Town Planning in Frontier America*. University of Missouri Press. 1980. United States. Pg. 27-30

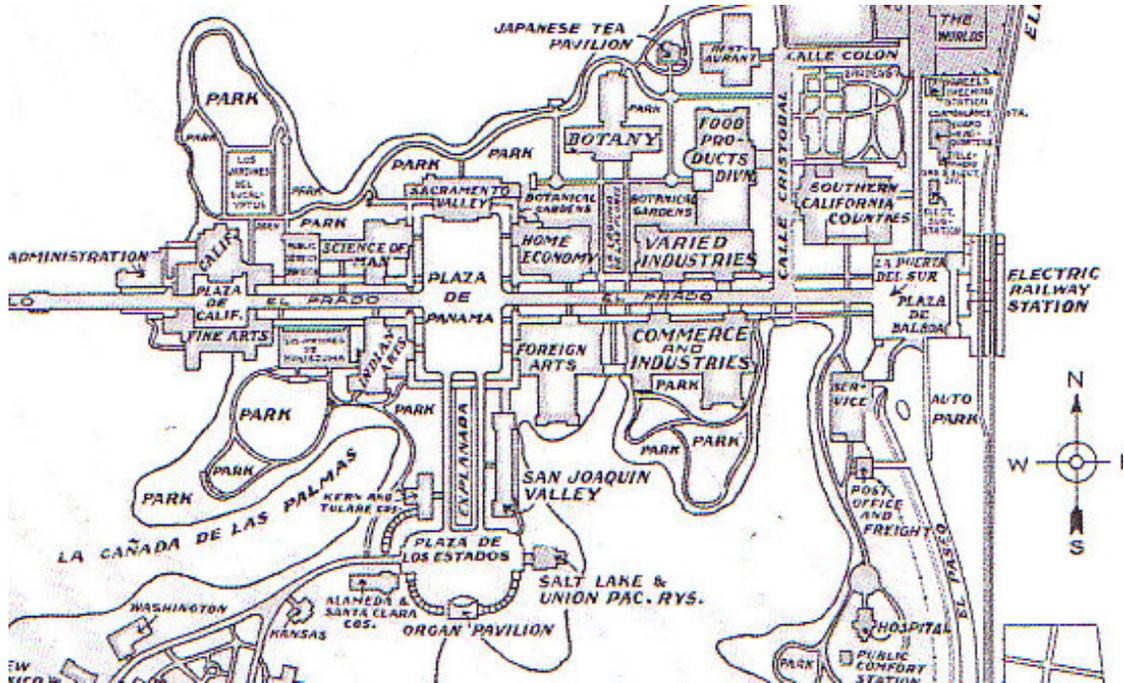


Figure 3.2 Enlarged plan of the 1915 Exposition. El Prado extends from the east through the Plaza De California, through the Plaza De Panama, and terminates at the Plaza De Balboa. The Explanada forms the north-south axis and meets El Prado at the Plaza De Panama. The design for this dominant area of the fair appears to follow the Laws of the Indies.

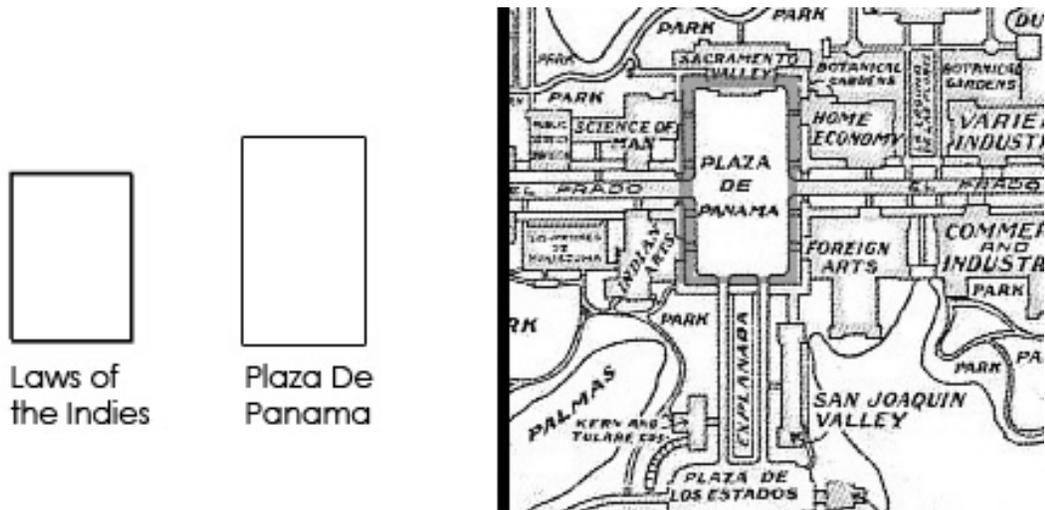


Figure 3.3 Diagram comparing the principals of the Laws of the Indies and the Panama California Exposition of 1915. The Laws of the Indies call for plazas to be at least twice as long as they are wide. The Plaza De Panama is almost two and a half times as long as it is wide.



Figure 3.4 The California Building was positioned on the site similarly to the way the church would be placed according to the Laws of the Indies. The building sits nearest to San Diego Bay and could be utilized as a stronghold by closing off the gates on either side of the Plaza De California.

In addition to the Plaza De Panama, other elements of the Fair appear to be based on the Laws of the Indies. The Laws require the church building to be located towards the harbor and to be constructed in a manner in which it could be used as a stronghold in the event of an attack. At the Fair the California State Building in form represents a church building and is placed to the west of the Plaza, toward the San Diego Bay. Additionally, the enclosed courtyard of the Quadrangle would provide the stronghold, outlined in the Laws.

The Laws of the Indies, understandably, were focused on the protection of these colonial settlements. They call for the construction of buildings surrounding the main plaza so this area would be protected as well. The Plaza De Panama was surrounded by the Science of Man Building to the northwest, the Indian Arts Building to the southwest, the Foreign Arts Building to the southeast, and the Home Economy

Building to the northeast. Arched portales surrounded the Plaza De Panama reinforcing the Laws of the Indies security regulations.¹³² Arched arcades followed both sides of El Prado from the California Quadrangle ending at the Varied Industries and the Commerce & Industries Buildings just before the Plaza De Balboa.



Figure 3.5 Photograph looking at the Fine Arts Building from the portales surrounding the Plaza De California.

In between the major buildings along El Prado were areas of interest. Once the visitor passed through the California Quadrangle to the south was the Gardens of Montezuma and to the north was park that led to the Eucalyptus Garden behind the California Building. Meandering paths ran along the back of the buildings along El Prado, offering views of San Diego and the Bay. Between the Home Economy

¹³² Reys, John. *Town Planning in Frontier America*. University of Missouri Press. United States. 1980. Pg. 27-30

Building and the Varied Industries Building, on the north side of El Prado, was the Lily Pond with the Botanical Building at the north end. This area created a courtyard , with the Botanical Building to the north, the Food Products Building to the east and the Home Economy and Varied Industries Building to the south. Benches surrounding the Lily Pond offered a picturesque place for visitors to rest. On the northeast side of the Botanical Building were the Japanese Tea Pavilion and a restaurant.



Figure 3.6 Looking north from El Prado at the Lilly Pond and the Botanical Building.

To the east of the Varied Industries Building and the Food Products Building was the Calle Cristobal, which ran north-south. On the east side of the Calle Cristobal was the Southern California Counties Building with a garden to the north. The Southern California Counties Building sat at the northwest corner of the Plaza De Balboa which signified the end of El Prado. Just like the Plaza De Panama, El Prado

intersected the Plaza De Balboa at its center. A street also intersected the Plaza at the center of the north side. Called The Isthmus, the street led to the amusement and concessions areas of the Fair. The Isthmus continued on a straight north-south axis until the concessions/amusement buildings ended then the street began to curve with the landscape.

At the north end of Calle Cristobal the orthogonal park plan was broken and an undulating pathway led visitors past a citrus grove to the model farm areas. In this section of the park in addition to the model farms with demonstration areas, the International Harvester Co. and Standard Oil Co. had buildings. The International Harvester Co. Building housed exhibits and an area for demonstrating the newest techniques for orchard cultivation.¹³³ On the west side of the building was a grain field and an orchard where the machinery was operated. There was also an open air theater and a tractor exhibit with fields to the north where the use of the tractors could be demonstrated. The pathway met The Isthmus with the Painted Desert of Santa Fe between the two.

¹³³ *The Official Guide Book of the Panama California Exposition San Diego 1915*. San Diego, California. January 1 to December 31, 1915. The San Diego Public Library. Accessed November 24, 2007.

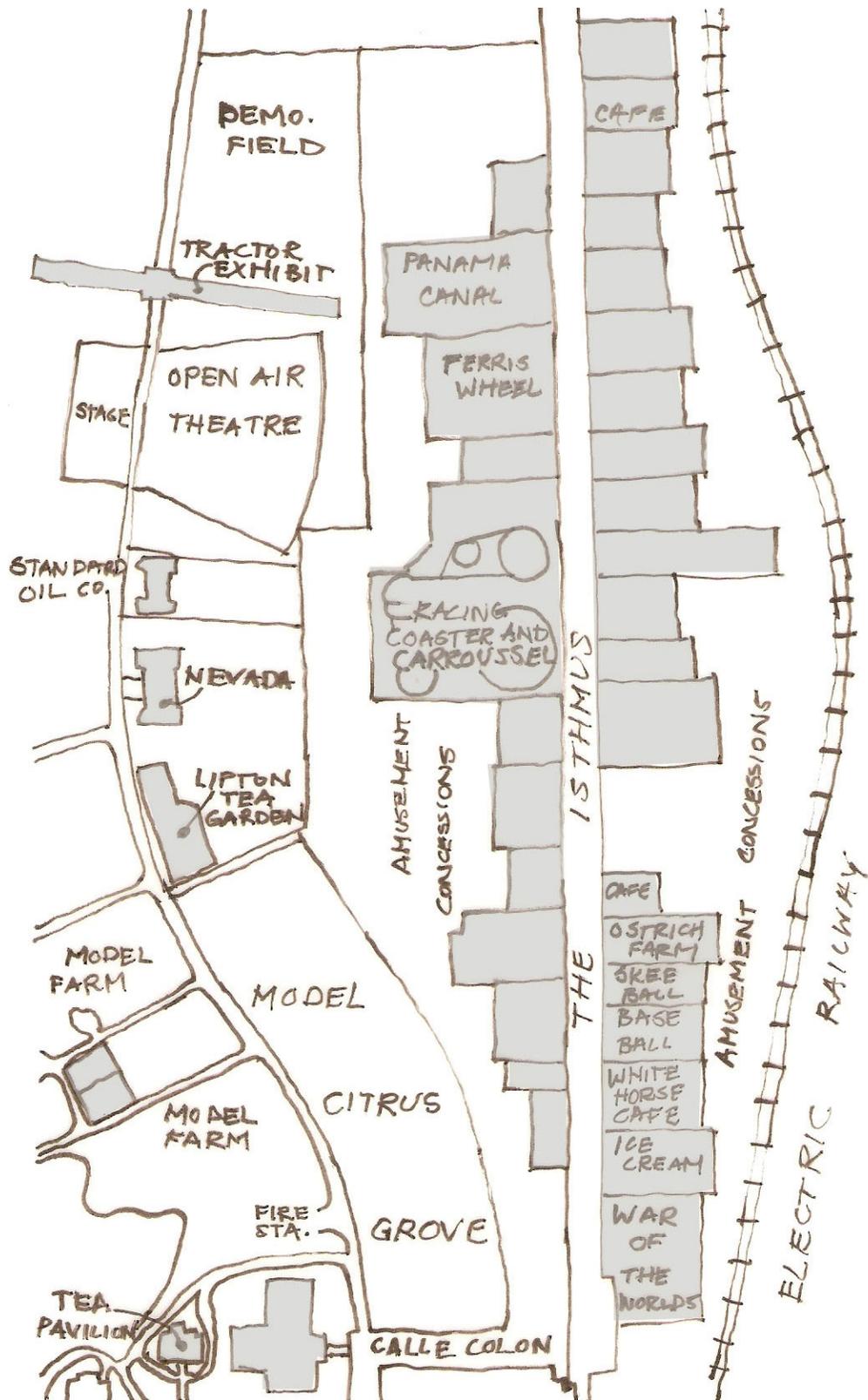


Figure 3.7 Enlarged plan of the Isthmus.



Figure 3.8 Images from the Isthmus. Although this area was primarily for amusement there was an educational purpose behind the majority of the exhibits.



Figure 3.9 Poster advertising the Painted Desert exhibit.

The Painted Desert of Santa Fe was constructed to show visitors the life and living conditions of Pueblo and nomadic tribes. Great adobe structures were constructed by Pueblos, Taos, Hopis, and Zunis tribes in this area. Members of the tribes were onsite during the Exposition, weaving blankets, making pottery, and shaping copper and silver. According to the *Official Guide Book* for the Exposition, “they will be seen building new adobe houses; they will be shown in their ancient ceremonials in their kivas, or ritual places...they will be seen at their outdoor bake

ovens and by the corrals where the grazing animals are kept.”¹³⁴ According to the *Guide Book* members of the represented tribes were brought from Arizona and New Mexico to construct this exhibit in the fair. It would be interesting to know if this was in fact true and if their depiction of the living conditions and trade techniques was accurate. At the end of The Isthmus, after the Painted Desert of Santa Fe, was the Puerta Del Norte, or north gate, of the Exposition. This marked the northern limits of the park and exited into the parking lot for Exposition visitors.



Figure 3.10 Image from the Painted Desert in 1915.

¹³⁴ *The Official Guide Book of the Panama California Exposition San Diego 1915*. San Diego, California. January 1 to December 31, 1915. The San Diego Public Library. Accessed November 24, 2007.



Figure 3.11 Navajo Tribe at the Painted Desert in 1915.

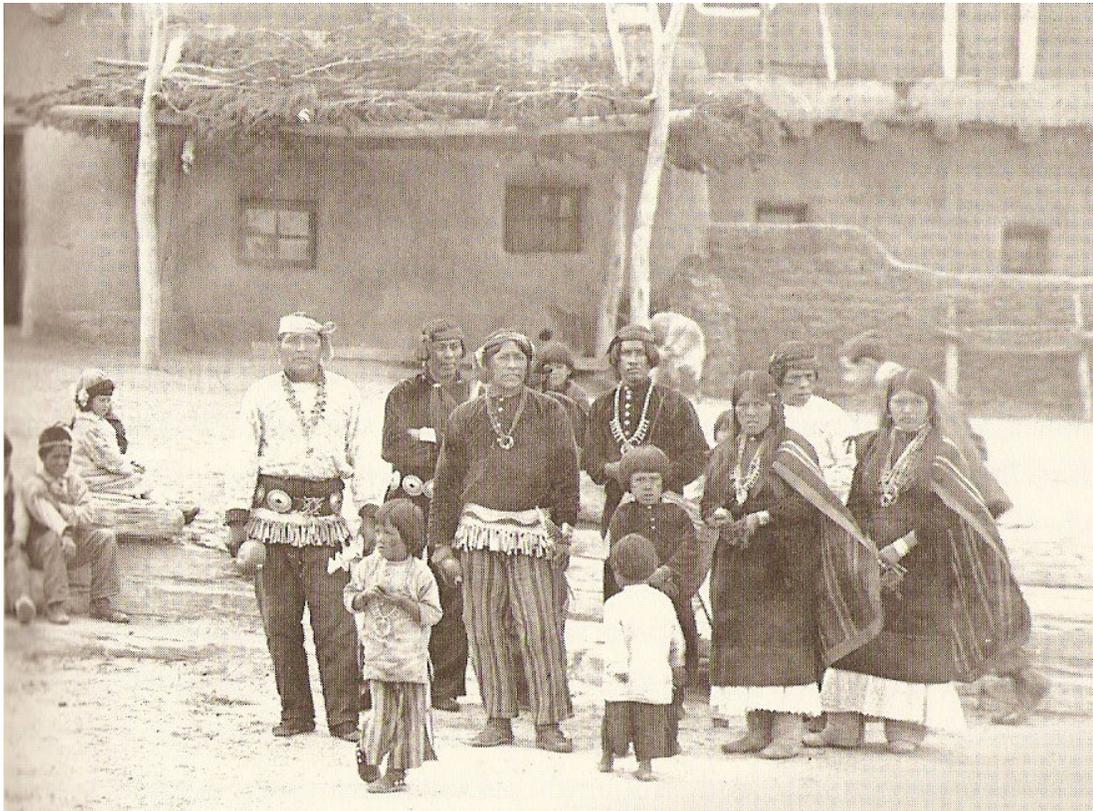


Figure 3.12 Navajo Tribe at the Painted Desert in 1915.

To the east of the Plaza De Balboa was the electric railway station. For visitors coming from downtown or the neighborhoods to the north of the park they could arrive by means of the railway and enter through the south gate. To the south of the Plaza De Balboa was a pathway that led to the Pepper Grove. Along the path one passed the Service Building, the Post Office, and a Hospital with a Public Comfort Station. The Pepper Grove solely served as a vista for visitors to look towards downtown and the ocean or to take a rest from the bustling Fair.¹³⁵ The service buildings of any Fair are rarely mentioned, yet they are important to the overall plan. In the case of the San Diego Fair, the service buildings were located close to the road

¹³⁵ *The Official Guide Book of the Panama California Exposition San Diego 1915*. San Diego, California. January 1 to December 31, 1915. The San Diego Public Library. Accessed November 24, 2007.

(El Paseo) that led straight into downtown San Diego. Locating the Hospital here allows for the transportation of a sick or injured visitor out of the park quickly and easily. Separating these functions into an easily accessible area, also allowed Exposition business to be conducted without trekking to other parts of the Fair.

Similar to the buildings north of the Calle Cristobal, the buildings south and southwest of the Plaza De Panama, save for those arranged along Explanada, followed the topography of the site. On the east side of Explanada was the San Joaquin Valley Counties Association Building. Inside the building were artistic arrangements of grains and grasses that displayed the resources found in the Valley in a unique way. Across the Explanade was the Kern & Tulare Counties Building, also displaying images and samples of the resources to be found in these regions.

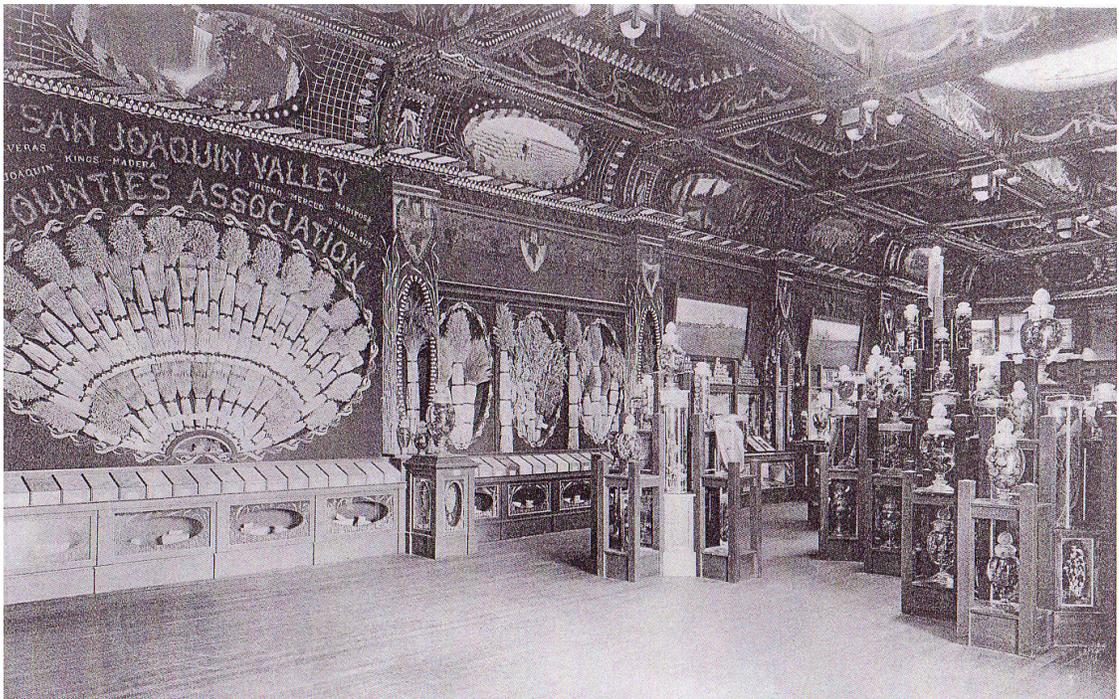


Figure 3.13 Interior of the San Joaquin Valley Building. Bundles of grass and grain were displayed on the walls.

At the south end of the Explanada was the Plaza De Los Estados. On the south side of the plaza was the Spreckels' Organ Pavilion, to the east was the Salt Lake & Union Pacific Railroad Building and to the west was the Alameda & Santa Clara Counties Building. A pathway leading west from the Plaza Del Los Estados guided visitors past towards the State Buildings for Kansas, Utah, Washington, New Mexico, and Montana. Beyond these buildings, on the southern-most point of the Fair was the U.S. Marine Corp Camp and Parade Ground. The exact arrival of the Marine Corp Camp is ambiguous. In the *The Official Park Guide Book* for the year 1915, there is no mention of the camp.¹³⁶ From a map published in the Christman book, the camp existed during the 1915 fair because of the copyright date; however, Christman only mentions the presence of military at the Fair as an addition when the Fair was reorganized for 1916.¹³⁷

Another part of the Exposition, but located off of the official grounds, was the nursery. As mentioned in Chapter 2, the maintenance of the grounds was considerable and plants were replaced each night. Therefore it is not surprising that the size of the Exposition Nursery takes up almost as much area as the buildings and gardens along El Prado. The Nursery was located to the southeast of the Pepper Grove, across the railroad tracks and the road from the Exposition grounds. The location of the nursery, the fact that replacement and maintenance took place largely at night, and the manner in which *The Official Guide Book* speaks of the horticulture of the Fair suggest that this large operation was meant to be secretive. Nowhere does the *Guide Book* mention how each night plants are replaced and heavily watered so they can appear to thrive in

¹³⁶ *The Official Guide Book of the Panama California Exposition San Diego 1915*. San Diego, California. January 1 to December 31, 1915. The San Diego Public Library. Accessed November 24, 2007.

¹³⁷ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg 43-55.

the desert climate.¹³⁸ The Fair represented a fantasy. The officials wanted to show visitors a land of abundance and magic; apparently this could not be done without a little deceit.



Figure 3.14 The Spreckels Organ Pavilion marks the southern end of the Explanada.

¹³⁸ *The Official Guide Book of the Panama California Exposition San Diego 1915*. San Diego, California. January 1 to December 31, 1915. The San Diego Public Library. Accessed November 24, 2007.

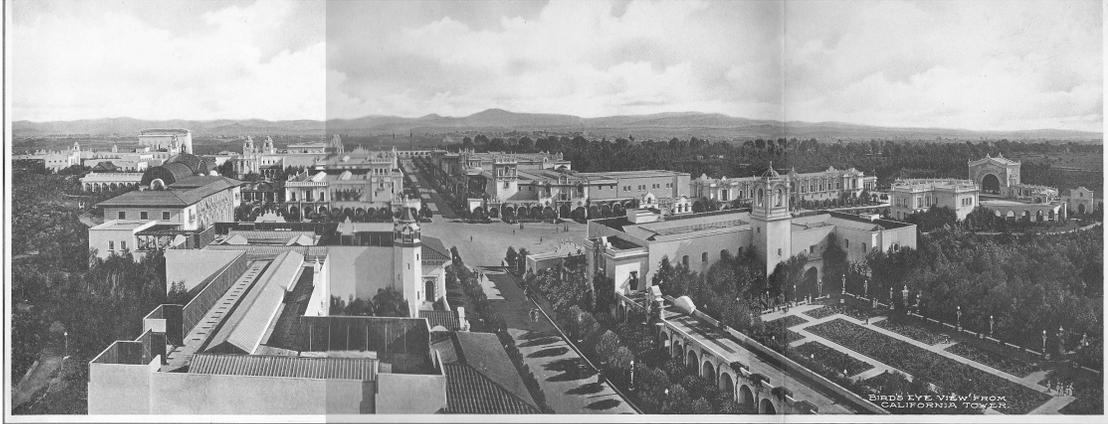


Figure 3.15 Panorama taken from the California Building tower. View looks east along El Prado with the Plaza De Panama at the center, the Spreckels Organ Pavilion to the right, and the Sierra mountain range in the distance. From this view, many of the extensive plantings can be seen. This lush green landscape is severely contrasting to the natural landscape of Balboa Park see in the image below.



Figure 3.16 Image of Balboa Park before the construction of the Exposition.

The California Quadrangle

For the design of the California Quadrangle, Clarence Stein referenced Mexican and Aztec buildings and decorations. He mentions that the architecture of these cultures is unique because “there seems to have been not only unlimited wealth and architects who could plan in a big way, but also native workman, competent to execute most intricate carving” and he mentioned how the workman mastered the techniques that “combined not only the crowded-almost Oriental – splendor of Aztec carving and love of rich coloring – but much of the best of the artistic inheritance of the Spanish masters.”¹³⁹ His admiration of Mexican and Aztec architecture was not rooted solely in the fact that their designs were unique, Stein also was adamant at utilizing truly American influences in the San Diego Fair.

Both Goodhue and Stein referenced previous expositions as relying too strongly on European influences. However, Stein pushed the issue quite fervently. Stein felt the Spanish Colonial was more authentic to America than anything that had been built in a previous exposition. He stated that the “American architectural inheritance [turned too often] to European sources and too often to French books.”¹⁴⁰

Of all the buildings in the Fair, those of the California Quadrangle were most genuine to the principles of Spanish Colonial style. Many of the other buildings along El Prado shared the same massing and character of those in the Quadrangle, however their architectural influences varied greatly. The designs of the buildings outside the California Quadrangle have been attributed to Frank Allen Jr. and a handful of other architects.¹⁴¹ Examples of buildings by Frank Allen Jr. include both the Commerce & Industries Building and the Varied Industries Building. These buildings lack the

¹³⁹ Stein, Clarence. “A Triumph of the Spanish-Colonial Style”, in *The Architecture and Gardens of the San Diego Exposition*. San Francisco. Paul Elder and Company 1916. Pg. 13

¹⁴⁰ Ibid. Pg. 12

¹⁴¹ In the book on Goodhue by Alexander, et. al. photographs of the tower of the Commerce & Industries Building suggest this element of the building was designed by either Stein or Goodhue,

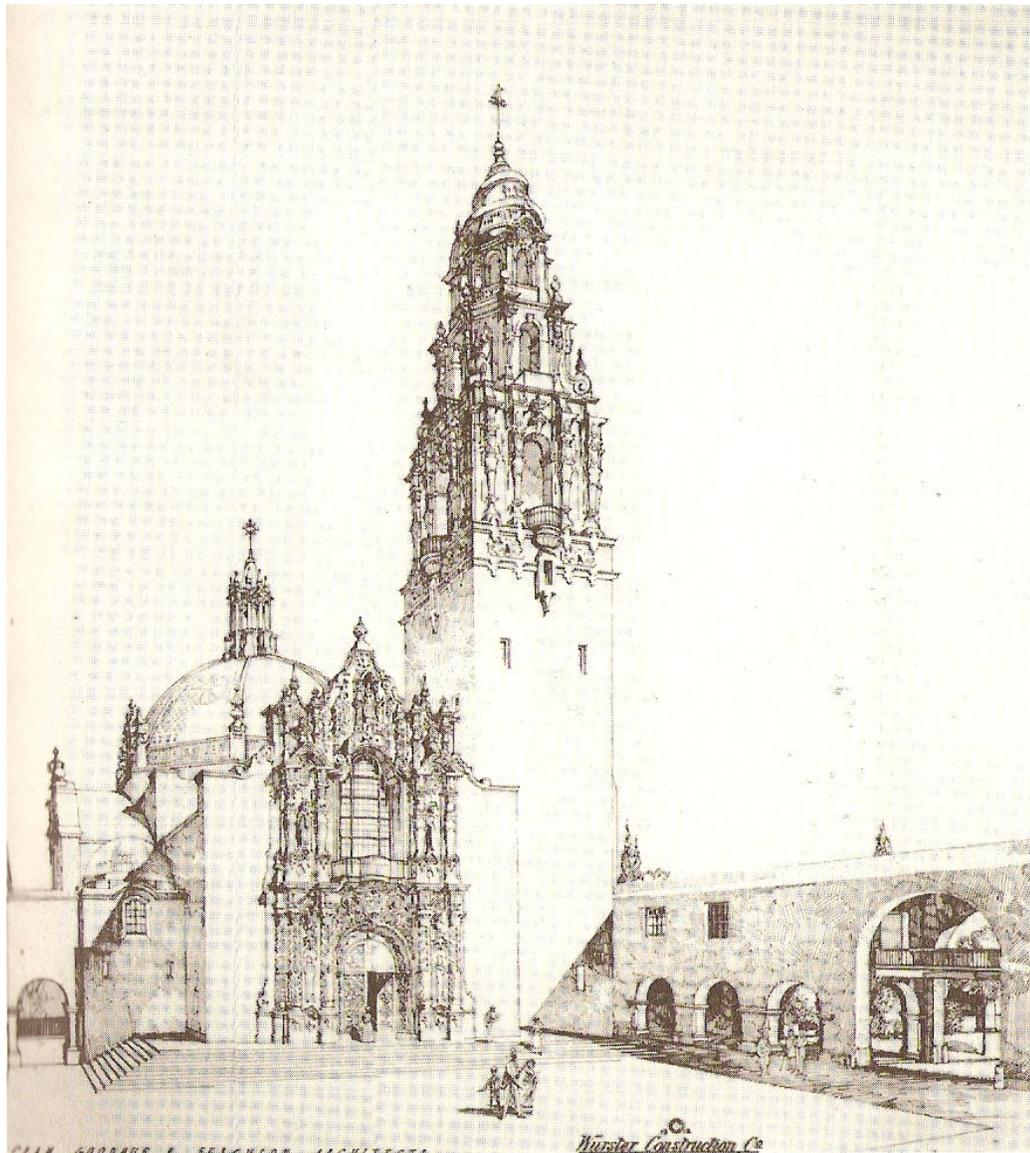


Figure 3.17 Rendering from the office of Cram, Goodhue and Ferguson of the California Building and the Plaza De California (a.k.a. the California Quadrangle).

but no documentation specifically verifies this suggestion. Alexander, Hartley Burr; Ralph Adams Cram; George Ellery Hale; Lee Lawrie; C. Howard Walker; Charles Harris Whitaker. *Bertram Grosvenor Goodhue- Architect and Master of Many Arts*. Press of the American Institute of Architects, Inc. 1925. New York City.

Spanish Colonial style of ornament and instead are adorned with carvings of oriental and Arab influences.¹⁴² At the cornice of the Commerce & Industries Building there are bare-breasted women who appear to be holding up the soffit. This as well as other clues show that these buildings are not Spanish Colonial in origin.



Figure 3.18 Sketch of the California Building from the west. This drawing is obviously dramatized because the Cabrillo Canyon is not as deep as is portrayed here.

Goodhue and Stein's crowing glory was the California State Building, undoubtedly the most prominent building of the 1915 Fair. It was not only the first building visitors to the Fair saw from across the bridge, but it was visible from miles away. The dominant 200-foot tower with intricate ornament and the deeply symbolic façade were the key elements of the building.¹⁴³ The choice of this typology for the

¹⁴² Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. 2005. Albuquerque. Pg. 85

¹⁴³ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. 1983. Cambridge, MA & London, England. Pg. 114

California Building was symbolic as its purpose was to display archaeological, ethnological and anthropological pieces of regional history.



Figure 3.19 The west gate of the Exposition with the ornamental tower and dome of the California Building visible above.

The decoration on the tower and the patterns in the tile of the dome were standard elements of Spanish Colonial architecture. Images from the book *Tres Siglos De Arquitectura Colonial* churches from the 18th century in Mexico with similar attributes as the California Building.¹⁴⁴ The highly ornate façade followed the trends of the Spanish Colonial style by incorporating figures and elements of San Diego history.

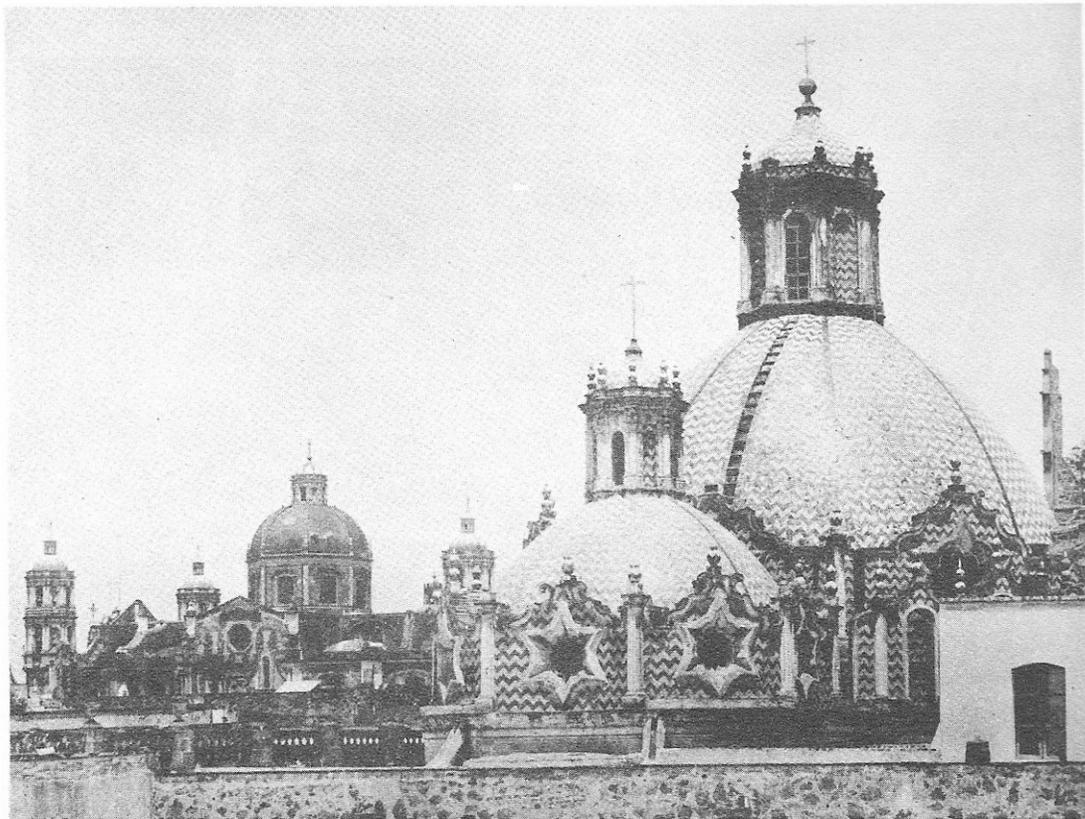


Figure 3.20 Tile domes on the church of the Pocito in the Federal District of Mexico, a typical element of 18th Century Spanish Colonial architecture.

¹⁴⁴ *Tres Siglos De Arquitectura Colonial*. The Department of Education of the Republic of Mexico. D. Appleton-Century Company. 1933. New York.

Adorning the top of the façade is a statue of Junipero Serra, the Franciscan monk who was charged with the task of establishing the first missions in Alta California. On either side of Serra and just a few feet below are the busts of Cabrillo, Vizcaíno and Portolá. Below the Spanish explorers stood the statue of Luís Jayme the martyr of the conflict between native Californians and their Spanish conquistadores. Edgar Lee Hewett, the director of the School of American Archaeology, was an avid fan of the symbolism in the façade and noted that never had he seen a “Spanish renaissance façade” that was able to convey “the conflicting aims of Spanish Colonial policy in all its humanity and sadness”. Another dominant element of the façade was the Biblical verse at the base of the dome. From Deuteronomy it reads “A land of corn, barley and vines, in which the fig, pomegranate and olive grow; a land of oil and honey”. This verse appeared often in the Franciscan journals of Alta California.¹⁴⁵ Unfortunately, it is unknown who chose this verse for the building and to attribute it solely to Goodhue or Stein would purely be speculative.

The historical symbolism and story-telling was not limited to the exterior of the building. Inside were carvings and frescos depicting moments in the colonization of the area. These pieces helped to tell visitors stories of art, architecture, social life, religion and city building. The carvings were placed in the friezes and they depicted the various conquerors important to the area. Carlos Vierra painted the frescos in the balconies above the rotunda. Vierra captured interpretive imagery of ancient Latin American cities.¹⁴⁶ A complete list of the artwork displayed in the California Building is included in Appendix B.

¹⁴⁵ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. 2005. Albuquerque. Pg. 106

¹⁴⁶ *Ibid.* Pg. 108

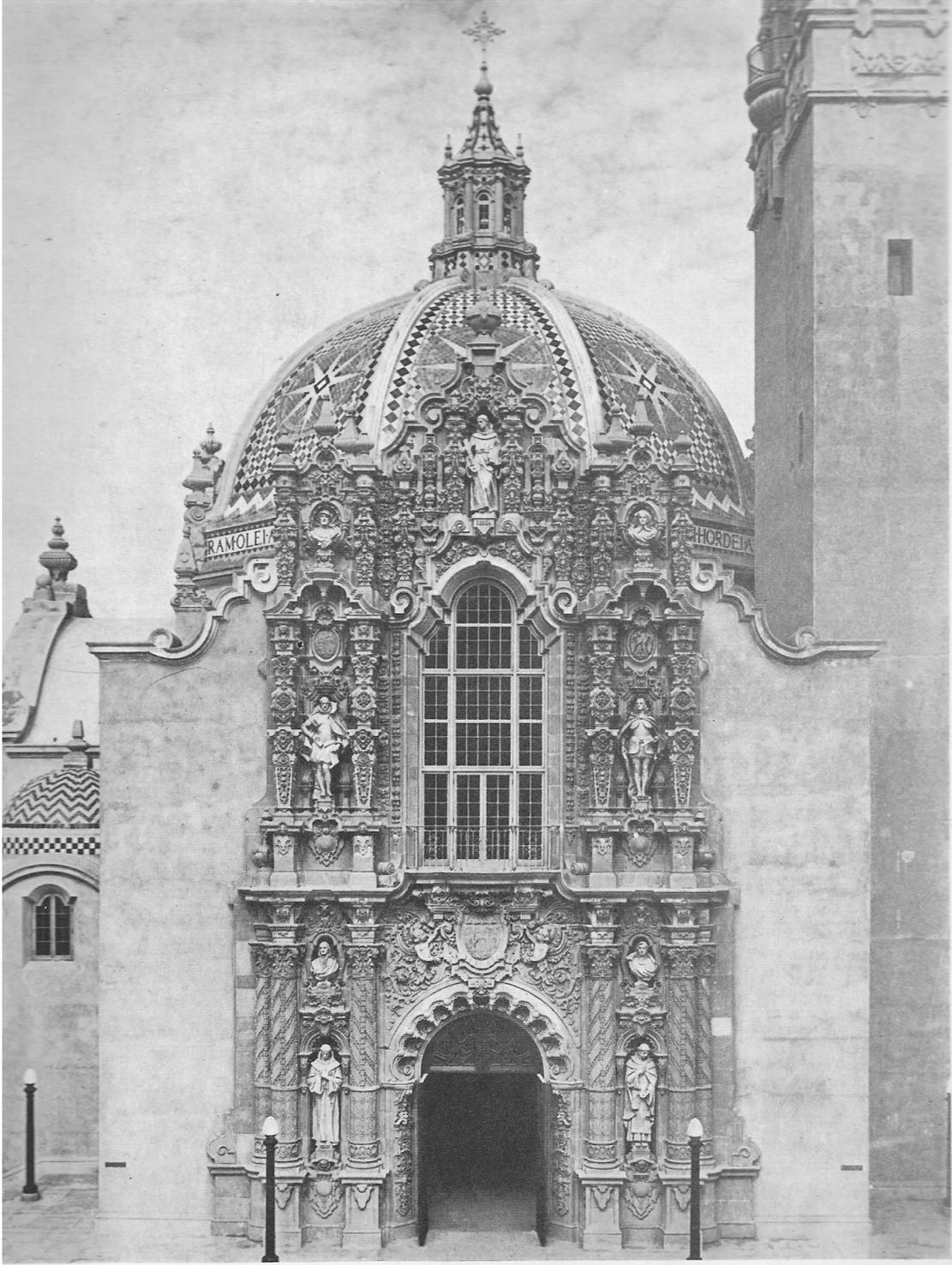


Figure 3.21 The front façade of the California State Building.



Figure 3.22 Interior photograph in the rotunda of the California Building with the carvings seen on the balconies.

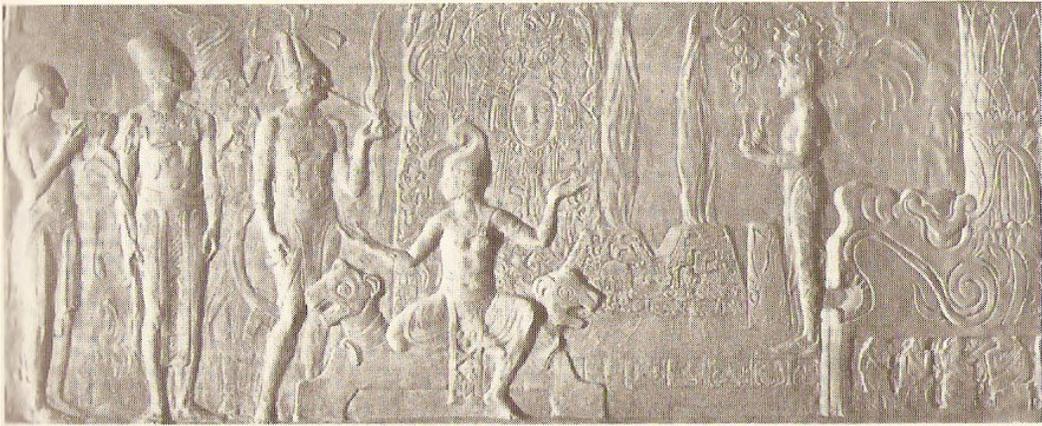


FIG. 25. CEREMONY OF DIVINATION.

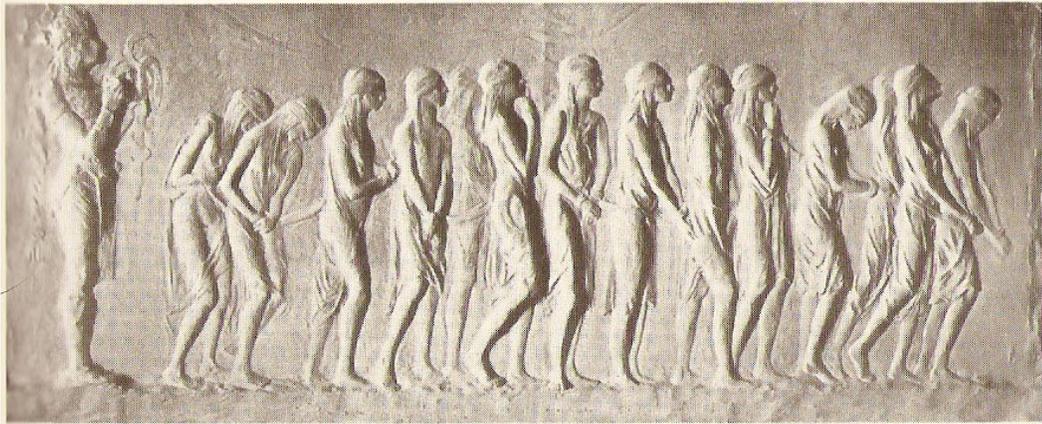


FIG. 26. SACRIFICIAL PROCESSION OF THE VIRGINS.

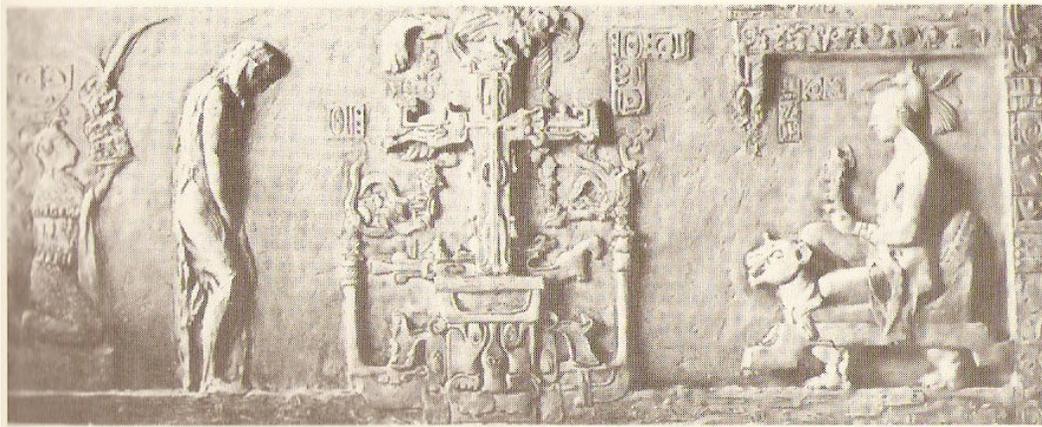


Figure 3.23 Carvings placed in the friezes of the California Building. The images depict stories of art, architecture, social life, religion and city building in Mexican and Southwestern history.

In addition to serving as an exhibition space, the California Building was the Host building. On the ground floor were the office of the President of the Exposition G. Aubrey Davidson and the parlor for the California State Commission. On the second floor were the Women's Headquarters where the President of the Women's Board of the Exposition, Mrs. I.N. Lawson, kept her office.¹⁴⁷ The exhibits in the California building introduced visitors to the history of Spanish influence in the region through displays of archeology, art, and models of ancient cities.

The Fine Arts Building across from the California Building, has a much less prominent presence on the Quadrangle. The front façade of the Fine Arts Building has a one-story arcade with a tile roof. It then steps back to a two-story plain façade with a simple cornice moulding two feet below the top of the parapet. Inside the west entrance of the Fine Arts Building was replica of a Franciscan chapel. The rough-hewn beams of the ceiling and the tile floor were reminiscent of the elements of chapels in the California missions. The remainder of the first floor of the Fine Arts Building was a long exhibit hall displaying paintings for sale by artists such as George Luks, Joseph Henry Sharp, Maurice B Predergast, and William Glackens. A complete list of the paintings in the main hall of the Fine Arts Building can be seen in Appendix C. In the basement level of the Fine Arts Building an exhibit of pictures and relics associated with early San Diego were displayed. The exhibit was contributed to the Exposition by the Pioneer Society.¹⁴⁸

The California Building and the Fine Arts Building compose the majority of the permanent structures of the exposition. As a way to decipher the difference between the structures, the temporary buildings were finished in pearl gray stucco

¹⁴⁷ *The Official Guide Book of the Panama California Exposition San Diego 1915*. San Diego, California. January 1 to December 31, 1915. The San Diego Public Library. Accessed November 24, 2007.

¹⁴⁸ Ibid

while the permanent buildings were finished in a pink-beige tone stucco. Although the temporary buildings were beautiful, Goodhue believed them to be mere “stage scenery”. He wrote “the reveals of windows and doors [in the temporary structures], when studied critically, are observed to be pitifully thin” and although the “various features and projections are, considered with reference to what is behind them, [the buildings are] playful and meaningless rather than purposeful and logical expressions of their interior.”¹⁴⁹

When the construction of the buildings was complete and the grounds of the exposition nearly finished, a handful of museums and organizations came to San Diego to provide the exhibits that would be shown. These organizations included the Museum of New Mexico, the School of American Archaeology, and the Smithsonian Institution.¹⁵⁰ These organizations were critical to achieving the overall goal of the exposition by showing the history and the progress of man.

On January 1, 1915 the gates of the Panama-California Exposition were opened to the public. Although the exhibits and the theme were like nothing that had been seen at a previous exposition, it was the architecture that left the lasting impression on the visitors.

Post-Exposition

The majority of buildings at the Fair were never meant to remain. Plans for the park had been established well before construction. The temporary buildings were to be removed and large public gardens were to be planted in their place. The California Quadrangle would remain and act as the main gate into a 200 acre public garden.

¹⁴⁹ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. 1983. Cambridge, MA & London, England. Pg. 116

¹⁵⁰ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. 2005. Albuquerque. Pg. 60

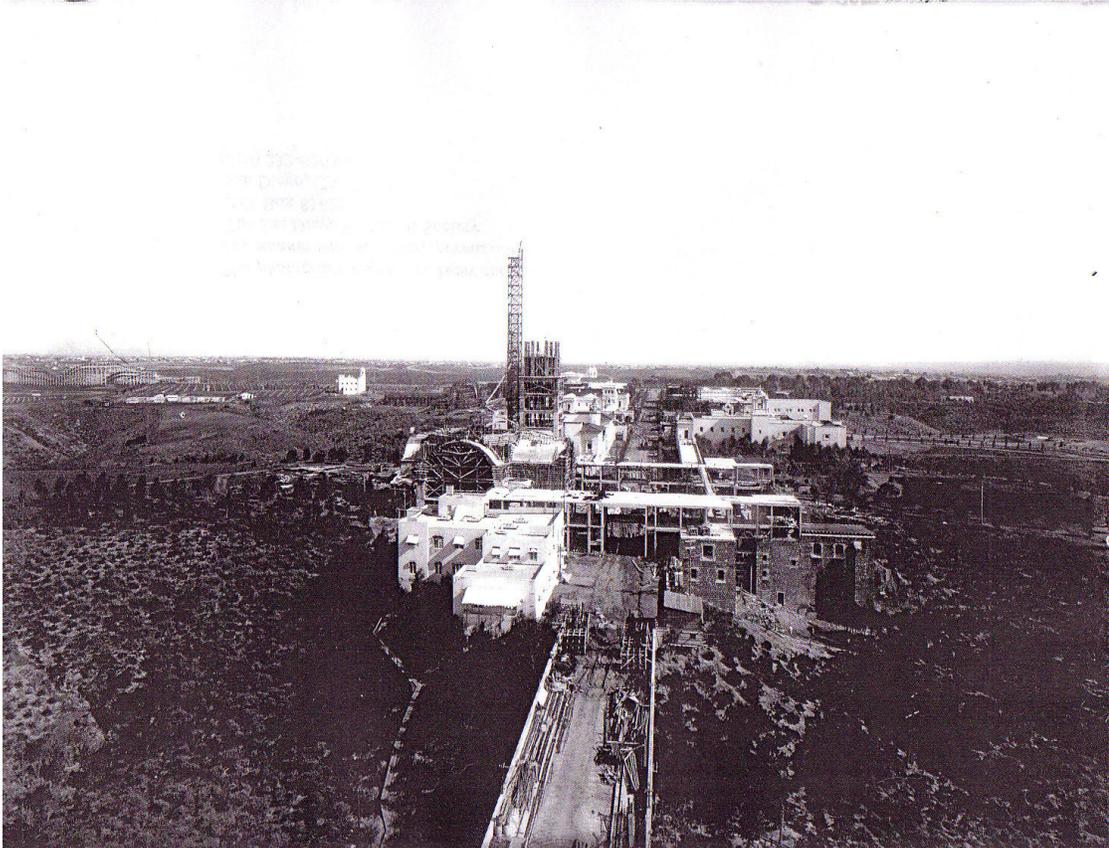


Figure 3.24 The construction of the Panama California Exposition. Below is the Cabrillo Bridge and the scaffolding for the California Quadrangle can be seen in the center.



Figure 3.25 Poster for the Exposition with an aerial drawing of the grounds. Interestingly the grounds are drawn looking southwest. In this depiction the California Quadrangle and the main gate are not dominant or easily identifiable.

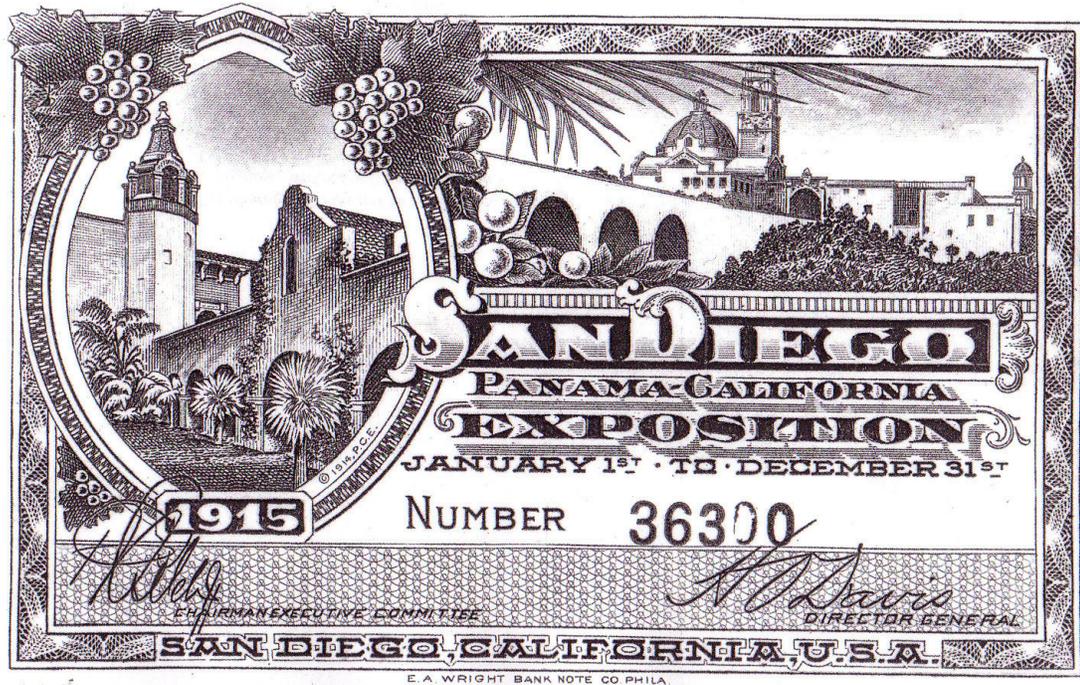


Figure 3.26 Bank note for the Exposition.

Goodhue envisioned that it would rival in element and beauty the great gardens of Europe.¹⁵¹ Besides the Quadrangle Buildings, only the Botanical Building, and the Spreckels' Organ Pavilion were intended to remain.¹⁵² Although in his writing Goodhue was adamant that the temporary structures should be removed¹⁵³ it would be interesting to know whether he would have received such acclaim for the Fair had most of the buildings been demolished. Although his own buildings would have remained, the popularity of Balboa Park rests in the grand collection of buildings that remain from the Fair. It is hard to imagine that its popularity as an attraction for tourists and locals would be as great had only his two buildings remained.

¹⁵¹ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. 1983. Cambridge, MA & London, England. Pg. 118

¹⁵² Bartholomew, Harland. *Master Plan for Balboa Park San Diego, CA*. June 1960. Pg. 6-10.

¹⁵³ Goodhue, Bertram G. *The Architecture and the Gardens of the San Diego Exposition*. Paul Elder and Company Publishers. 1916. San Francisco.

The first unexpected event in the life of the exposition was that as the year 1915 came to a close, John D. Spreckels and other board members petitioned for the Fair to continue for another year. The petition was a success and the exposition was reorganized as the Panama-California International Exposition. Since the San Francisco Fair had ended, San Diego was able to obtain many of the exhibits as well as several new ones. Nine new buildings were erected in the name of other states¹⁵⁴ and several of the existing buildings were modified for new exhibits.

According to the 1916 Fair map, the California Building and the Fine Arts Building remained the same, as did the San Joaquin Valley Building, the Foreign Arts Building, the Southern California Counties Building, the Botanical Building, the Kern and Tulare Counties, and the State Buildings on the southwest section of the site. Almost every other building on the site changed names (unfortunately a guide book for the 1916-1917 Fair could not be found, therefore it is unknown if the exhibits in the buildings changed or just the names of the buildings). The Science of Man Building to the east was renamed the Science and Education Building, the Indian Arts Building became the Russia & Brazil Building, the Home Economy Building became the Pan Pacific Building, the Food Products Building and the Varied Industries Building were combined in the 1916 Fair to become the Foreign and Domestic Industries Building, and the Commerce and Industries Building became the Canada Building. The use of the northern area of the Fair remained fairly similar to the 1915 Fair. The Standard Oil Co. and the International Harvester Company remained in their buildings. The Citrus Grove and model farms remained as well as the Tractor Exhibit and demonstration areas. The Open Air Theater was removed for a new Motor Demonstration Track and it appears a track was added across the path to the west from the Demonstration Track. The Painted Desert of the Santa Fe remained for the second

¹⁵⁴ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 53-54

year of the Fair, but it appears the roadways to the north of it were slightly reconfigured. A few new buildings were added into the concessions and amusement area, but for the most part it remained similar to the original Fair.¹⁵⁵

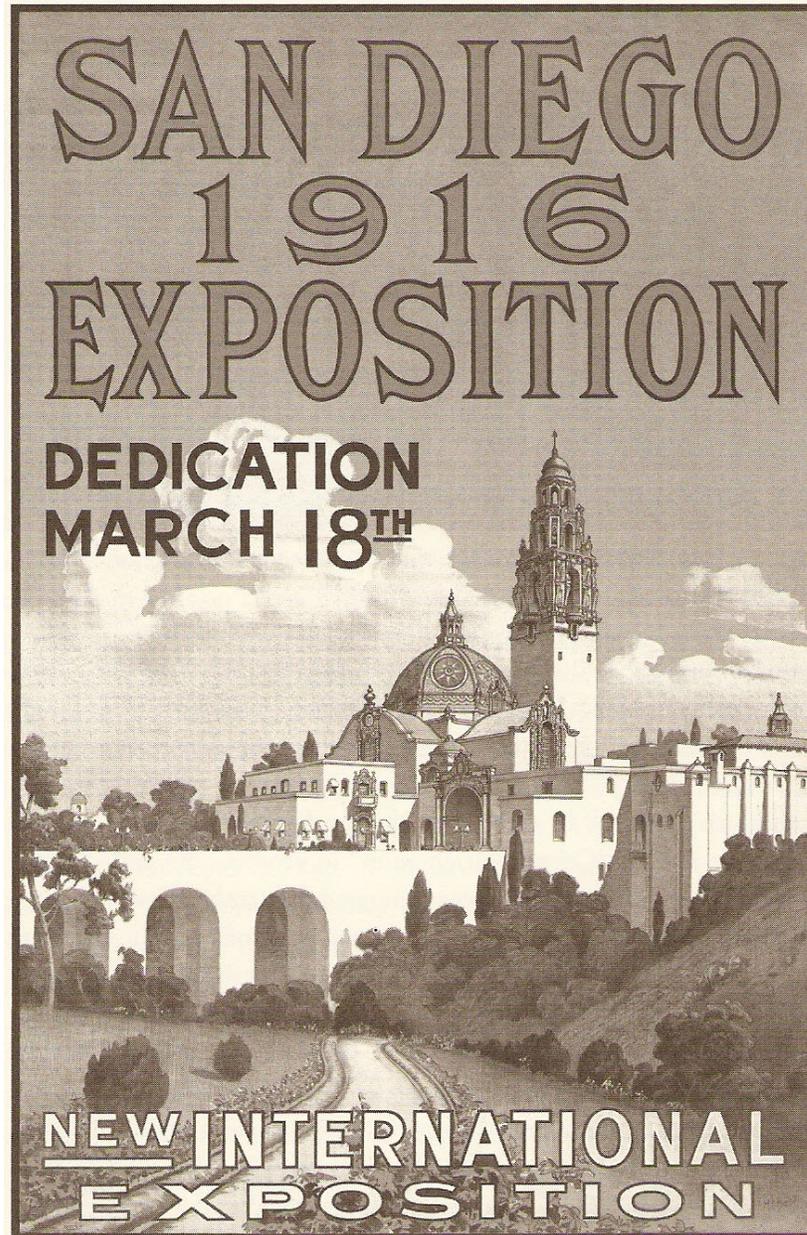


Figure 3.27 Poster for the 1916 Fair. Notice the word “New” is underlined to stress its reorganization.

¹⁵⁵ Bartholomew, Harland. *Master Plan for Balboa Park San Diego, CA*. June 1960. Pg. 18

In the second year the United States government took a great interest in the Fair. The Sacramento Valley Building became the United States Government Building and several military regiments were active participants in the second year of the Fair. The 1916 Fair map shows a U.S. Coast Guard addition to the U.S. Marine Corp Camp on the southern edge of the grounds.¹⁵⁶ Although these military additions seem a strange addition to an exposition, they added to the pageantry and grandeur.¹⁵⁷ From this point on, the United States Military and Balboa Park would be forever linked.

In addition to the changes to existing buildings, the construction of new buildings, and the military presence, the only difference between the 1915-16 and the 1916-1917 Fair were the addition of eleven more exhibits from counties around California. At the ceremony on closing day, the renowned singer, Madame Ernestine Schumann-Heink sang “Auld Lang Syne” from the Spreckels’ Organ Pavilion, the band played “The Star Spangled Banner,” and fireworks were arranged to spell “World Peace 1917.” Ironically, three months after the closing, America declared war on Germany. The Fair officially closed on January 1, 1917. The success of the two-year run was sufficient to pay all the expenses and have enough funds left to donate to the newly established San Diego Museum.¹⁵⁸

After the Exposition

When the United States entered into World War I the city approved the use of the exposition site as a training ground for recruits. By the end of 1917 more than 5,000 men were being trained in Balboa Park. A tent hospital was established closer to downtown. This later evolved into the Naval Hospital that remains on the site today. In addition to the Naval training center, a Naval air base was located in the park.

¹⁵⁶ Bartholomew, Harland. *Master Plan for Balboa Park San Diego, CA*. June 1960. Pg. 18

¹⁵⁷ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 53-54

¹⁵⁸ *Ibid.* Pg. 54

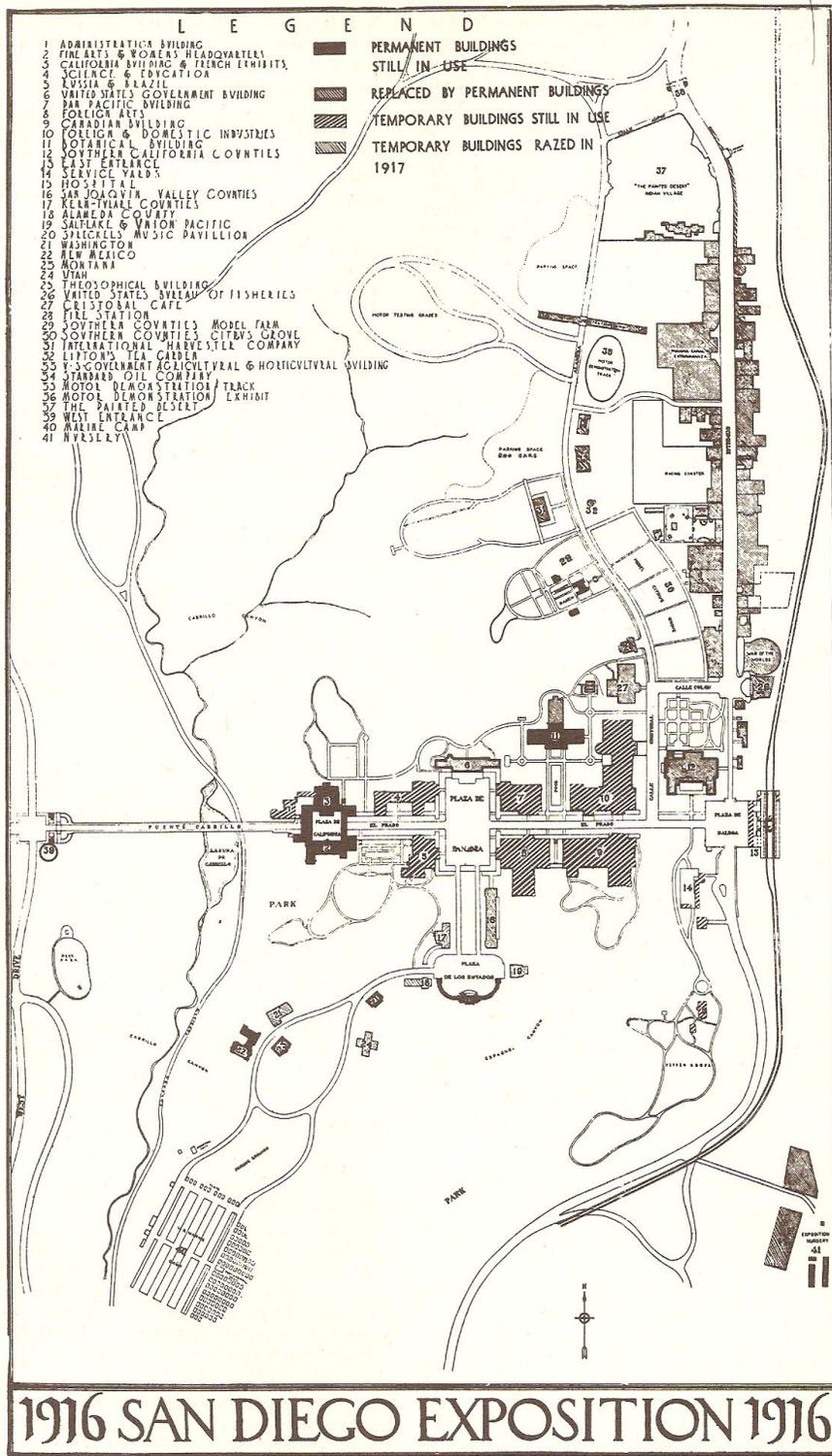


Figure 3.28 Map of the 1916 Fair.

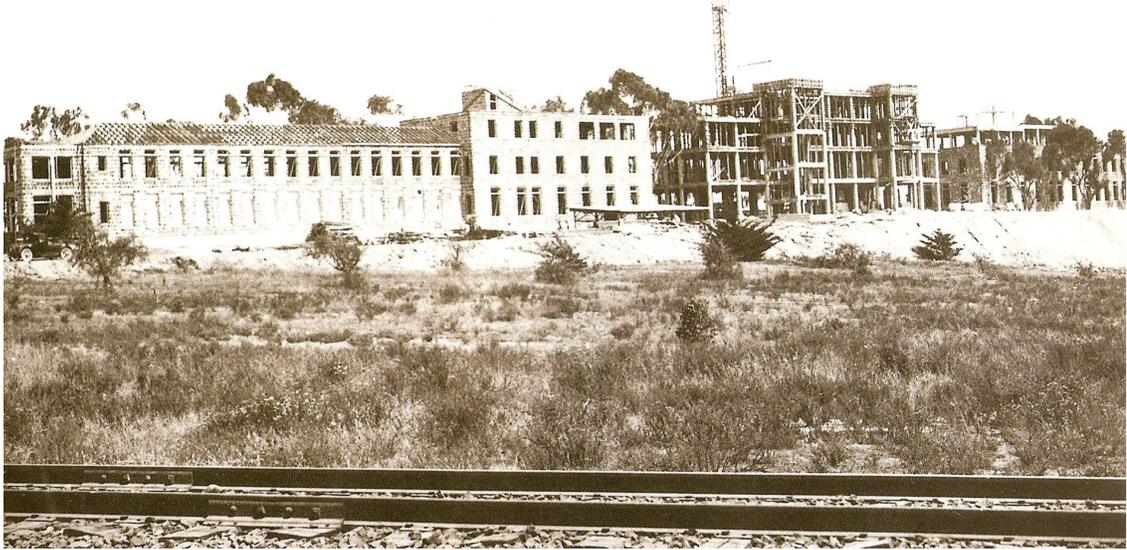


Figure 3.29 Image of the construction of the Marine Camp in 1915. This camp initiated the military presence San Diego is known for.

The presence of this air base in San Diego led to the establishment of the Naval Air Station-Miramar years later. The use of Balboa Park during World War I awakened the idea that San Diego could be a military strong-hold. The establishment of the Naval Hospital, the Naval Air Station at Miramar, and the Marine Corps Recruit Depot (which Clarence Stein worked on when Goodhue was commissioned for the design) all originated from the early military presence in San Diego. At the end of the war the military moved out of Balboa Park. The exposition buildings were in such bad condition that the city proposed to finally demolish them.¹⁵⁹ However, the city would soon find out that the citizens of San Diego would never allow this to happen.

¹⁵⁹ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 71-72

As soon as the exposition closed George Marston, Edgar Hewett and several local citizens had moved quickly to establish the San Diego Museum Association. This group was victorious at convincing the United States National Museum and the School of American Archeology to donate the items that had been loaned for the Fair. This triumph resulted in the establishment of Balboa Park as a permanent cultural center of the city.¹⁶⁰ After World War I, the museums re-occupied the buildings of the Fair and were instrumental in saving them from demolition.

When the city officially condemned the buildings of the 1915 Fair, the citizens of San Diego united to raise more than \$40,000 for their rehabilitation. In 1922 George Marston asked the citizens for another \$23,000 to accompany the \$47,000 the U.S. Government appropriated to further repair dilapidated buildings. Despite the great strides the citizens had taken, these repairs were only temporary since the majority of the buildings were merely lath and plaster and could not withstand even the mild Southern California climate.¹⁶¹

In 1933 the buildings were in such poor shape that they were again condemned. The citizens groups petitioned the city to save the buildings. At a cost of almost \$400,000 the 1915 exposition buildings were revitalized once again. After this extensive restoration of the site, it was decided that another exposition should be held on the site.¹⁶² Although the buildings at Balboa Park were well loved by the citizens of San Diego, the choice of its use for the second exposition was somewhat forced.

As the centennial of the establishment of San Diego's first municipal government approached, a committee was formed with citizens enthusiastic about a centennial celebration. Ernest Dort, the committee's secretary, suggested another

¹⁶⁰ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 143

¹⁶¹ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 74

¹⁶² Ibid. Pg. 81- 82

exposition and that it be placed near the waterfront where John Nolen had suggested in his 1908 plan for the city. Despite the committee's efforts to gain the support of local businessmen, the depression San Diego and the rest of the country was experiencing made many apprehensive at such an endeavor.¹⁶³ Although the committee was unsuccessful, their suggestion was taken by a San Diego transplant and successfully made into reality.

Frank Drugan, a newspaper journalist who relocated to San Diego after losing his home and business in the Long Beach earthquake, realized what a boost a second exposition could give the economy. As it soon became apparent that no one was eager to make the economic investment a second exposition would require, Drugan realized that in Balboa Park, sat a "complete exposition plant." He was able to convince powerful businessmen and citizens that a minimal amount of investment could result in the revitalization of San Diego business. In 1933, Drugan negotiated with the director of exhibits at the Chicago Century-of-Progress Exposition, to transfer the exhibits to San Diego in 1934. In addition to this, Drugan was able to convince the head of the Reconstruction Finance Corporation, Jesse H. Jones, to assist San Diego in their centennial exposition undertaking.¹⁶⁴ Drugan's thrift and innovation enabled the California Pacific International Exposition to become a reality.

In 1935 the California Pacific International Exposition opened. Utilizing the 1915 buildings required only a few new structures to be built.¹⁶⁵ The new buildings were located on the southern portion of the site where the state buildings and the Marine Corps camp had been located. Where the Kansas Building once was, the Floral Association Building was erected. The Utah Building was replaced by the Photo Arts

¹⁶³ Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 150

¹⁶⁴ *Ibid.*. Pg. 156-157

¹⁶⁵ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 81- 82.

Building. The House of Pacific Relations replaced filled the park area where the Montana State Building once stood. The Balboa Park Club Building with a cactus garden in the back replaced the Washington State Building and The Palisades Building was built on the site of the New Mexico Building. It is unknown whether these buildings were removed prior to the 1935 Fair or if they were demolished for the larger buildings to be built. On the site where the Marine Corps and Coast Guard Camps once sat, the Ford Building, the Balboa Park Bowl, the Municipal Gymnasium, and the Federal Building were erected. Most of the buildings to the north of El Prado had been removed including the model farm and demonstration areas and the concession and amusement buildings. For the 1935 Fair a Spanish Village and a miniature railroad was built.¹⁶⁶

To the north of California Building an English Village was built with a Shakespearian Globe Theater. The Science & Education Building became the Medical Arts Building, the U.S. Government Building became the Fine Arts Building, the Brazil & Russia Building became the House of Charms, the Foreign Arts Building became the House of Hospitality, the Canada Building became the Electric Building, the Foreign & Domestic Industries Building became the Food and Beverage Building, the Southern California Counties Building became the Natural History Museum, and the Pan Pacific Building became the American Legion Building.¹⁶⁷

The 1935 Fair focused on bringing culture to visitors. In the Ford Building and the Balboa Park Bowl were daily musical performances from choirs and symphonies from around the country. Abridged performances of Shakespearian plays were performed at the Old Globe Theater. In addition to these cultural events were a plethora of educational exhibits such as firefighting techniques demonstrated by the

¹⁶⁶ Bartholomew, Harland. *Master Plan for Balboa Park San Diego, CA*. June 1960. Pg. 9.

¹⁶⁷ *Ibid.* Pg. 7.

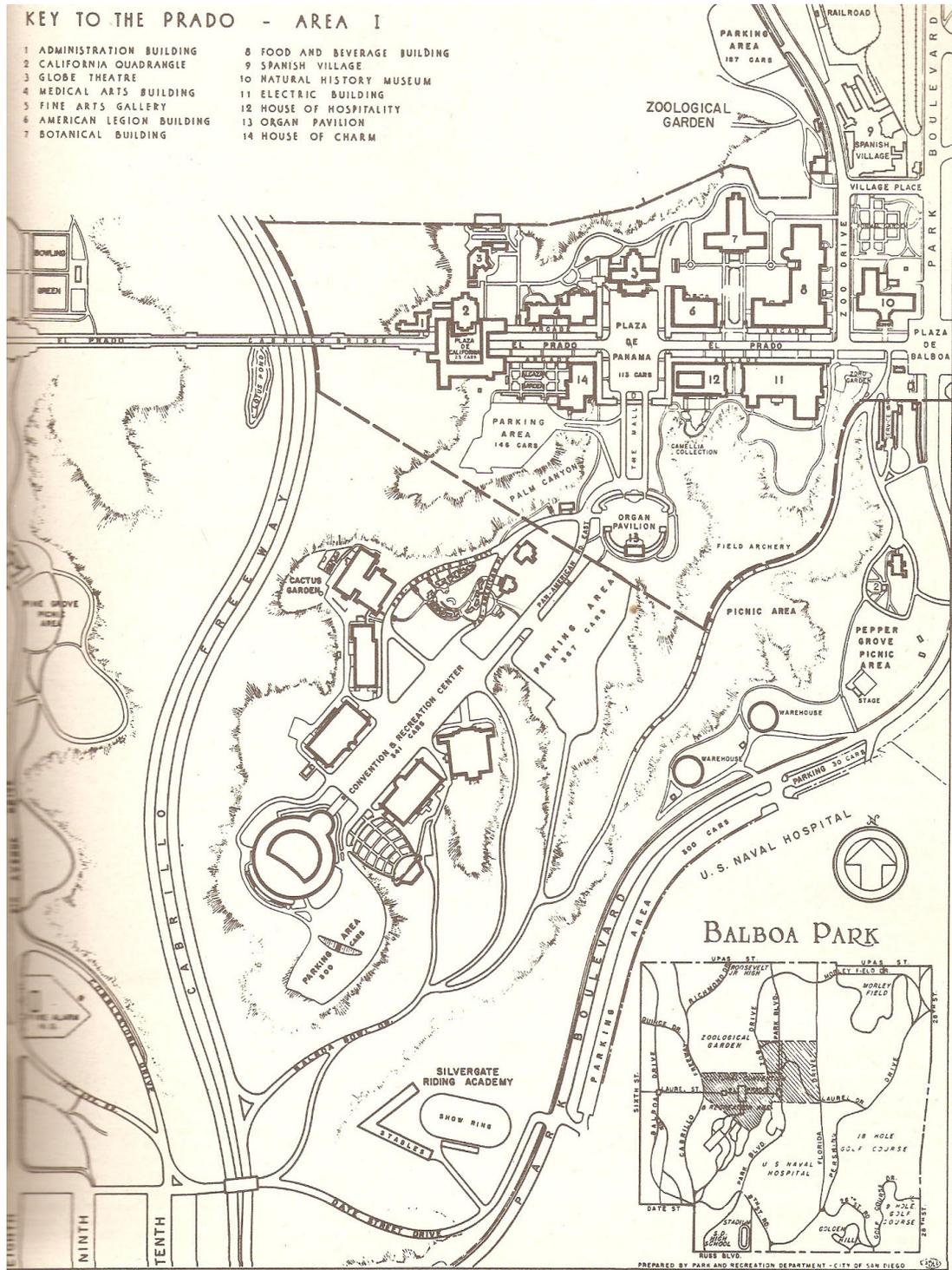


Figure 3.30 Plan of the 1935 Fair.

Forestry Service and automobile construction in the Ford Building. The Fair was not large in comparison to other world fairs, but still managed to attract celebrities and dignitaries. President and Mrs. F.D. Roosevelt visited the Exposition with Mayor Percy Benbough and Governor Frank Marriam.¹⁶⁸

Six months before the 1935 Fair was to end, writer Edward T. Austin wrote an article in *The San Diego Union* stating that the biggest problem the citizens of San Diego would face would be “what to do with a \$6,000,000 Exposition layout and no Exposition,” when the 1935 Fair came to a close a great debate ensued as to whether the new buildings would remain. Austin argued that since the second exposition had doubled its use of Balboa Park, some demolition would have to occur in order for the park to return to a public recreation area.¹⁶⁹ Several buildings from the second exposition were indeed retained, including the English Village, where the Old Globe Theater was constructed.¹⁷⁰ Although unlike the first exposition, the majority of the new structures were removed at the end of the second Fair. The 1935 exposition was successful at reviving Balboa Park as a social center for the residents of San Diego; however, this would soon change.¹⁷¹

World War II brought with it another naval occupation of the buildings. In contrast to World War I, at the end of World War II the Navy gave the city more than one million dollars for the repair of the buildings. By the 1980s several million more would be spent to maintain the structures that dated back as early as 1915.¹⁷² The amount of money that has been spent to keep these temporary structures in place and

¹⁶⁸ Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 84-87

¹⁶⁹ Austin, Edward T. “\$6,000,000 Added to Value of Park by Expo Estimate”. *San Diego Union*. September 14, 1936. San Diego Historical Society Research Archives. Accessed November 21, 2007.

¹⁷⁰ Bartholomew, Harland. *Master Plan for Balboa Park San Diego, CA*. June 1960. Pg. 6-10.

¹⁷¹ Austin, Edward T. “\$6,000,000 Added to Value of Park by Expo Estimate”. *San Diego Union*. September 14, 1936. San Diego Historical Society Research Archives. Accessed November 21, 2007.

¹⁷² Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 99

the overall impact that they have had on San Diego is notable. Goodhue's reputation and influence on the architecture of southern California is well publicized, however something that is often overlooked is the influence the exposition had on his later architectural commissions.

CHAPTER 4

THE HISTORY OF TYRONE, NEW MEXICO

After capturing the world's attention first with the design of West Point and then with the completion of the San Diego Exposition, Bertram Goodhue was sought out for several new commissions. His first commission after the Exposition was for the design of a company town in Tyrone, New Mexico.¹⁷³ Goodhue placed Clarence Stein in charge of the design for Tyrone and Lewis Mumford suggests, his involvement on this project helped to shape his opinions on worker housing and town planning which he became well-known for in his later career.¹⁷⁴

The story of Tyrone begins with the story of copper mining in the American Southwest which was largely a result of the efforts of a young Mexican in search of American investment. Matías Romero, a 25-year-old lawyer, came to the United States in 1862 as a refugee to solicit aid against France who had invaded Mexico under Ferdinand Maximilian. However, in addition to this support he was looking to inspire the investment of American capitalists in Mexico.¹⁷⁵ What was unique about Romero's interest in U.S. investment was that less than twenty years earlier Mexico and the United States were waging war against each other over what became known as the borderlands.

Despite the varied and somewhat volatile relationship Mexico had with the United States, Romero believed that if the two countries could find a "common ground" it could lead to the achievement of autonomy for the Mexican government. Therefore it was his goal to present the American business class with the many

¹⁷³ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 152

¹⁷⁴ Stein, Clarence S. *Toward New Towns for America*. Introduction by Lewis Mumford. The M.I.T. Press. 1971. Pg. 13

¹⁷⁵ Truett, Samuel. *Fugitive Landscapes*. Yale University Press. 2006. Pg. 55-56

opportunities for investment to be had in a restored liberal Mexico. ““My country has been favored with all the blessings of nature,’ Romero told the crowd seated before him...As Mexico’s neighbor, he insisted, the United States was ‘called by nature’ to develop his nation’s mineral resources”. It was during this campaign that Romero formally met William E. Dodge, Jr., of Phelps Dodge and Company. Romero was already acquainted with William E. Dodge, Sr., his father, Dodge, Sr. was an avid supporter of President Benito Juárez, who had been removed from office by the French Monarchy, and viewed the Juárezista cause as a model of republican endeavors.¹⁷⁶ However, this was not the only motive behind the invitation.

History of Phelps Dodge and American Copper

The history of Phelps Dodge and how it became a copper empire began with Anson G. Phelps and his rise to success in the American merchant business. The Phelps family sailed from England in 1630 and after several moves around New England they settled in Simsbury, Connecticut, a village approximately twelve miles from Hartford. Anson’s exposure to copper mining began in Connecticut with Copper Mountain, a hill that stood on the northeast edge of Simsbury.¹⁷⁷ Copper Mountain was one of the first sites of copper mining in the American colonies.

The industry of mining copper dates back thousands of years, but the dawning of the Copper Age, as it is known, is accredited to two English men: James Watt and Matthew Boulton. In 1775, coinciding with the start of the Industrial Revolution in England, a partnership was formed between these two gentlemen. James Watt had invented and patented a steam engine that the two planned to produce and sell to the copper mines of southwestern England. Although the steam engine would later have a

¹⁷⁶ Truett, Samuel. *Fugitive Landscapes*. Yale University Press, 2006. Pg. 55-56

¹⁷⁷ Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 37

plethora of applications, its first function was to pump out seepage from underground mining shafts.¹⁷⁸ This invention transformed the world of copper mining. With the ability technology to pump water out the underground shafts, new depths could be reached in mining.

Copper mining at the time was centered in England with more than a hundred mines near Cornwall and Devon. Without a ready supply of coal in the area to power smelters, the ore had to be shipped to Swansea, Wales, for refining. It was then sent to Birmingham and similar fabricating centers. Among the shop owners in Birmingham was Matthew Boulton, who stamped copper coins for governments and private companies. The relevance of England as the copper mining center was significant in that among the some 60,000 workers who were employed in the mines of Cornwall and Devon were the expertise responsible for developing all the other copper regions of the world from the 18th century up through World War I.¹⁷⁹ There was no doubt in the world market at the time that England cornered copper production.

Until the first mines opened in the United States, America was one of England's biggest customers. With rich lumber supplies, shipbuilding became a prominent product in the colonies and copper was used to sheath the bottom of these wooden vessels.¹⁸⁰ Among the tensions brewing between the United States and England was this monopoly on copper production. The mine at Simsbury yielded its first copper in 1707, but due to strict British laws preventing smelting outside of England, the mine was operated in secret.¹⁸¹

Among the workers at the Simsbury mine were some of Phelps's own ancestors. Although Anson Phelps's involvement in copper mining did not begin until

¹⁷⁸ Navin, Thomas R. *Copper Mining and Management*. University of Arizona Press. Tucson, Arizona. 1978. Pg. 9

¹⁷⁹ Ibid. Pg. 9

¹⁸⁰ Ibid. Pg. 10

¹⁸¹ Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 38

much later in his life, his first contact with the red metal began with brass. England had managed to keep the techniques of brass manufacture a secret up through well after the Revolutionary War, a group of Connecticut entrepreneurs managed to re-discover the technology with the help of what knowledge could be taken from artisans coming to the United States from abroad and a fair amount of experimentation. The brass industry in Connecticut exploded in the nineteenth century and the Naugatuck Valley cornered the market on tin, copper and brass production for the first half of the century. This “Brass Valley” as it became know, was where a young Anson Phelps made his first partnership and built his first factory.

The factory was to produce copper kettles in a rather unusual manner. Until that time copper kettles were cast into form, but Phelps’s partner envisioned a mill where the kettles could be hammered out of the copper, thereby using less material and creating more profit. Unfortunately this first venture failed for it was only later when more malleable alloys were developed that copper could be hammered without cracking. As his partner worked to save the kettle factory, Phelps moved on to build more factories that produced a plethora of brass and copper goods.¹⁸²

In 1844 Phelps established a company town he named Ansonia, and it was here that he began the Ansonia Brass and Battery Company.¹⁸³ Its first product was the hammered copper kettles he had attempted to produce years before. Consuming more copper annually than any other mill in the United States, it soon became apparent to Phelps that new sources of copper were needed to keep up with the production at his mills. The small amount that could be extracted from New England’s mines had to be supplemented by copper from England. It was the realization that demand was greater than supply that propelled the Phelps Dodge Company into the copper mining

¹⁸² Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 38

¹⁸³ Ibid Pg. 38. In 1869 the Ansonia Brass and Battery Company was renamed the Ansonia Brass and Copper Company.

industry.¹⁸⁴ Despite its major holdings in copper production in the nineteenth century, Phelps Dodge's enterprise was not limited to this red metal.

The economic prosperity in the United States between 1820 and 1830 resulted in the partnership of Anson Phelps and Elisha Peck, an English merchant. The firm of Phelps and Peck began as a response to King Cotton in the American South and the erection of an abundance of mills in England for the production of clothing and fabric. After the War of 1812 international trade was left in ruins and it was firms like Phelps and Peck that helped to reconnect trade between the United States and Europe.¹⁸⁵

Phelps and Peck arranged the transportation of the cotton from warehouses in New Orleans and Savannah to their headquarters in New York and then on to England.¹⁸⁶

Elisha Peck resided in England where he would trade the American cotton for clothing that he shipped back to be sold in Phelps's store. In addition to the cloth and garments, Peck would send a variety of metal products which Phelps would use to supply factories around the country, as well as his own. Typically a shipment from England would include several sheets of brass, copper and zinc as well as square wire, copper buttons, brass kettles, copper nails, solder, rivets, iron, tin and tinplate. Tin became Phelps's primary import during his partnership with Peck and later when Phelps Dodge was formed. At the end of the 1820s the partnership of Peck and Phelps was so successful that the firm decided to erect a giant warehouse in New York to accommodate their office and their growing quantities of inventory. A six-story building was placed on the corner of Cliff and Fulton streets and received such acclaim that groups of tourists would come to see this marvelous warehouse. Despite the fact that the partnership had specifically requested the building be sufficient to

¹⁸⁴ Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 38

¹⁸⁵ Ibid. Pg. 29

¹⁸⁶ Ibid. Pg. 26

hold the intensive loads of cotton and metal that would be stored there, on May 4, 1832 the building collapsed.¹⁸⁷



Figure 4.1 Drawing depicting the collapse of the Phelps Peck warehouse building.

Fortuitously Anson Phelps had stepped out of the office that morning to attend a meeting and was spared from the wreckage. Unfortunately, his heir apparent and future son-in-law, Josiah Stokes, as well as six other valued employees were killed by the collapse. Anson was so distraught by the disaster that he immediately resigned himself from the successful business he had worked so hard to establish and as a result, the partnership of Phelps and Peck dissolved. It was his son-in-law, William E. Dodge that encouraged Phelps to resume his business ventures through a partnership

¹⁸⁷ Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 38

with himself and Daniel James. Phelps, Dodge and James resumed a similar trade system that Peck and Phelps had established; this time Daniel James resided in England where the firm was called Phelps, James & Co.¹⁸⁸

William E. Dodge and Anson Phelps were very close to one another. This was most likely due to them sharing a similar background. Like Phelps, Dodge came from Connecticut and was raised as a devout Presbyterian. William Earl Dodge was born in Hartford on September 4, 1805. At the age of thirteen he worked as a junior clerk in his father's dry goods store in New York City. From 1827 until the formation of Phelps, Dodge & Co. in 1834, William E. Dodge continued to run his family's business. At its inception Phelps, Dodge & Co. was split between four people: Anson Phelps, William E. Dodge, Daniel James, and Anson Phelps, Jr. Although Anson Phelps, Jr. was given 12.5 percent of the company, he was anything but interested in being involved in his father's business. He lacked the zeal for business that came so naturally to the elder Phelps and found relaxing in his small boat on the East River much more pleasing than sitting behind a desk all day. Both James and Dodge were given 20 percent shares in the company and the elder Phelps retained the rest.¹⁸⁹

Although imported metal began to dominate Phelps Dodge's domestic sales, the company sold everything from pottery to feathers. Rampant inflation and speculation caused the American economy to crash in 1837. Suddenly Daniel James was unable to sell American cotton at a profit and therefore was unable to purchase any tinplate to be sent back to the United States. The newly formed partnership was burdened with debt and was struggling just to stay afloat. James Stokes, whom

¹⁸⁸ "The End of an Era: Cleveland Earl Dodge (1888-1982)". Silver City Historical Museum. Accessed November 18, 2007.

¹⁸⁹ Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 32

Caroline married, was able to loan the company a sizeable amount of money to help them pay their debts.¹⁹⁰

What is intriguing about the Phelps Dodge Company is that over the years the partner's individual interests opened new markets for the company's success. The elder Phelps was of course inclined to investing in the metal industry, but he also found high risk ventures very appealing. Over the years he encouraged his partners to invest in real estate, banking and rail roads. By the 1850s Anson Phelps had one of the biggest property portfolios in the state of New York.¹⁹¹

In contrast to Phelps, William E. Dodge was attracted by the timber business, particularly the vast forests in northern Pennsylvania. This virgin forestland proved to be easily harvested and the lumber was very strong yet light. Phelps Dodge's lumber holdings came at the perfect time, in the 1840s the United States underwent a construction boom. Although Phelps Dodge continued to purchase more forestland and sawmills, lumber only made up ten percent of their annual profits.¹⁹² It was Phelps, Dodge & Company's involvement in railroad that helped to nurture its growing timber holdings.

When William E. Dodge began running his father's dry goods store in 1827 there was not a regular railroad line in operation in the United States; however, he was certain that railroads would render canals and turnpikes obsolete in the world of commerce. After the Civil War, Dodge and other investors of the Houston & Texas Central Railroad took over its operations and thereby secured millions of acres of timberland in east Texas. Although Phelps Dodge had investments in railroad projects around the country, including the Union Pacific and the Lackawanna & Western, by

¹⁹⁰ Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 33

¹⁹¹ Ibid. Pg. 36

¹⁹² Ibid. Pg. 37

the end of the nineteenth century the company's involvement in the railroad business was all but over.¹⁹³

When Anson Phelps died in 1853 the company passed on to William E. Dodge, James Stokes, and Daniel James. Although Anson Phelps, Jr. still retained significant holdings in the company, his death five years later marked the end of the Phelps family in the company. In the years after his death, the company continued to operate as it had when the elder Phelps was alive. However in 1861, with the start of the Civil War, the partners began to realize that the company needed to evolve to stay afloat.

During the Civil War, the company was able to survive by winning contracts to sell sewing machines to England and sheet metal to Russia, but they also began looking into local markets to diversify their holdings. They sold wire they had imported from England to the company constructing the first transcontinental telegraph line which was completed in 1861, but they also looked for ways to tap into domestic raw materials. William E. Dodge worked tirelessly to expand the company's operations to include a New Jersey iron mine, mills and foundries in Illinois and a tin mine in California.¹⁹⁴

In the 1850s, William E. Dodge had made an investment in a Lake Superior company called the Minesota Mining Company.¹⁹⁵ Of the ninety-four Michigan copper mines operating between the 1840s-60s, only the Minesota and one other, the Cliff mine, survived the trials of mining in the area.¹⁹⁶

At the time, transportation into the area was all but non-existent. In response to the transportation issue, the Cliff mine erected a fabricating facility in Pittsburgh and a

¹⁹³ Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 43

¹⁹⁴ Ibid. Pg. 44

¹⁹⁵ Ibid. Pg. 46

¹⁹⁶ Navin, Thomas R. *Copper Mining & Management*. University of Arizona Press. Tucson. 1978. Pg.

smelter in Cleveland. Until this time, copper ore from the United States had to be shipped to Swansea, Wales for smelting, greatly diminishing any potential profits. In the 1870s Michigan mines were producing enough ore that a significant portion could be shipped abroad, but by the 1880s the American demand for copper had caught up with its supply.¹⁹⁷ Although it was not until the 1880s that the majority of Americans realized new copper prospects were needed, progressive businessmen such as William E. Dodge and William E. Dodge, Jr. had anticipated this need several decades before.

By the 1860s, Phelps Dodge was the primary manufacturer of brass (an alloy of copper and zinc) in the United States. Rumors of a copper discovery in Sonora, Mexico may have peaked Dodge's interest in the southwest and in Matías Romero when he came to the United States in 1862. Whatever the reason, the development of the relationship between Dodge Jr., and Sr. and Romero marked the beginning of a changing relationship between Mexico and the United States and resulted in the establishment of a copper district in the southwest that was unrestricted by the border. "By 1864, the expansion of U.S. capital into Mexico was beginning to replace the appetite for territory."¹⁹⁸

The Southwestern Landscape

In the early 1850s, an expedition was sent out to survey the new border between the United States and Mexico. Until this time there was little documentation of what these areas looked like or who occupied them. John Russell Bartlett, under the U.S.-Mexican Boundary Commission, managed the group of men in charge of mapping the territory while he wrote of their journey. The expedition began in Texas and extended west to California. His first writings spoke of "the abundance of timber,

¹⁹⁷ Navin, Thomas R. *Copper Mining & Management*. University of Arizona Press. Tucson. 1978. Pg. 12

¹⁹⁸ Truett, Samuel. *Fugitive Landscapes*. Yale University Press, 2006. Pg. 55-56

soil, and water”. He sketched the peculiar flora and fauna they encountered including lizards, cacti, and prairie dogs. However, when they reached New Mexico and Arizona, Bartlett wrote, “nature assumes a new aspect”, “here man....cannot live....for there is no water to slake his thirst, no wood to supply him with fuel; nor can the domestic animals so necessary to him exist.”¹⁹⁹

Despite the desolation they observed Bartlett’s group repeatedly discovered the remnants of villages and missions. This abandonment was widespread throughout the southwest. Nomadic cultures, followed by settlers unable to survive off the land or pushed out by the Apache, scattered the landscape with abandoned structures. Cattle and horses that had lived on early ranches were left to degenerate into wild beasts. The landscape and the continued occupation of the Apache tribes that the American southwest remained unsettled by white men for several decades after the mapping of the border. Some attempted the journey into this area, but Apache raids and the dry desert climate stunted widespread migration.

In Mexico in 1879 Porfirio Díaz promoted the cross-border connection between Mexico and the United States when he authorized the Atchison, Topeka, and Santa Fe Railroad to build their line into Sonora. The railroad was seen as a means of liberation for Mexico from its struggling economy. However, the Apache, drought and epidemics of illness slowed the construction of the line. The United States had attempted to suppress the violent Apache by rounding up many of them and placing them on a reservation in Arizona. This proved unsuccessful. In 1882, as a means of controlling the raids, Mexico and the United States negotiated several border-crossing treaties that established the cooperation of both nations in suppressing the attacks.²⁰⁰

¹⁹⁹ Truett, Samuel. *Fugitive Landscapes*. Yale University Press, 2006. Pg. 13-14

²⁰⁰ Ibid. Pg. 65-68.

Under this coalition the borderlands began to be settled by miners, ranchers and the like.

Prospectors and investors came into New Mexico, Arizona, and northwestern Mexico and started establishing mines. Although the mine at Tyrone came more than twenty years later, its story is closely tied to the fate of the Phelps Dodge mine of Bisbee in Arizona.

Bisbee, Arizona

At the end nineteenth century Phelps Dodge began to ponder the question of how to better capitalize on its copper interests. Until this time, the ore from the mines the company invested in had to be smelted and processed elsewhere in the United States or in Wales. The partners discussed the idea of building their own smelter on Long Island which would allow them to not only process their own ore, but profit by processing the ore of other American mines.²⁰¹

In 1881, a young engineer named James Douglas met with William E. Dodge, Jr. to give advice for building the smelter on Long Island. At the time Douglas was managing the Chemical Copper Company, a small refining plant near Philadelphia. Although the it never achieved financial success it was innovative in respect to the fact that it employed a new technique of copper-refining which Douglas himself had helped to develop.²⁰²

His involvement in the copper industry was a response to his father's so-called "reckless speculation" in a wildly unsuccessful Canadian mine. At the time Douglas was studying medicine at Laval University, however when his father's folly endangered their family's financial stability, Douglas switched from medicine to the

²⁰¹ Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 57

²⁰² Ibid. Pg. 13

study of metallurgy and mining. He assisted his chemistry professor with a series of experimentations which resulted in the development of a refining method which electrolytically refined the copper ore. The Hunt-Douglas method, as it became known, enabled the gold and silver by-products previously lost in the refining process to be recovered. Douglas was instantly recognized as a leading expert in the copper industry which explains why Phelps Dodge's executives summoned him for a meeting.²⁰³

Through their conversation, Dodge became aware that Douglas was heading to Arizona to examine a mine at Bisbee. Dodge had recently been approached by a prospector about investing in a mine at Morenci, Arizona. The prospector's name was William Church and quite confidently he had approached the Phelps Dodge partners to request a \$30,000 loan to develop his mining prospect. The partners had promised to consider his proposal primarily because the Ansonia Brass Works had just recently received a shipment of copper from an Arizona mine called the Copper Queen. In addition to this, recent prosperity had left the partners with some extra money to invest in other prospects.²⁰⁴ Therefore, when their conversation turned to Arizona, Dodge asked Douglas if he would examine Morenci while on his trip to Bisbee and report back about the claim.²⁰⁵

Despite the great strides taken in making the southwestern landscape safe for settlement, on his journey Douglas wrote back to Dodge stating that a tribe of Apache had recently raided the district, killed the teams transporting the ore from the mine to the smelter, and had then surrounded the smelter where the workers were able to successfully hold them off.²⁰⁶ When Douglas returned with positive news about the

²⁰³ Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 12-13

²⁰⁴ Ibid. Pg. 10

²⁰⁵ Ibid. Pg. 12

²⁰⁶ Ibid. Pg. 63

ore deposits, Dodge approved the investment in William Church's claim. Shortly after this, Phelps Dodge was offered the Atlanta claim which adjoined the Copper Queen claim at Bisbee.²⁰⁷

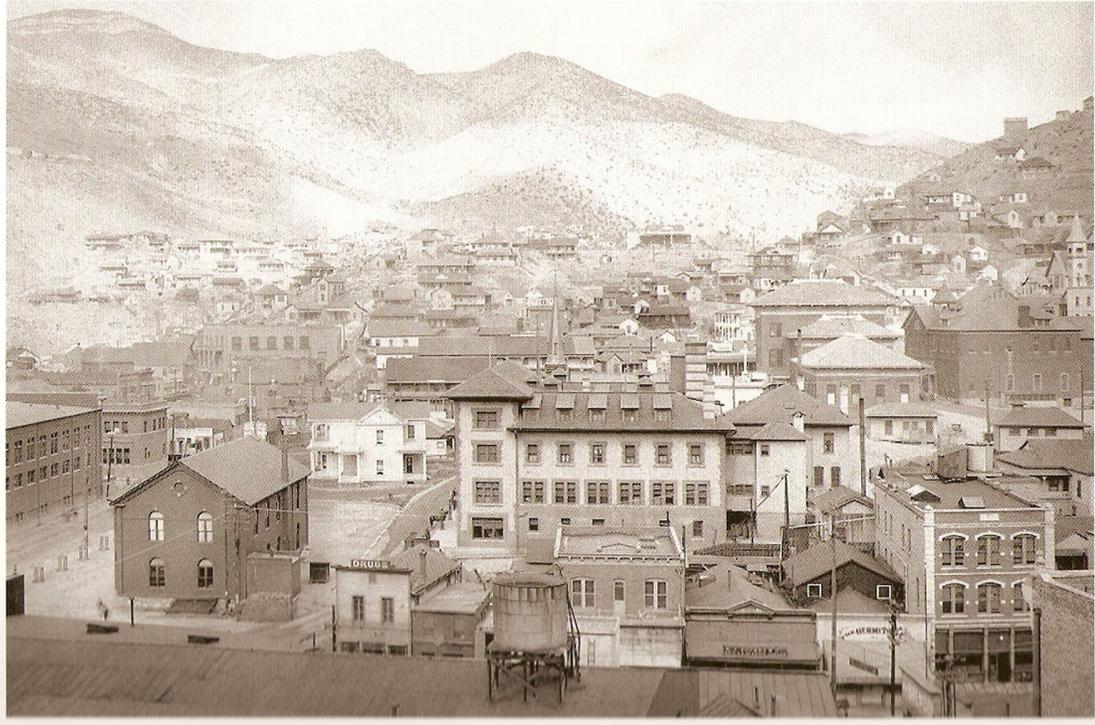


Figure 4.2 Bisbee, Arizona around the end of the 19th Century.

At the request of William Dodge, James Douglas was hired to manage the Atlanta mine at Bisbee. Despite high hopes and early speculation, the progress at the mine was dismal. The company poured more than 60 thousand dollars into the mine, but it was not until a year later that they finally struck ore. As luck would have it the ore was discovered on the border between the two mines and a legal battle ensued. To solve the problem, Phelps Dodge entered a partnership with the Copper Queen in 1885 and the Copper Queen Consolidated Mining Company was created. Not long after this

²⁰⁷ Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 75

union the price of copper dropped, making many of the investors nervous. They sold their shares to Phelps Dodge and soon the company owned nine tenths of the mine.²⁰⁸

Although the mine required continuous development over the last decades of the nineteenth century, it turned out to be the purest copper vein in American history and by 1909 the mining district of Arizona dominated the world's copper production.²⁰⁹

James Douglas was instrumental in the expansion of Phelps Dodge from a merchant company to one of the largest copper producers in the world. A religious and moral man, Douglas worked to transform the mining camps at Bisbee from rows of brothels and saloons to a more civilized place. Douglas provided a YMCA, hospital, and library at Bisbee.²¹⁰ James Douglas' work to provide amenities for company employees laid the groundwork for such elements at Tyrone, but it was his son who was directly responsible for the town.

Walter Douglas received an engineering degree from Columbia University School of Mines²¹¹ and began working for Phelps Dodge Corporation as a metallurgist. In 1901, at the age of 31, he became the general manager of the mine at Bisbee. He took over his father's position as general manager of all mining operations for Phelps Dodge in 1911. Walter split his time between New York and Arizona, traveling between the two in a private railcar.²¹² Unlike James Douglas, Walter was less interested in the technical side of mining and instead took interest in uniting mine management to oppose unionization.²¹³ He was elected president of the American Mining Congress and shifted the organization away from mining and geological

²⁰⁸ Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 73-77

²⁰⁹ Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, London. 1995. Pg. 130-132

²¹⁰ Ibid. Pg. 130-132

²¹¹ "Walter P. Douglas, President of Phelps-Dodge Corporation." University of Arizona. www.library.arizona.edu/exhibit/bisbee/history/whoswho/walter_douglas.html. Accessed April 24th, 2008.

²¹² Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, London. 1995. Pg. 130-131

²¹³ "Walter P. Douglas, President of Phelps-Dodge Corporation." University of Arizona. www.library.arizona.edu/exhibit/bisbee/history/whoswho/walter_douglas.html. Accessed April 24th, 2008.

problems and emphasized the need for addressing employer organization, labor relations, politics, and taxation. In Arizona the power of labor was increasing, as the middle- and working-classes began to sympathize with them. As Arizona approached statehood, proposed legislations threatened to require worker compensation, increase corporate liability and taxation, and favor other worker interests. As predicted, in 1912 when Arizona became a state, they established the most pro-labor constitution in America. Walter Douglas and executives at Phelps Dodge became nervous at this new government in Arizona and began purchasing mining claims and land in New Mexico.²¹⁴ It was the changing face of the mine worker that brought about the legislation and led to the powerful labor coalitions in Arizona.

After 1900, with the advances in mining technology, what was traditionally done by skilled workers was now being accomplished by unskilled workers for significantly less pay.²¹⁵ One of the more prominent innovations that changed mining from a skilled to an unskilled market was the invention of the pneumatic drill. This was instrumental in reducing worker exhaustion and increasing the overall production of mines. Additionally, the advent of electricity in mine shafts improved conditions considerably with better lighting and ventilation. The advancement of elevator technology also greatly improved the conditions of underground mines.²¹⁶

American workers were replaced with immigrant groups who had experience with mining in their own countries: Cornishmen, followed by Serbians, Hungarians, Finns, and Italians. As technology improved, unskilled workers replaced these groups by undermining the wages. At Bisbee the threat of losing jobs to unskilled immigrant workers resulted in worker solidarity. In addition to nationality restrictions, the

²¹⁴ Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, London. 1995. Pg. 130-132

²¹⁵ Ibid. Pg. 130-132

²¹⁶ Navin, Thomas R. *Copper Mining and Management*. University of Arizona Press. Tucson, Arizona. 1978. Pg. 34.

workers sought better wages and improved conditions. The Western Federation of Miners was established and a series of bitter confrontations took place between management and labor at the mine. Strikes erupted throughout Arizona and after negotiating with strikers at the Phelps Dodge mine of Clifton-Morenci, Walter Douglas swore he would never again negotiate with strikers.²¹⁷

The Development of Tyrone

In reaction to the Arizona strikes, in 1915 Walter Douglas sought to open a new mining town at Tyrone. He decided to hire architect Bertram Grosvenor Goodhue to design the entire community in this secluded mountain range in New Mexico. As previously mentioned, Phelps Dodge began the acquisition of land in New Mexico in 1912. The mine at Tyrone was among this group of purchases²¹⁸. Tyrone was in operation before the commission of the town, but was a minimal “tent city” with a handful of framed structures including a hotel and a hospital.²¹⁹

The mine at Tyrone was originally operated by Nathan Leopold, Sr. of Chicago and was called the Burro Mountain Copper Company. Nathan and his brother had acquired the property in 1904 from the Southwestern Copper Company. As a result of the Leopold brothers’ purchase, they erected a smelter near the mines in an area they established and named Leopold. When Phelps Dodge purchased the Burro Mountain Copper Company, the property included Tyrone and the smelter at Leopold. When the company decided to begin development of the mine at Tyrone, it was Douglas that suggested the company hire an architect to plan what was to become known as a “model” company town. “In contrast to the typical mining camp of the

²¹⁷ Crawford, Margaret. *Building the Workingman’s Paradise: The Design of American Company Towns*. Verso, London. 1995. Pg. 130-132

²¹⁸ Ibid. Pg. 132

²¹⁹ Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 119

West, which grew like a tumbleweed and disappeared almost as fast, Tyrone would be carefully planned and constructed.”²²⁰

The reason for the choice of Bertram Goodhue as the architect of Tyrone has been variously credited. One source suggests that Douglas’ vacation home in Santa Barbara was responsible for the introduction of his family to the architecture of Bertram Goodhue.²²¹ It is unknown whether this is due to a trip down to the Exposition during a vacation or whether the two men were introduced by a mutual friend. Either way, the choice of Goodhue as master planner for the community of Tyrone was undoubtedly a result of the fame he had earned with the design of the Panama-California Exposition of 1915 in San Diego.²²²

Although Goodhue may not have known this, this “model” town was intended to respond to the changing labor situation. The site itself was instrumental in perpetuating the control of the company over labor and production.²²³ Although this thought is widely concealed by the company and seldom mentioned in historical documentation the management itself viewed the company town as a social experiment, to deter labor unrest.²²⁴

Located twelve miles southwest of Silver City, the area around Tyrone was largely unpopulated. The economy of New Mexico was dominated by ranching. Both factors seemed to diminish the likelihood that labor issues would acquire the political force they had in Arizona.²²⁵ Tyrone was nestled in the Burro Mountains just over the continental divide²²⁶. The terrain made traveling into and out of the area was very

²²⁰ Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 119

²²¹ Ibid. Pg. 120

²²² Crawford, Margaret. *Building the Workingman’s Paradise: The Design of American Company Towns*. Verso, London. 1995. Pg. 132

²²³ Ibid. Pg. 136-140

²²⁴ Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 120

²²⁵ Crawford, Margaret. *Building the Workingman’s Paradise: The Design of American Company Towns*. Verso, London. 1995. Pg. 136-140

²²⁶ Ungnade, Herbert E. *Guide to the New Mexico Mountains*. Sage Books, Denver. 1965. Pg. 135.

difficult. With a mining town in an area such as this, it became apparent that all services would have to be provided by the company, including public utilities, transportation, and municipal government.²²⁷

In June 1917, as the world was at war, the workers at the Copper Queen and neighboring mines walked off the job. War demanded increased copper production, therefore the strike was seen as unpatriotic. On July 12, 1917, more than twelve hundred striking workers were gathered and held at gunpoint at a baseball field. They were then loaded onto railcars and sent into the desert.²²⁸ The army later rescued the deportees, but held them for two months to avoid further violence. Although Douglas was later arrested briefly for giving the order to deport the workers²²⁹, the incident was quickly written off as a “case of wartime patriotism gone awry.”²³⁰

Wanting to avoid labor organization, Douglas decided that at Tyrone, Phelps Dodge would employ a minimal amount of American workers to act as the supervisory staff, but that the rest would be Mexican laborers. Douglas felt that Mexican workers were “easily led and just as easily intimidated.”²³¹

²²⁷ Navin, Thomas R. *Copper Mining and Management*. University of Arizona Press. Tucson, Arizona. 1978. Pg. 32

²²⁸ Truett, Samuel. *Fugitive Landscapes*. Yale University Press. 2006. Pg. 173-174.

²²⁹ Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso. London. 1995. Pg. 150

²³⁰ Truett, Samuel. *Fugitive Landscapes*. Yale University Press. 2006. Pg. 173-174.

²³¹ Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso. London. 1995. Pg. 136-140



Figure 4.3 Bisbee, Arizona.

CHAPTER 5

THE DESIGN OF TYRONE, NEW MEXICO

It should be noted that copper mining is historically an endeavor that destroys the landscape. At Bisbee cutting down trees in order to furnish the amount of wood necessary to heat worker homes, run the charcoal burning smelters, and the steam powered hoists in the mines, transformed the landscape so profoundly that it would hardly be recognizable to its early surveyors. Even this could not keep up with the demand and a subculture of “wood grubbers” was created by woodcutters who excavated for tree roots. Besides transforming the flora and fauna of the area, the removal of trees had a negative effect on runoff retention. Without the brush and trees, hillsides became rapid avenues for water to rush down into the valleys, damaging towns and filling mine shafts with water.²³²

Tyrone was different. The advent of the railroad that connected the Southwest to markets in the rest of the United States and Mexico, reduced the need for this kind of cutting. Lumber needed for the mining and living activities was brought in from elsewhere.²³³ This also allowed the town to be designed around existing trees on the site.

Unlike other mining towns, Tyrone was solely owned by Phelps Dodge. The company owned the land, the railroad tracks into the town, and every building on the site. The isolation of the town reinforced the workers’ dependence on the company. At Bisbee, workers were free to own their own land or rent from a private owner, but at Tyrone the housing was rented from the company. The company was unable to build enough housing for all the workers in the town, but, like Bisbee, it rented lots to

²³² Truett, Samuel. *Fugitive Landscapes*. Yale University Press. 2006. Pg. 73-76

²³³ *Ibid.* Pg. 73-76

workers where they could erect tents or frame structures. Similarly, entrepreneurs coming to open businesses at Tyrone were prohibited from erecting their own structures; instead they rented space in the company-owned buildings. Although the town was designed around a central plaza where workers were meant to come together and mingle on a common ground, this was the only place Mexicans and Americans were meant to be together.²³⁴

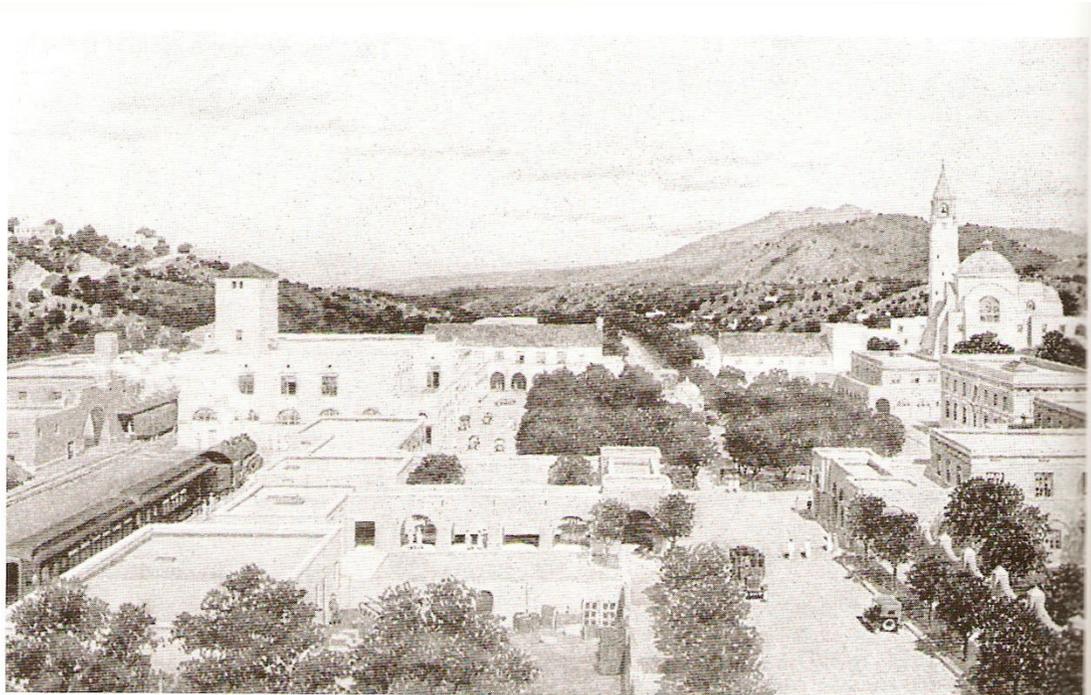


Figure 5.1 Rendering of Tyrone, New Mexico. From the office of B.G.Goodhue. The drawing shows a town complete with buildings surrounding a plaza and a church in the distance reminiscent of the California Building.

The concept behind the design of Tyrone was an “idealized Mexican Town”. The purpose was to attract Mexican laborers and make them feel at home. All the commercial buildings were located on a grand plaza with continuous portales

²³⁴ Crawford, Margaret. *Building the Workingman’s Paradise: The Design of American Company Towns*. Verso, 1995. London. Pg. 136-140

connecting the separate structures. The result was a strong similarity to the buildings and arcades from the San Diego Exposition, but without the extravagant ornament that characterized the Spanish Colonial style.²³⁵ In a letter to *Architectural Record* from Goodhue's office (the initials at the bottom read S/B) wrote,

*Mr. Goodhue was chosen architect because of familiarity with the style as shown at San Diego. However, he naturally treated this problem in a much simpler and less ornate manner; in fact practically no modeled ornament is used at Tyrone, excepting on the two principle buildings of the Plaza, the Store and the Office Building.*²³⁶

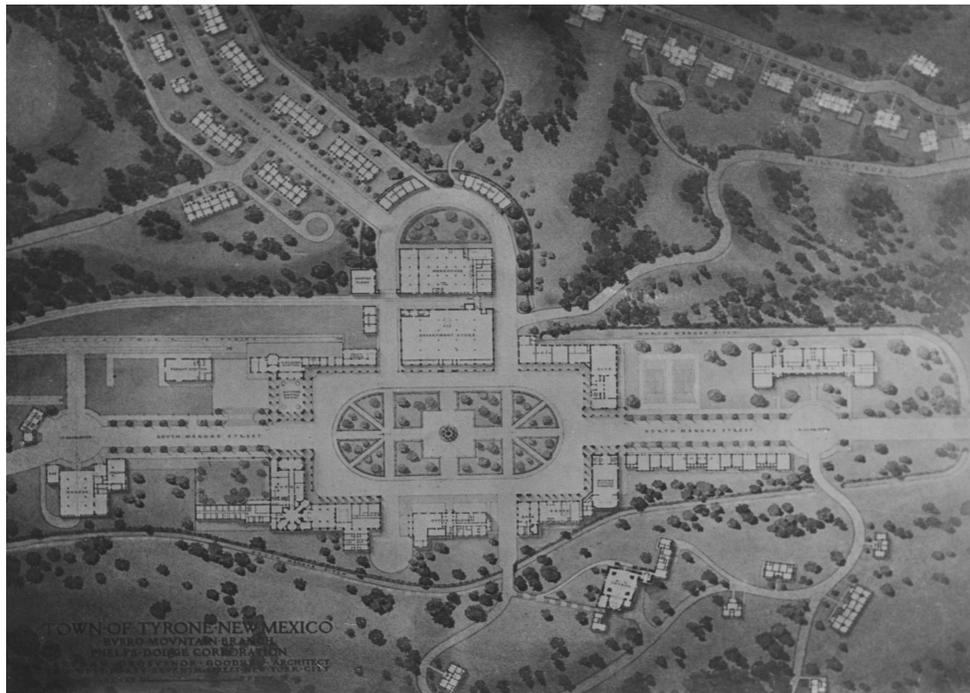


Figure 5.2 Site plan of Tyrone, New Mexico from the office of B.G. Goodhue. Similar to the San Diego Exposition, the layout reflects aspects of the Laws of the Indies.

²³⁵ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 152

²³⁶ "Letter from B.G. Goodhue Office to Mr. M.A. Nikkelson of the *Architectural Record*". July 3, 1918. Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.

One thing that must be noted about Tyrone is that the site plan from Goodhue's office was very different from what was actually built at Tyrone (from this point on the plan will be referred to as the Goodhue master plan). The Goodhue master plan called for additional buildings that were never constructed. Images of northwestern Mexican villages from the colonial period depict similar architecture to that of Tyrone. Similar to the Panama California Exposition of 1915, the plan for Tyrone had attributes of colonial towns designed using the Laws of the Indies.²³⁷ The main north-south axis, Mangas Street, intersects the central plaza at its center. Unlike the Laws, instead of one main east-west street intersecting the center of the plaza on the other sides, at Tyrone there are two east-west streets intersecting the plaza.

The plaza was approximately 140 feet by 250 feet and housed a bandstand and a large fountain.²³⁸ The Goodhue master plan provided buildings all around the plaza. A building with a bank, shops, and a theater was intended to wrap around the northeast corner of the plaza. The portion on the east side was constructed but not the entire building. More shop buildings were planned on the north side of this building along Mangas Street, but these were never constructed. A building with more shops and a club was planned to wrap around the northwest corner of the plaza, but not constructed. A hotel was intended to wrap around the southeast corner of the plaza, but this was not constructed. If all the buildings had been constructed then Tyrone would strongly resemble a colonial town in Mexico that had utilized elements from the Laws of the Indies. Because only half of the plaza buildings were constructed it was less picturesque than the Goodhue master plan intended.

²³⁷ Reps, John. *Town Planning in Frontier America*. University of Missouri Press. 1980. United States. Pg. 27-30

²³⁸ Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. 1983. Cambridge, MA & London, England. Pg. 152

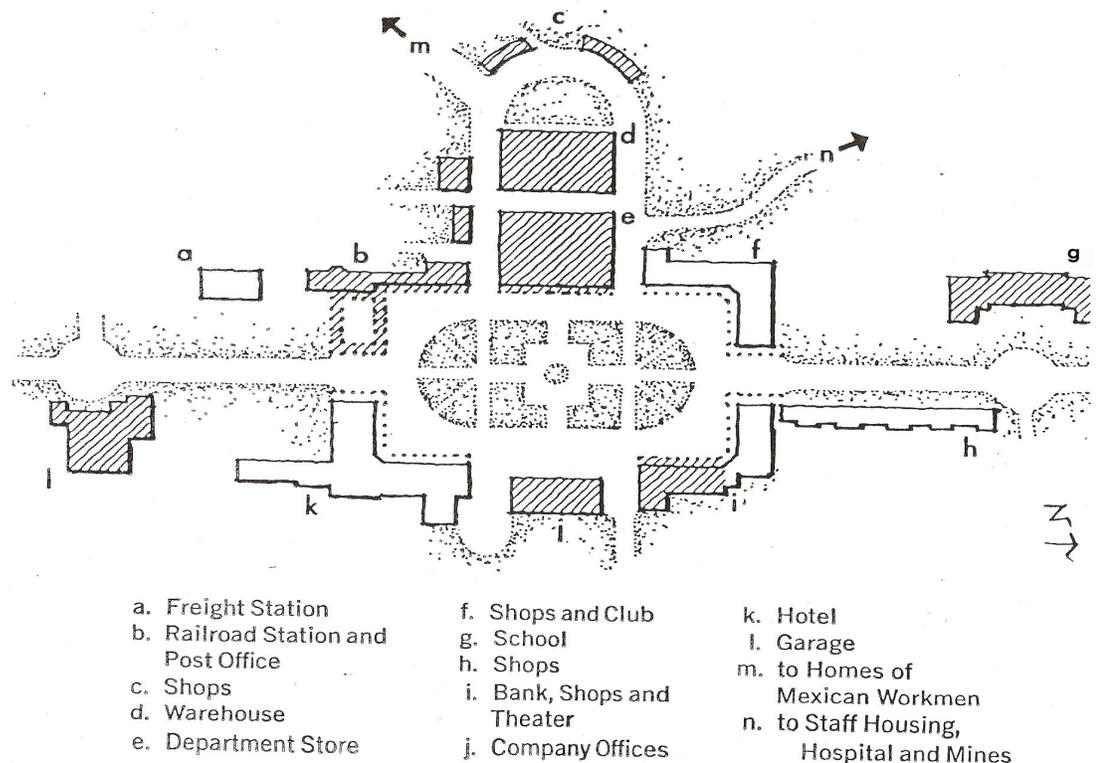


Figure 5.3 Analysis of the site plan at Tyrone. All the buildings from Goodhue's plan are drawn, but the only structures built are highlighted with diagonal hatching. Three of the four corners of the plaza lacked definition due to the fact that these buildings were never built.

The buildings from the Goodhue master plan that were constructed included the Railroad Station and Post Office, the Freight Station, the Heating Plant, the Garage, the Company Office Building, the Bank Building, the Department Store, the Warehouse, the School Building, and the Picture Show Building. The Hospital was also constructed but it was located northwest of the town.²³⁹ The topography of the site influenced the layout of the buildings off of the main plaza, just as the buildings away from El Prado followed the topography at the Panama California Exposition of 1915.

²³⁹ Gustafson, Connie. "Tyrone, New Mexico. Bertram Grosvenor Goodhue Architect 1915-1917". Silver City Historical Society. Accessed November 17, 2007.

Located on the side of a hill, the town sat between the workers' housing. The American worker housing was built along the hillside above the plaza to the east, capturing the view of the surrounding hilltops and the town. The Mexican worker housing was built on the hillside below the town to the southwest, down into the valley. The hillside below the town was very steep and susceptible to high amounts of runoff during rainstorms making it extremely unpleasant to live at times. The executive housing was built above the town to the northwest. The hospital was built in the same area as the executive housing.



Figure 5.4 Aerial photograph of Tyrone, New Mexico. The town sits in the center of the photograph and the roads on the hills behind it lead to the American housing.

The most prominent buildings in the town were the Store, the Company Office Building, and the Hospital. The Store and the Company Office Building were both centered on the east and west side of the main plaza. The store was by far the dominant structure with a tower that rose high above the street. The iconic nature of these buildings emphasized their role in the social fabric of the town. The Mercantile was well-stocked with almost anything a resident might desire and Phelps Dodge, as most company town owners, offered their workers credit to purchase items at the store. This tended to keep the workers in constant debt to the company. The style itself that of a Mexican colonial town, was a means of reinforcing a hierarchical social order that was typical in Mexican history.²⁴⁰



Figure 5.5 The company store from across the plaza.

²⁴⁰ Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, 1995. London. Pg. 136-140



Figure 5.6 Although the photograph on the left was taken inside the Mercantile at Phelps-Dodge's Douglas mine, it helps to illustrate the immense amount of items a typical company store would offer. Interestingly enough many of the later Phelps-Dodge Mercantile stores imitated the style of that of Tyrone. The photograph to the right is the Mercantile at Morenci in the mid-20th century, but the tower and simplified portales are reminiscent of Tyrone.



Figure 5.7 The company office building across the plaza from the store.

With the development of Tyrone, Phelps Dodge hoped to create an environment to attract life-long and loyal workers. In the effort to accomplish this goal, the town had many modern amenities.²⁴¹ However, even the town amenities were utilized to divide the workers. The American workers were able to use the company club, restaurant, and the theater, but the Mexican workers only had access to a pool hall and the plaza.

The design and size of the housing illustrated the racial dynamics present in Tyrone. The letter to *Architectural Record* mentions the segregation and inequality of the houses: “although [sic] the labourers are housed along the streets in the minor canyons, the Americans who form the better paid workmen, have their homes on the hills above.”²⁴² American workers were provided a single-family home or half of a duplex. Each unit was composed of three or more rooms with indoor plumbing, sewer, and electricity. The styles of the American worker housing varied slightly but were all stucco with arched openings. Some had hipped roofs with terra cotta tile, some had flat roofs with terra cotta tile accents, and some just had flat roofs. A four-room detached single-family house actually had five rooms with three porches. There was a living room, kitchen, dining room with a storage room, bedroom with closet, bathroom, a front porch, a rear porch off the kitchen and sitting porch off of the bedroom.²⁴³

²⁴¹ Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, 1995. London. Pg. 136-140

²⁴² “Letter from B.G. Goodhue Office to Mr. M.A. Nikkelson of the Architectural Record”. July 3, 1918. Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.

²⁴³ Images from the Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007

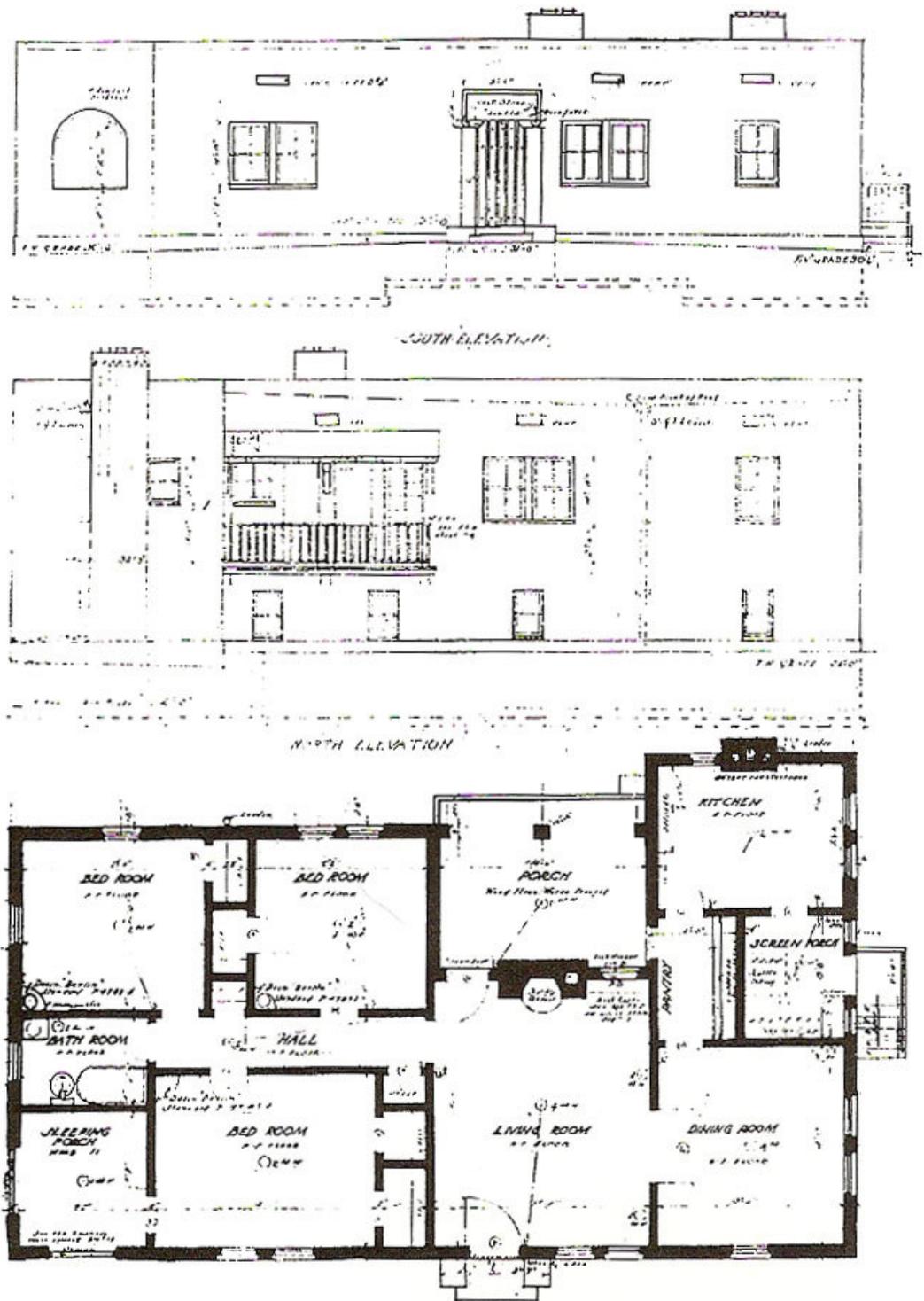


Figure 5.8 Plan of an American worker house.

Similarly the hillside duplex housing had one unit below with two bedrooms, one bathroom, a kitchen with pantry, a combined living and dining room, a cellar and an entry porch and one unit above with the same organization as the four-room house. The smallest American homes consisted of one bedroom with a closet, a kitchen, a bathroom, a living room, an entry porch and a rear porch.²⁴⁴ Even the most modest American homes were luxurious compared to the Mexican housing.



Figure 5.9 Photograph of an American house.

Originally, no housing was planned for Mexican workers. The company intended to rent small lots of land where they could put their tents. In 1916, Goodhue suggested building several houses for the Mexican workers. In contrast to the American housing and despite the fact that the rent was the same for both, the Mexican housing consisted of a series of two-room apartments lined up in rows of six. There a cold water pump in the kitchen area, but no indoor bathrooms or electricity.²⁴⁵

²⁴⁴ Images from the Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007

²⁴⁵ Letter from B.G. Goodhue Office to Mr. M.A. Nikkelson of the Architectural Record. July 3, 1918. Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.

The Mexican housing was designed as a row of three duplexes. Each duplex shared a front porch and the plan of the interior was mirrored about the common wall. The first room in the house was the living room with two windows. The outer units had windows on two sides, but the inner units had two windows facing the front. The living room passed directly into the kitchen. The kitchen had a back door that exited opposite the front door and there were one or two windows in the kitchen depending on the unit.²⁴⁶ It is hard to imagine having a family live in such a small space.

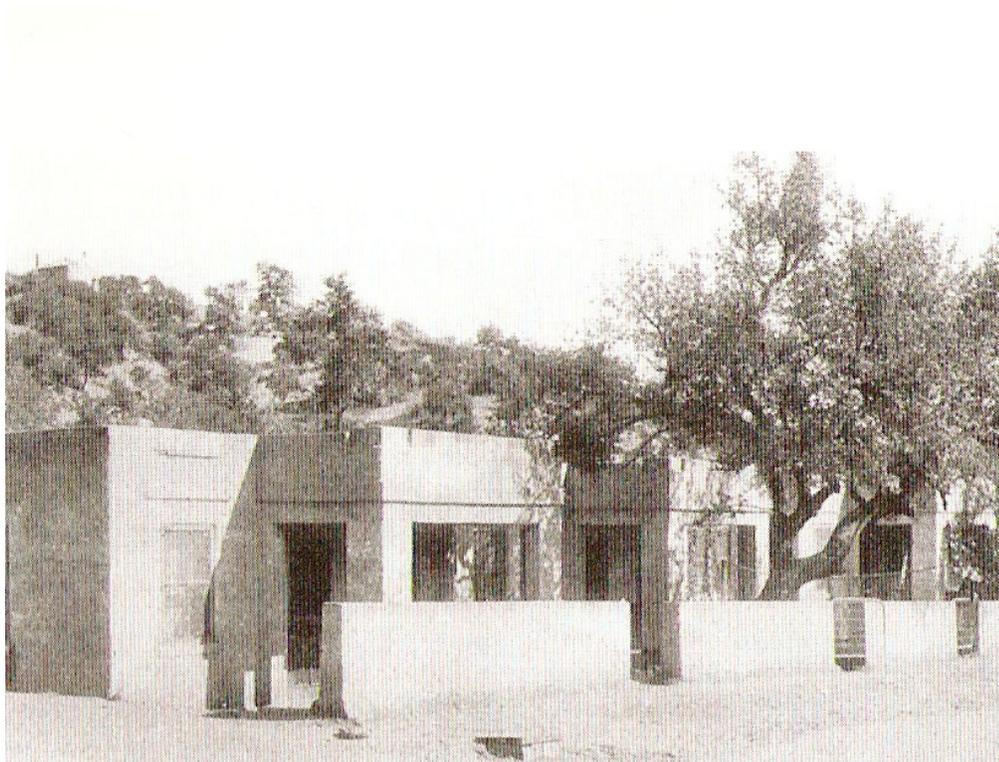


Figure 5.10 Mexican worker housing.

²⁴⁶ Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, 1995. London. Pg. 136-140

In the book *The Traditional Architecture of Mexico* images can be seen of colonial era Mexican housing. The housing in the Mexican State of Sonora, the likely origin of the Mexican workers, is similar to the houses at Tyrone. In contrast to Tyrone, many of the homes depicted in the book have no windows and only blankets covering the front doorway.²⁴⁷ It is conceivable that the housing at Tyrone was much better than anything the workers had back in Mexico and there is no doubt it was more pleasant than living in a tent. Despite the shortcomings of the Mexican housing, it was so popular that the company was unable to build new homes fast enough to keep up with demand.²⁴⁸

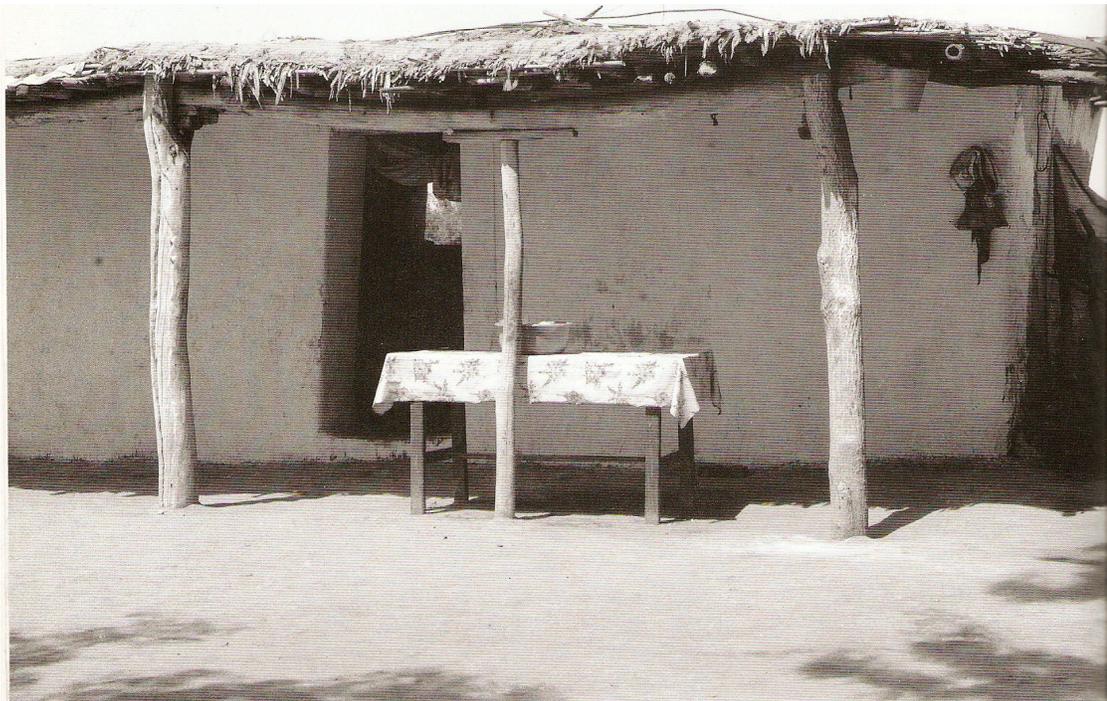


Figure 5.11 One-room Sonoran home. Although the houses offered to Mexican workers at Tyrone were much smaller with fewer amenities than those for the American houses, one has to keep in mind that the image above depicts a typical home in Mexico.

²⁴⁷ Yampolsky, Mariana. *The Traditional Architecture of Mexico*. Thames and Hudson Ltd. 1993. London.

²⁴⁸ Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, 1995. London. Pg. 136-140

Because a handful of designs were repeated in the worker housing, interest was added through the use of color. White, gray, pink, tan, and blue colored stucco was used to add interest to the hillside housing (all Mexican housing was uncolored). The houses were constructed of terra cotta brick walls and foundations, except where the foundation walls acted as retaining walls on the hillside. In these instances the foundation walls were concrete with terra cotta brick above. Originally all the walls were to be constructed of concrete, but midway through construction the cost of the housing became a concern. In a letter to the E.M. Sawyer of the Burro Mountain Copper Company from the Goodhue office, suggested the substitution of terra cotta brick as a means to reduce the cost of construction for the houses.²⁴⁹

In addition, the letter suggests the substitution of the wrought iron railings with wood railings, the elimination of the mantels and bookcases in the living rooms, the elimination of the tile roofs for some of the designs, and reducing the amount of storage provided in the kitchens.²⁵⁰ These suggestions were all for the American houses. It is probable that the Mexican housing could not be made more inexpensive since it was far simpler. Unfortunately, there is no return correspondence suggesting which elements were eliminated from the housing during construction. Fortunately a handful of photographs exist of the exteriors of the worker housing, but it is unknown which elements were changed to respond to the increasing costs of construction.

²⁴⁹ Letter to E.M. Sawyer of the Burro Mountain Copper Company. "Re: American Houses". September 20, 1916. Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.

²⁵⁰ Ibid.

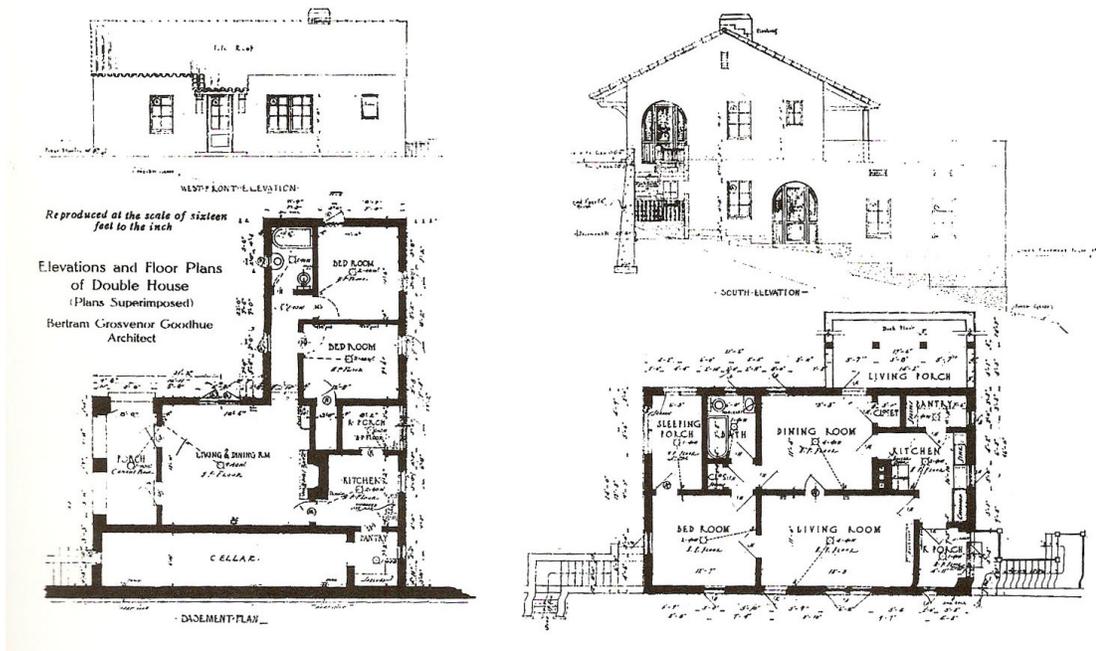


Figure 5.12 Plans and elevations for a two-story duplex to house American workers at Tyrone, New Mexico.



Figure 5.13 Photograph of the two-story duplexes for American workers.

Leading the World of Medicine

The T.S. Parker Hospital at Tyrone was considered state-of-the-art for its time. It contained “two operating rooms equipped with overhead, shadowless lighting, an elevator, sunken bathtubs, private telephones, and sun-rooms” where patients could recover with a beautiful view of the southwestern landscape.²⁵¹ In addition to its architectural amenities, the Hospital at Tyrone was among the first places in the country where radium was being used for the treatment of cancer.²⁵²

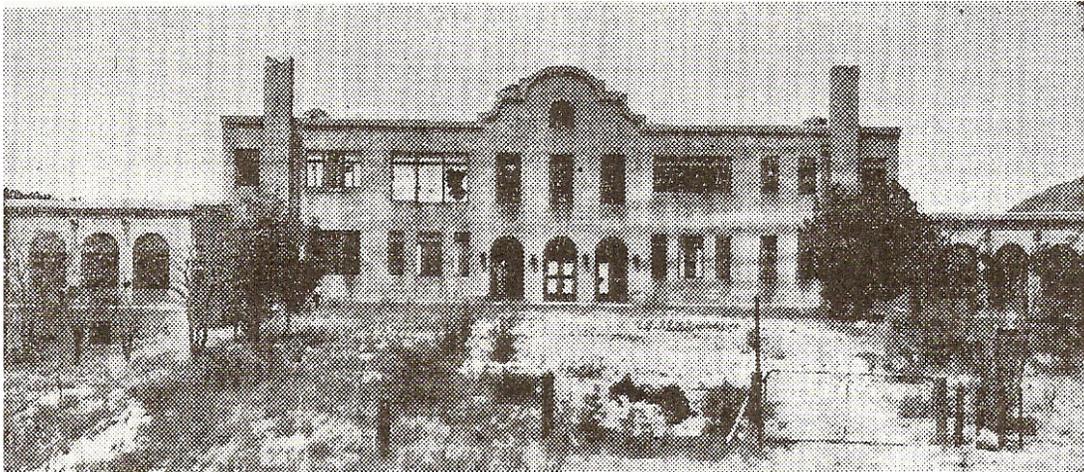


Figure 5.14 Although it does not look like much when this photograph was taken in 1950, the T.S. Parker Hospital was state of the art for its time. It is hard to believe that one of the first places to conduct radiation treatment for cancer would ever sit vacant with broken windows.

When the town officially opened in April of 1916 it received much acclaim from newspapers and architectural magazines. The *Architectural Review* published an article entitled “The New Mining Community of Tyrone, N.M.” in 1918 stating “the fact that, in both directions, there is every prospect of its exceeding the customary

²⁵¹ *Ghost Towns of New Mexico*. “XII Tyrone: the Creation”. Pg. 121-126. Silver City Historical Museum Research Archives. Accessed November 17, 2007

²⁵² “Tyrone Hospital Uses Radium Treatment”. *Silver City Enterprise*. 26 November 1920. Silver City Historical Museum Research Archives. Accessed November 17, 2007

corporation standards causes it to possess a particular architectural interest and value.”²⁵³ The *Silver City Independent* speculated “by the end of this year, Tyrone will be a mining camp worthy of the name and its daily output of copper ore will put it in the class of some of the largest copper producing districts of the United States.”²⁵⁴ It was predicted that Tyrone would blossom into a city of 20,000 people.²⁵⁵

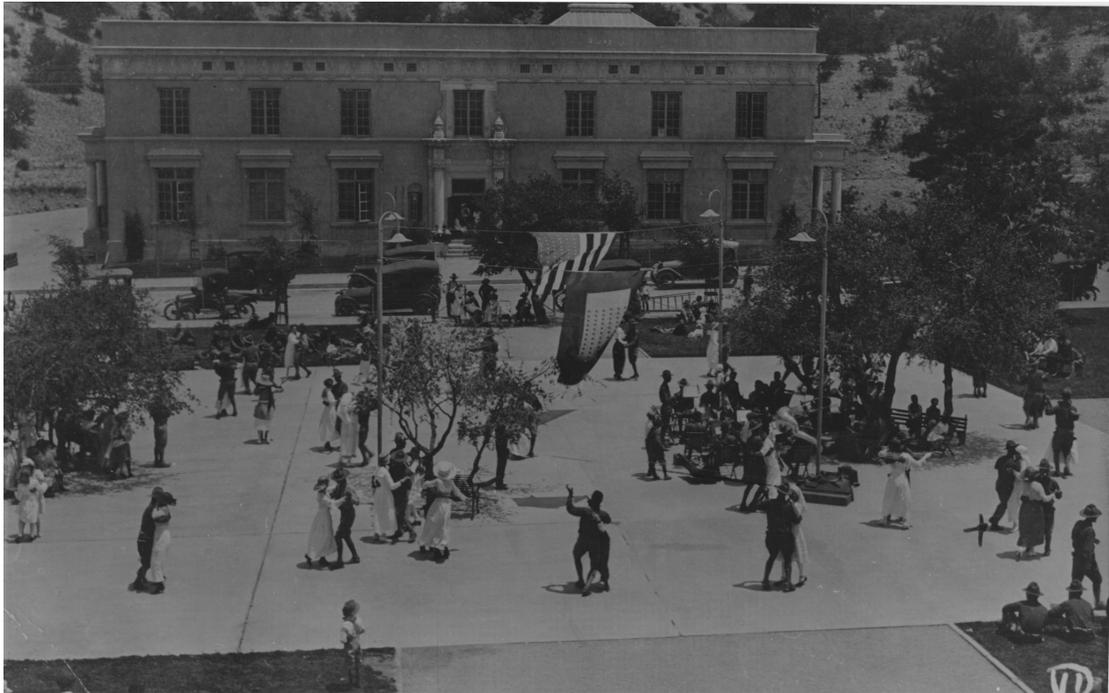


Figure 5.15 Town dance in front of the company office building. From this photograph it is easy to see how the site was planned to incorporate the existing trees because their location seems contradictory to the rectilinear arrangement of the plaza.

²⁵³ “The New Mining Community of Tyrone, N.M.”. *Architectural Review*. Vol VI. November 4, 1918, Boston Edition, Pg. 59. As quoted in Arthur, Greg “Historic Sites on Private Property”. Paper dated March 13, 1981. Silver City Historical Museum Research Archives. Accessed November 17, 2007.

²⁵⁴ “Tyrone Camp to Open Up April 10”. *Silver City Independent*. 4 April 1916. Silver City Historical Museum Research Archives. Accessed November 17, 2007.

²⁵⁵ *Silver City Enterprise*. 15 December 1916. Pg. 1. As cited in Conwell, Linda Irene. “A History of Old Tyrone”. Paper Dated August 1971. Silver City Historical Museum Research Archives. Accessed November 17, 2007.

From what documentation exists of the town during its operation, it was a popular place to live and the citizens were happy. By 1920 Tyrone was the seventh biggest town in New Mexico and was considered “the most beautiful mining town in the world.”²⁵⁶ But then the prices for copper began to drop. The mine continued to operate but in 1921 the price of copper dropped below the rate at which Tyrone could produce a profit. Despite the fact that the workers volunteered to take a 25 percent pay cut, it was not enough to make a difference. Phelps Dodge closed the mine and transported the workers out of the town. Mexican workers were put on trains to Las Cruces where they were deported across the border.²⁵⁷



Figure 5.16 Residents boarding the last train out of Tyrone.

²⁵⁶ Phillips, Rick. “Centerfold”. *The Enterprise*. 13 May 1982. Pg. 8-9. Silver City Historical Museum Research Archives. Accessed November 17, 2007.

²⁵⁷ Ibid.

The *Silver City Enterprise* chronicled the closure of the mine and the trains leaving Tyrone bound for Mexico. On March 18, 1921 an article announced that Tyrone would close as of April 1st. “No announcement as to the length of time the mine would be shut down has been made by the officials and it is taken from this that it will be for an indefinite period, meaning until the surplus of copper on hand in this country is exhausted and the price recovers.”²⁵⁸ The article suggests that the entire region was aware copper prices were dwindling and jobs at every mine were at stake. On April 8th the *Enterprise* rationalized the deportation of Mexican workers, saying that they intended to return to Mexico to “take up the work they left when driven from the republic to the south by the revolution.”²⁵⁹



Figure 5.17 Another celebration on the plaza.

²⁵⁸ “Tyrone Camp Will Close Down on the First of April”. *Silver City Enterprise*. 18 March 1921. Pg. 1 Silver City Historical Museum Research Archives. Accessed November 17, 2007.

²⁵⁹ “One Way Excursions Leaving Tyrone Daily for Mexico”. *Silver City Enterprise*. 8 April 1921. Pg.1 Silver City Historical Museum Research Archives. Accessed November 17, 2007.

The Fate of Tyrone

After the mines closed, Phelps Dodge continued to profit from Tyrone when the general manager of Tyrone, Phil Lynch and his wife began operating the town as a dude ranch. In a brochure advertising the vacation resort it states “nestled in a lovely valley, lies the beautiful little village, Tyrone. Secluded, yet readily accessible over good roads, just one mile off of U.S. 180. Tyrone offers an ideal location for delightful holidays, or, for permanent residence.”²⁶⁰ Tyrone boasted vacation-friendly activities including hunting, fishing, horseback riding, a golf course, tennis courts, and delightful weather year round. In an interview, Helen Lynch said the locale was perfect for visitors wanting to experience the “Wild West”. Despite all the things that the site offered Phelps Dodge was “reluctant to advertise its oasis” for fear that its identity as a mining company would be jeopardized.²⁶¹



Figure 5.18 Vacation cabins at The Pines.

²⁶⁰ Lynch, Phil. “Tyrone”. Brochure no date. Silver City Historical Museum Research Archives. Accessed November 17, 2007.

²⁶¹ Griffin, Sandra. “Tyrone’s time in the spotlight”. *El Paso Times*. 16 June 1986. Pg. 1A, 2A.

Meanwhile, Phelps Dodge sold the railroad line and depot to a Silver City businessman named Fred Borenstein. When Borenstein saw the beautiful station with its marble drinking fountain and highly detailed woodwork, he decided not to demolish the structure. Instead he approached an executive at Phelps Dodge and offered him the opportunity to purchase it back. As times were hard for the corporation and it had no desire to spend frivolously, the executive explained that he lacked the capital to do so. “Borenstein asked the executive what he had in his pocket; mystified, the man brought forth some keys and a few coins, including a silver dollar. The Silver City man plucked up the dollar: ‘You’ve just rebought the station at Tyrone.’”²⁶² It seems the architecture of the town, as the architecture of the Fair, had captured the sentiment of one Silver City businessman.

Despite the operation of the town as a dude ranch and the group of writers and artists that came to permanently inhabit the homes of Tyrone²⁶³, with the rationing of gas during the Second World War, the remote resort community became a luxury of the past.²⁶⁴ Although several attempts to resume operations were made after 1921, it was not until the 1960s that this occurred. In contrast to the underground operations of early Tyrone, the new mine employed the technique of open pit mining. Between 1921 and 1960 the buildings at Tyrone had slowly deteriorated. Since the company retained ownership of the land, as the buildings fell into disrepair, it came in and began removing the structures.²⁶⁵ The town of Tyrone was written about in travel books and stories about ghost towns. It was called the “Million Dollar Ghost Town”. With the reopening of the mine, residents in the area assumed the company would rehabilitate

²⁶² *Ghost Towns of New Mexico*. “XII Tyrone: the Creation”. Pg. 121-126. Silver City Historical Museum Research Archives. Accessed November 17, 2007

²⁶³ Jenkinson, Michael. “Tyrone: The Creation of a Model Ghost Town”. *The American West*. Vol. V No. 2. March 1968. Pg. 38-42, 78-79

²⁶⁴ Griffin, Sandra. “Tyrone’s time in the spotlight”. *The El Paso Times*. 16 June 1986. Pg. 1A, 2A.

²⁶⁵ Florin, Lambert. *Ghost Towns of the Southwest*. Promontory Press, 1987. New York.

what was left of the town. Both the *Silver City Independent* and the *Silver City Enterprise* ran articles boasting the company would resume operations and encouraged miners to return to the area.²⁶⁶



Figure 5.19 Photograph of the portales at Tyrone after decades of neglect. The stucco is cracking and spauling with pieces scattered on the walkway below (Date Unknown).

²⁶⁶ Silver City Historical Museum Research Archives. Accessed November 17, 2007.



Figure 5.20 Photograph of the Justice Court in Tyrone with the door and windows boarded up (Date Unknown).

In 1965, M.P. Scanlon, a vice president of Phelps Dodge, evaluated the remaining buildings of Tyrone. Although it is unknown how biased his opinions were, he found that over half the buildings required demolition from neglect. Although the worker housing remained, Scanlon felt that modern residential standards and worker requirements could not be satisfied with these pre- World War I homes. Despite the claim that the buildings should be demolished, local Silver City residents observed that the post office and the department store were in adequate condition to be rehabilitated and preserved.



Figure 5.21 The open pit mine of Tyrone in November of 2007.

Harry Benjamin from the Silver City Museum speculated that one of the reasons Tyrone did not survive was due to the confusion of activity surrounding the reopening of the mine. When Phelps Dodge officially announced the opening of their new open pit mine, they did so within a few months of resuming operations. Therefore, when the announcement came residents were unaware that the removal of the town would be taking place and had little time to react, let alone form any serious resistance.²⁶⁷ It is unknown how long the buildings at Tyrone stood past the reopening of the mine, but it seems that the open-pit may have encapsulated the original

²⁶⁷ Arthur, Greg. "Historic Sites on Private Property". Paper dated March 13, 1981. Silver City Historical Museum Research Archives. Accessed November 17, 2007.

town site. Whenever it occurred, by the 21st century, only a handful of photographs remained of “Goodhue’s” Tyrone.

Stein’s work on Tyrone, New Mexico was his first project involving housing for working class citizens and more importantly his first project designing an entire town. In San Diego, Stein was in charge of the overall plan for the site, but he only designed the buildings in the California Quadrangle. Although Tyrone was a much smaller project overall, Stein was in charge of all of the buildings as well as the master plan. Tyrone was intended to represent a typical Mexican town with arcades around a central plaza, stuccoed walls, and tile roofs. The commission was awarded to Goodhue from his notoriety for the Panama-California Exposition of 1915. The style and organization of Tyrone were similar to the Exposition, but the company town lacked the fanciful ornamentation of the Fair. The Mercantile and the Company Office building were the only structures to be decorated with Churrigueresque elements and they by no means covered entire facades as they had in the Fair. At Tyrone the style took after the simple design of the Cabrillo bridge and was ironically similar to the work of Irving Gill.

CHAPTER 6

FINAL ANALYSIS

The Panama-California Exposition and Tyrone had to be influential to Stein, but the analysis of them raises some interesting questions. What were the connections between the San Diego Fair and Tyrone, New Mexico beside the fact that one came after the other? Were there connections between these two projects and Stein's later work? When something has great meaning to a person they often make an effort to stay connected to it. It is known that these two sites survived long after Stein's initial involvement therefore did he continue to show an interest in them after he left Goodhue's office? The final analysis of this thesis attempts to answer these three questions.

Panama California Exposition v. Tyrone, New Mexico

The Panama California Exposition and Tyrone had major differences. The most prominent was the fact that the former was a world fair and the latter was a company town. These building typologies have very little in common, yet the most common thread they shared was their architectural style. Although Tyrone was a highly simplified version of the Exposition, the similarities are obvious. Both were designed with arcades surrounding central plazas, they had the axial organization. Had Tyrone been constructed as planned the similarities would have been stronger between the two projects, but they are still a like.

Some of the major differences between the two projects were their size and their overall cost. In the case of the Exposition more than \$8,000,000 was spent in its

construction.²⁶⁸ Several sources have stated that Tyrone was “a million dollar” mining town, but the company claims that it cost much less than this to build. Even if it was close to one million dollars the Fair budget was over eight times the money.

The fairgrounds of the Panama-California Exposition covered over 1,000 acres in Balboa Park. Although it is unknown the exact acreage of the Tyrone site, perhaps the best way to compare them is by the plaza size. The Tyrone plaza was 140 ft x 250 ft whereas the Plaza de Panama was larger at 200 ft x 400 ft. With its buildings, the Tyrone plaza would be about the same size as the Plaza de Panama in San Diego. The Tyrone site plan appeared to cover a few hundred acres because the houses were scattered up and down the hillsides. It could be presumed that Tyrone was about one-third the size of the Exposition, therefore significantly smaller. In addition to acreage, the amount of structures built at each site was dramatically different. At Tyrone only around a dozen buildings were constructed, although several thousand housing units were built. The Exposition comprised over seventy buildings, most of them at least twice the size of the mercantile building at Tyrone.

Keeping the sizes and budgets in mind, it can be imagined that there were great differences between how these two projects were planned, designed and constructed. Tyrone, for example, most likely needed a much smaller construction crew whereas the Exposition needed hundreds of people just to take care of the plantings. The Exposition had a team of designers (Clarence Stein and perhaps others in the Goodhue office, Frank Allen Jr., Carleton Monroe Winslow, Irving Gill, and perhaps many others), who worked for almost five years to plan and design this project. The design and planning of Tyrone began around 1915 and the town officially opened in April of 1916. Construction of the housing continued and records show that the site was not

²⁶⁸ \$2,000,000 stock subscriptions, \$1,250,000 municipal bonds, \$5,000,000 from the City Council. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 17

completely finished until 1918, but it is probable that the Tyrone project needed a much smaller team of people (perhaps only Stein) since it was able to be accomplished in a shorter period of time.

One predominantly overlooked characteristic that both these projects shared was their connection to labor unrest. As mentioned in Chapter 1, the construction of the Exposition was overshadowed by a great deal of labor issues surrounding the Fair. In addition to this problem, the rights of working class citizens were being unconstitutionally removed through the street-speaking ordinance. Similar labor issues were present all around the United States. It is doubtful that Stein was able to participate in the design of the exposition without being aware of these problems. His work in San Diego and the social and political environment around him most likely had some influence on his work at Tyrone, where he was able to design for the laboring population. Phelps Dodge wanted to encourage worker loyalty and retention by creating a master-planned community. However, the Tyrone project was conceived as a response to labor unrest.

Tyrone was meant to limit the possibility of any labor strikes like those at the Phelps Dodge mine of Bisbee. Although the mass deportation and abandonment of the workers from the Copper Queen mine was kept out of most major news outlets²⁶⁹, it is doubtful the company was able to keep their treatment of the situation a secret. Tyrone appears to have been an attempt to deal with labor issues as well as regain positive attention for the Phelps Dodge Corporation.

²⁶⁹ The reason this event was kept out of newspapers was most likely due to the fact that Walter Douglas and his family owned the newspapers in the area. It is possible that this was also the reason that much of the news about Phelps Dodge is generally positive. "Walter P. Douglas, President of Phelps-Dodge Corporation." University of Arizona. www.library.arizona.edu/exhibits/bisbee/history/whoswho/walter_douglas.html. Accessed April 24th, 2008.

There were very few similarities between the Panama-California Exposition and Tyrone, New Mexico. The architectural style, the labor unrest surrounding them, their location in the southwestern United States, and the time at which they were built are their strongest similarities. The building typologies, the size of the project, the budgets, and the duration of their design and construction were the biggest differences between them. A look at the differences and commonalities of these two projects link them together and help to show Stein's progression from a mythical city on a mesa to a more purposeful copper mining town.

The Origins of Kitimat

Lewis Mumford in his introduction for *Toward New Towns for America* talks of Stein and his abundant influence in the profession of city planning. He states:

Clarence Stein is a rare combination of artist and organizer; a man of fine taste, delicate discrimination, and a background of adequate means that gave him wide opportunities, not only for the exercise of these qualities but for travel as well. He had been chief designer for Bertram Grosvenor Goodhue and had been in charge of the planning of a model mining town at Tyrone, New Mexico. But during the years of his greatest activity, the organizer in Stein was perhaps uppermost: it was he who not merely kept the office running, but organized the Regional Planning Commission, and deployed the little squad of thinkers and technicians who surrounded him with such skill that their opponents treated them as respectfully as if they were a regiment.²⁷⁰

The fact that Lewis Mumford brings up the case of Tyrone and his later statements about Stein's influence on "...establish[ing] a widespread need for new housing for the lower income groups..."²⁷¹ suggests that Mumford believed Tyrone to be significant to Stein's past and the formation of his stance on housing policy.

²⁷⁰ Stein, Clarence S. *Toward New Towns for America*. The M.I.T. Press. 1971. Pg. 13

²⁷¹ Ibid. Pg. 14

Mumford's statement raises the question: what connection did Stein's work on these two projects have with his later career?

In the case of the Panama California Exposition of 1915, this was the only world fair that Stein designed, but Tyrone is another story. In 1951 Stein was hired by the Aluminum Company of Canada, Ltd. (ALCAN) to develop a master plan for a mining community at Kitimat, British Columbia.²⁷² According to the *Kitimat Townsite Report* prepared by Stein and the group of professionals working on the project, Stein delineates that his tasks included:

*Outlining basic requirements for the comprehensive development and operation for the purpose of giving maximum livability at minimum long term operating cost; Formulating and outlining the program for each of the component fields of activity; Coordinating these special programs into a comprehensive, overall program and schedule; and Choos[ing] and train[ing] an acceptable, young, and experienced man to become the director of a planning department in Alcan.*²⁷³

Stein's official title for the Kitimat project was Coordinator and Director of Planning.²⁷⁴ Lewis Mumford indicated that "Stein got [the job] because he was the one person [among the many planners who tried to get the job] who showed [ALCAN] that he had any grasp of the political and administrative realities of founding a New Town."²⁷⁵ Despite the fact that this seems to suggest that Tyrone was quite influential to Stein's later work, no evidence was found to support this idea.

²⁷² Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg. 504

²⁷³ Stein, Clarence S. Et. Al. *Kitimat Townsite Report*. Edited and Reissued by the Corporation of the District of Kitimat, December 1960. (Book found at Cornell University Fine Arts Library NAC 6830 K62 581 v.1.)

²⁷⁴ Stein, Clarence S. Et. Al. *Kitimat Townsite Report*. Edited and Reissued by the Corporation of the District of Kitimat, December 1960. (Book found at Cornell University Fine Arts Library NAC 6830 K62 581 v.1.)

²⁷⁵ Mumford, Lewis. Letter to Frederic J. Osborn, December 8, 1951, in *Letters of Lewis Mumford and Frederic J. Osborn*, ed. Michael Hughes. Praeger. 1972. New York. As quoted in Parsons, Kermit.

From what is known about the intention of Tyrone, Clarence S. Stein's planning objectives for Kitimat could quite easily be mistaken for those of Tyrone. In the *Kitimat Townsite Report*, Stein writes:

The purpose of Kitimat is the industrial success of the plant. That success will depend on the degree that workers are content, that they like living in Kitimat. Unless the town can attract and hold industrial workers, there will be continuous turnover and difficulty, interfering with dependable output.

The workers must find Kitimat more than temporarily acceptable. They must be enthusiastic about it as a particularly fine place in which to live and bring up their families. It must become the place they want as homeland, the town they are going to make their own.²⁷⁶

Phelps Dodge intended to inspire loyal and long-term employment through the master planning of a town. The projects both had their individual obstacles. Tyrone was located in the hot dry desert of New Mexico and Kitimat, in the densely forested regions of Canada. Yet the planning of both towns dealt with similar issues. In the case of Kitimat Stein writes:

There is much to contend against in making this possible; including Climate, Remoteness, Strangeness.

There is the weather—seemingly incessant rain, snow, winds. There is strangeness—the wilderness. There is remoteness from all habitual things and places—old friends, markets, customs. There is the counter attraction of the big city with its varied life and entertainment, and the chance of easily getting another job. Men will pioneer for a time in the wilderness for big pay and plenty of good food and a free trip every two months. However, such continuous extravagance and turnover is incompatible with an efficient plant, particularly in an industry that requires lengthy training for its workers...

At Kitimat the setting for a good life must be hewn out of the unknown wilderness. Pioneers must be old timers, bound to Kitimat by enthusiastic love of their town and its unusual qualities. They must be

Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. 1998. United States. Pg. 504

²⁷⁶ Stein, Clarence S. Et. Al. *Kitimat Townsite Report*. Edited and Reissued by the Corporation of the District of Kitimat, December 1960. (Book found at Cornell University Fine Arts Library NAC 6830 K62 581 v.1.) Pg. 3

*given the utmost freedom to develop their lives and that of their community to fit their needs, their desires and their pocket books. And so the plans for Kitimat, both operational and physical, have been developed to serve as a flexible setting for good living that is open to continuous growth and expansion.*²⁷⁷

Perhaps the biggest difference between the obstacles of Tyrone and Kitimat is that workers at Kitimat were more likely to have their own automobile. Although Tyrone had the train coming and going each day, the workers were somewhat more captive than those of Kitimat. The utilization of non-native labor at Tyrone was key to the town's design and organization. The housing and amenities for workers were distinctly different.

At Kitimat the realization was made that workers with families were more likely to stay than a roaming bachelor. Therefore Stein assumed that at least 80% of the workers would be family men and planned the neighborhoods accordingly. Tyrone was developed in much the same way. The fact that the American housing had more than one bedroom, a kitchen, a living room, and a bathroom suggests that the plans were intended for a family unit. If Tyrone was simply planned for bachelor miners then one or two room accommodations (similar to those of the Mexican workers) would have been sufficient and instead of individual kitchens it is more likely that some sort of cafeteria or mess hall would have likely been provided.

Of course the greatest connection between the two company towns could be made if the plan of Kitimat were based on the Laws of the Indies or if the buildings were Mission Style with portales surrounding a center plaza. This is not the case. The

²⁷⁷ Stein, Clarence S. Et. Al. *Kitimat Townsite Report*. Edited and Reissued by the Corporation of the District of Kitimat, December 1960. (Book found at Cornell University Fine Arts Library NAC 6830 K62 581 v.1.) Pg. 3

plan for Kitimat more closely represents the curving plans of post-World War II suburban developments. Kitimat was located on the side of a hill in a densely forested area, although it would be imprudent to comment on whether its design and plan are reflective of Canadian heritage, since this would require an entirely separate thesis.



Figure 6.1 Site plan for Kitimat, B.C. The City Center is depicted by the larger black area just left of and below center. The plan depicts curving residential streets terminating in cul-de-sacs. This is starkly different from the plan for Tyrone, New Mexico.

Stein's Continued Concern About the Fate of these Projects

Stein's involvement with the Panama California Exposition was not limited to the design of the master plan and the California Quadrangle. After its completion, Stein delivered a speech in front of the New York Chapter of the American Institute of Architects. In his address he describes the plan and architecture of the Exposition, see Appendix A.²⁷⁸ The speech was undoubtedly a means to advertise the introduction of the Spanish Colonial style and to help gain recognition for Bertram Goodhue's work, but it is intriguing that Stein delivered the speech and not Goodhue. No record remains of Stein's interest in San Diego from the time when he left Goodhue's office until the 1960s. In 1960 San Diego hired architect Harland Bartholomew to develop a master plan for Balboa Park, Stein seemed to burst into action corresponding with city officials to ensure his interests in the park were preserved.

In a letter dated May 10, 1961, Stein writes to Samuel W. Hamill, a San Diego architect, of his concerns for the fate of the California Building and lists his requests for the site:

I hope that among the first things that you will carry out will be:
(1) The closing of all vehicular traffic across the bridge and through the Plaza in front of the California building
(2) The opening up of views of the California building from various directions by cutting out sufficient of the trees.
*If at the same time it will be possible to move the Elizabethan theater a little further from the California building, I think it would help immensely. Don't misunderstand me. I think it is a fine thing to have a little theater there in the park. Friends of mine who have acted in it or seen it are enthusiastic about it. However, I think you would probably agree with me that it could be very much better placed.*²⁷⁹

²⁷⁸ Stein, Clarence S. "The Panama California Exposition". Written speech delivered to the NY chapter of the AIA, June 1915. Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.

²⁷⁹ Stein, Clarence S. Letter to Samuel Hamill. Dated May 10, 1961. Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.

Stein's letter seems to have had no impact on the master plan for the park, see Appendix D for the full letter. Vehicles continue to travel across the Cabrillo Bridge and the Elizabethan theater remains in its original location. It is unknown if any trees were removed to preserve views of the California building.

In the case of Tyrone, when an article came out in 1968 in the *American Institute of Architects Journal*, Stein wrote "I was interested in the article about Tyrone, N.M.: 'Last Days of a Beaux Arts Ghost Town', in the August issue of the *Journal*. Hardie Phillip²⁸⁰ would like to see this article. He and I worked in Goodhue's office together on the Tyrone planning."²⁸¹ This short letter is all that could be found about Tyrone in Stein's later years.

Through the examination of these two projects and the office in which he first worked it becomes apparent that three influences on Stein's later career were Bertram Grosvenor Goodhue, the social and political events surrounding the projects he worked on, and the projects themselves. Stein was inarguably a significant figure in architectural and planning history, but his early career had some influence on his later notoriety. Just as Goodhue would not likely have gone on to establish a prosperous individual practice had Cram and Wentworth not offered him a position in their firm,

²⁸⁰ Little information could be found about Hardie Phillip. He was employed in Goodhue's office. In the Clarence Stein Archives at Cornell, Stein noted that Hardie Phillip worked in the office from 1912 to 1924. When Bertram G. Goodhue died in 1924, Hardie Phillip was one of the three senior assistants to head the reorganized office of Bertram Grosvenor Goodhue Associates. In 1931, the three associates changed the firm name to Mayers, Murray & Phillip, but the firm dissolved in 1940. Shortly after, Phillip moved to California (Oliver, Pg. 235). On January 18, 1941 Clarence Stein wrote a letter to Aline Stein, his wife, stating the himself and Hardie Phillip had visited the Navy & Army in Washington. Phillip is not mentioned further, therefore it is unknown whether they were working together or just site-seeing together (Parsons, Pg. 406). Stein mentions Hardie Phillip in his letter to Samuel Hamill dated May 10, 1961. From the letter it appears that the three men were acquainted, but that Stein had lost touch with Phillip because he asked Hamill if he knew of Hardie's whereabouts, see appendix D for correspondence mentioning Hardie Phillip. The level of his involvement with Tyrone is unknown, but the letters between Stein and Hamill suggests that Phillip had some involvement with the Exposition as well.

²⁸¹ Stein, Clarence S. Letter to AIA Journal. Dated September 27, 1968. Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.

it is hard to believe that Stein would have evolved into the same person had he not been hired by Bertram Goodhue.

These two projects most likely had some influence or contribution, whether small or great, to his later work and interests. The correlation between Stein designing a company town and his later projects designing working-class neighborhoods and a mining project in British Columbia is easily seen. In the case of San Diego, the exposition was Stein's first project after returning from the *École des Beaux Arts*. As a young designer, he undoubtedly remembered his first project and the fact that the exposition received so much attention could only have added to how significant it was to his life and career.

CONCLUSION

Given his position as an influential leader in the profession of architecture and city planning it is curious that more has not been written about Clarence Stein's early work. He returned to New York after studying at the École des Beaux Arts and was immediately hired by Bertram G. Goodhue. Stein's first project in Goodhue's office was the Panama-California Exposition. Political and social uprisings in San Diego and the rest of the nation most likely caught the attention of Stein. The design of the Fair was widely praised and its architecture influential to San Diego and southern California. It was so widely loved that when the Fair closed the majority of San Diego citizens worked to prevent the demolition of the temporary structures.

When the Fair closed down, city agencies and museums were established in the park to prevent the demolition of the temporary structures. The retention of these structures required millions of dollars of investment from both government and private entities which surprisingly was accomplished. Although no one could have predicted it, the buildings of the exposition would serve a multitude of purposes over the years including a stronghold for national security and a place of cultural awakening. Although Goodhue saw the temporary buildings as mere "stage scenery" the city of San Diego obviously saw them as more.

The fame Goodhue received from the Panama-California Exposition resulted in the commission by Phelps Dodge Corporation for the company town of Tyrone, New Mexico. The importance of the town was great. Tyrone introduced the idea of a master-planned community offering good housing and amenities to its workers in exchange for loyalty and hard work. Although there were several socially charged issues surrounding the town, the project was noteworthy in that it encouraged higher standards for company towns across the United States.

The correlations between these two projects are significant. Their similarity of plan and style help to illustrate that one led to the other. The fact that Stein retained an interest in his first projects fifty years after their completion suggests the importance they had on his life and that they contributed to his later career as a propeller of civic reform. Every significant architect and planner has been substantially influenced by their mentors therefore Bertram Goodhue certainly had a substantial impact on Clarence Stein. Although Stein said little about Goodhue other than that he was a “sensible boss”²⁸², the fact that he seemed to thrive in the office suggests his loyalty and admiration for him.

This thesis has examined the history and development of two early projects by Clarence Stein in the office of Bertram G. Goodhue. The purpose was to discover the correlations and differences between the projects. Specifically, why and how the Panama-California Exposition led to the commission of the copper mining town of Tyrone, New Mexico and the extent to which Stein was involved in each of the projects. It is hoped that through the examination of these two projects a better understanding of Stein’s early career has resulted and insight into events that helped to form his later opinions and actions has been achieved.

Opportunity for Continued Research

The exploration of this thesis has illuminated opportunities for additional research. During the exploration of the history of Phelps Dodge and Tyrone, New Mexico the author discovered that Phelps Dodge retains an archive of company documents and history in an Arizona warehouse. Although admission into this archive was not permitted, should someone be admitted, it is probable that a wealth of

²⁸² Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. 1998. United States. Pg 79

additional information on Tyrone can be found. Additionally, there is an archive for Ralph Adams Cram in Boston, Massachusetts that the author was informed did not contain plans of the San Diego Exposition, but perhaps contains correspondence between Goodhue and Cram regarding the operations of their firm during the period before its dissolution.

One of the later discoveries of this thesis was that Hardie Phillip helped Stein with the design of Tyrone and perhaps had some involvement with the Exposition. This information was unfortunately found too late to pursue it further in this document, but it does offer an opportunity for additional research. Lastly, the correlation was lightly discussed between Stein's work on Tyrone, New Mexico and Kitimat, British Columbia. The discovery of the *Kitimat Townsite Report* at Cornell University offered incredible insight into the objectives and planning of the town. It would be intriguing to strengthen the connection between Tyrone and Kitimat through further research of the aluminum mining town in Canada.

APPENDIX A
TALK BEFORE THE NY CHAPTER AMERICAN INSTITUTE OF
ARCHITECTS JUNE 1915

The Panama California Exposition

The two features of the Panama-California Exposition at San Diego of particular interest to architects are its dissymmetry and picturesque plan and the use of a single architectural style—that of Spanish America.

At San Diego a frank attempt has been made to break away from the type of plan that was created in America by the Chicago Fair and which has been followed by practically all of our subsequent expositions. They were all quite reminiscent of Beaux-Art 'Grand Prix' with well defined axes, large open places surrounded by balanced colonnades and above all a simplicity that gave one a view of everything at a single glance.

The San Diego plan has I think more the character and charm of a real and living city. Just as our past fairs has lead to the enthusiasm for the monumental that has created our many new civic centers so the San Diego Fair may be a factor in arousing a public interest in that variety and picturesqueness that lends so much charm to the cities of Italy and Spain. In it, the large places, such as the Plaza de Panama, gains in force through their contrast with the long tree-lined El Prado by which it is approached – and the varied interest of half seen patio. After all the charm of the Italian cities are the more intimate side of their city plans, - the by-ways with their little shops, the occasional drinking fountain at a street corner, the glimpse of some secluded garden through a half open gate. The San Diego Fair has the varied symmetry and underlying order of the Latin cities, without the squalor of the crowded quarters; it is that glorification of the romantic in city planning.

The dominant note of the composition is the picturesque mass at the one entrance -- the permanent group of buildings. It is approached by a many arched bridge which crosses a deep canyon. The permanent buildings are grouped around a plaza but 110 feet wide – so small in fact that it might be properly called an entrance court. This gives access to El Prado, the main avenue of the Fair through its back bone – (Description of other features of plan.)

All of these main avenues and open places with their excellent plantings – as well as this group of buildings and its approach across the Puente Cabrillo are to form a permanent part of the new 1400 acre park that dominates the center of the City of San Diego. So the plan of the Fair was studies not only in relation to its use this year but also so that after the temporary buildings had disappeared their should remain a nucleus of a great formally planted domain somewhat in the spirit of the great estates of France.

This view taken from an areoplane [sic] gives some idea of the relation of the exposition to the city.

This is the main gateway to the Plaza de California – quite reminiscent with its approach of a portal to Toledo.

A view of the Prado. But before I speak further of the exposition I must say a word of the choice of the style of architecture.

The architectural style of our fairs in the past has had no particular significance. Our really American architectural inheritance has been found too limited in its uses. In the East the Colonial style has lacked the force and adaptability that seemed necessary for the gigantic displays of our Fairs. When the style of architecture was first considered it was natural that the Missions of California should have been thought of as models. But their style was found too limited in its resources. So the Spanish Colonial style of Mexico, of which our Mission style was an outgrowth, was decided upon, not only because of the historical significance of that style in California but because it is well suited to the climate and also has the gayety and colour so necessary for a Fair.

I have brought these few views of Mexican architecture so that you might have more clearly in mind the main characteristics of the architecture from which the buildings of the San Diego Fair were inspired. They have the essential features of all Spanish architecture: the contrasting of great surfaces of blank wall with occasional spots of luxuriant ornament; the love of bright colour shown in the paintings and gilding of sculpture and ornamental motives and the use of polychrome tiles. These are used not only on domes and towers but sometimes to cover large parts of the façade, while the large constructive forms, particularly vaults and domes, are frankly and simply expressed, the ornament, as in the work of the Orient, is rather an incrustation, a mere surface decoration, than a pretence at logical construction.

The style used in Mexico was seldom the Plateresque which would have been too delicate for the native workman to execute and had already been practically abandoned in Spain itself; but the Churrigueresque with its ever broken and twisted mouldings and the equally wild Baroque. The work was almost always executed [sic] by the Aztecs – the execution is crude but it is not lacking in charm and individuality.

But the attraction of the style is not in the detail. It is rather in the massing of the ornament, in its concentration and its contrast with the blank surfaces, and the general grouping of buildings with their many domes, towers and turrets and the rich use of colour. All these elements have been welded together to make the Exposition at San Diego.

[Signed] Clarence S. Stein.²⁸³

²⁸³ Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.

APPENDIX B

THE ART IN THE CALIFORNIA STATE BUILDING

I. VESTIBULE

HISTORICAL FRIEZE, "DISCOVERY AND CONQUEST OF AMERICA," MRS. SALLIE JAMES FARNHAM, SCULPTURE.

1. Discovery of America by Columbus
2. Discovery of Pacific Ocean by Balboa
3. Conquest of Mexico by Cortez
4. Conquest of Peru by Pizarro

BAS-RELIEF SCULPTURES FROM ANCIENT MAYA CITY OF PALENQUE, MEXICO:

5. The Magician: Pier Tablet from the Temple of the Sun.
6. The Priest: Pier Tablet from the Temple of the Sun
7. Altar Piece from the Temple of the Cross
8. Altar Piece from the Temple of the Sun
9. Hieroglyphic Tablet from the Temple of Inscriptions
10. Hieroglyphic Tablet from the Temple of Inscriptions

INSCRIPTION OVER DOORWAY:

11. Date of California Building (January First, 1915, A.D.) in Maya Hieroglyphic Characters.

II. ROTUNDA

COLUMNS AT ENTRANCE:

12. The Plumed Serpent Portal, Temple of Sacrifice, Chichen Itza, Yucatan

RELIEF MAP IN CENTER OF ROTUNDA:

13. Central America: The Home of the Ancient Maya Civilization.

SCULPTURED MONUMENTS FROM ANCIENT MAYA CITY OF QUIRIGUA, GUATEMALA:

14. The Great Turtle: Representing a woman in the mouth of a mythical animal.
15. Monument of a Bearded Man: Figure of a Death God on back.
16. The Leaning Shaft: Monument of a Priest Ruler.
17. The Queen: Monument of a Woman Ruler or Priestess.
18. The Dragon: Representing a bearded man in the mouth of a mythical animal.

III. UPPER GALLERIES. EAST SIDE

MURAL PAINTINGS OF MAYA CITIES. CARLOS VIERRA, ARTIST:

19. Ancient Temple City of Copan, Honduras.
20. Ancient Temple City of Quirigua, Guatemala.

MAYA FRIEZE: SCENES FROM MAYA LIFE. MRS. JEAN COOK-SMITH, SCULPTOR:

21. Quarrying Stones for the Great Monuments.

22. Hauling a Monument to the City.

23. A Serpent Dance.

24. Building a Maya Temple.

25. Sculpturing a Monument.

ARCHITECTURAL MODEL:

26. Temple of Sacrifice, Chichen Itza, Yucatan.

SCULPTURED MONUMENT:

27. Animal Head, from Quirigua, Guatemala

SOUTH SIDE.

SCULPTURED SHAFT FROM QUIRIGUA, GUATEMALA:

28. Monument of a Priest-Ruler.

MURAL PAINTINGS OF MAYA CITIES, CARLOS VIERRA, ARTIST:

29. Ancient Pyramid City of Tikal, Northern Guatemala.

30. Ancient City of Palenque, Chiapas, Mexico.

MAYA FRIEZE, MRS. JEAN COOK-SMITH, SCUPLTOR:

31. Dedication of a Maya Temple.

32. A Maya Ceremony of Divination.

33. Symbolic Panel "Spirit of the Past" (not yet installed).

BAS-RELIEF SCULPTURES:

34. Panel from the Temple of Inscriptions, Palenque, Mexico.

35. Altar Piece: Woodcarving from Tikal, Guatemala.

ANCIENT POTTERY:

36. Case of sixty-five vases, excavated at Chiriqui, Panama.

WEST SIDE.

MURAL PAINTINGS OF MAYA CITIES, CARLOS VIERRA, ARTIST:

37. Chichen Itza, the Holy City of Northern Yucatan.

MAYA FRIEZE: SCENES FROM MAYA LIFE. MRS. JEAN COOK-SMITH,

SCUPLTOR:

38. The Procession: Sacrifice of the Virigins at Chichen Itza.

39. The Sacrifice at the Sacred Well.

40. The Return of the Oracle.

41. The Assemblage at the Ceremonial Ball Game.

42. The Maya Ball Game.

ARCHITECTURAL MODEL:

43. The Palace at Uxmal, Northern Yucatan.

SCULPTURED MONUMENT:

44. Great Seal, from Quirigua, Guatemala.²⁸⁴

²⁸⁴ *The Official Guide Book of the Panama California Exposition San Diego 1915*. San Diego, California. January 1 to December 31, 1915. The San Diego Public Library. Accessed November 24, 2007. Pg. 22-23

APPENDIX C

PAINTINGS IN THE FINE ARTS BUILDING

1. Woman and Macaws, George Luks
2. The Theologian, George Luks
3. The Wrestlers, George Luks
4. Fantasy, George Luks
5. Cuban Dancers, George Luks
6. Children of the Slums, George Luks
7. The Broken Bow, Joseph Henry Sharp
8. Grief, Joseph Henry Sharp
9. Pottery Decorations, Joseph Henry Sharp
10. The Gamblers, Joseph Henry Sharp
11. The Stoic, Joseph Henry Sharp
12. Along the Little Horn, Joseph Henry Sharp
13. Landscape with Figures, Maurice B. Prendergast
14. Children Playing, Maurice B. Prendergast
15. The Brunette, William Glackens
16. Cape Code Shore, William Glackens
17. Girl in Blue Dress, William Glackens
18. Summer, Long Island, William Glackens
19. Skating, Central Park, William Glackens
20. Gods at Play, Carl Sprinchorn
21. Interior, Guy Pene Du Bois
22. Virginia III, Guy Pene Du Bois
23. Sporting Life, Guy Pene Du Bois
24. The Doll and the Monster, Guy Pene Du Bois
25. The Dancer, Guy Pene Du Bois
26. Twentieth Century Young Ladies, Guy Pene Du Bois
27. Movies, John Sloan
28. Brace's Cove, Gloucester, John Sloan
29. Clown Making Up, John Sloan
30. Autumn, Gloucester Dunes, John Sloan
31. Chinese Restaurant, John Sloan
32. Sunday, Girls Drying Their Hair, John Sloan
33. The Beryl Gorge, Appledore, Childe Hassam
34. Moonrise at Sunset, Childe Hassam
35. The Squall, Cape Ann, Childe Hassam
36. In Brittany, Childe Hassam
37. Irish Lad, Robert Henri
38. Tom Po Kwi (Water of Antelope Lake), Robert Henri
39. Po Tse (Water Eagle), Robert Henri
40. Mary O'D, Robert Henri

41. Irish Lass, Robert Henri
42. Pat, Robert Henri
43. Boat House In Winter, Ernest Lawson
44. Hill at Innwood, Ernest Lawson
45. Cloud Shadows, Ernest Lawson
46. Approach to the Bridge, Night, George Bellows
47. New York, George Bellows
48. Men of the Dock, George Bellows
49. Little Girl in White, George Bellows²⁸⁵

²⁸⁵ *The Official Guide Book of the Panama California Exposition San Diego 1915*. San Diego, California. January 1 to December 31, 1915. The San Diego Public Library. Accessed November 24, 2007. Pg. 25

APPENDIX D
CORRESPONDENCE BETWEEN CLARENCE STEIN AND SAMUEL
HAMILL

Letter from Samuel Wood Hamill to C.S.Stein

February 11, 1960

Mr. Clarence Stein, F.A.I.A.
517 No Roxbury Drive
Beverly Hills, California

Dear Mr. Stein,

As I have told Hardie Phillip, your visit to San Diego and Balboa Park was like a breath of fresh mountain air for me. The incongruous situation surrounding the master planning of Balboa Park has provided little but frustration for many of us.

Enclosed is a copy of the report, borrowed from the S.D. Chamber of Commerce, to whom I will return it if convenient, when you have read it.

Please be free however to mark the report, marginally or otherwise as your study requires, since I will be most appreciative of your point of view. I cannot imagine two persons more qualified to comment upon the real values and their conservation, in connection with the park and it's [sic] buildings, than yourself and Mr. Phillips.

However I will refrain from quoting you except insofar as you may specifically authorize since I refuse to involve you in something which is not of your immediate concern.

You are however the parent and you may choose to put in a word or two as to the disposition of your brain child.

I hope that we may see you again in this area. Your counsel to the museum people would be especially valuable.

Today I mentioned to James Britton, an editor of the "San Diego Magazine" that you had been here. He immediately asked for your address, which I gave him and presume he will write you.

Anything you give him will doubtless be published. I hope I have not burdened you.

Sincerely,

Samuel Wood Hamill F.A.I.A
Architect

Letter from C.S.Stein to Samuel W. Hammill

May 10, 1961

Mr. Samuel W. Hamill, F.A.I.A.
403 Scripps Building
San Diego 1, California

Dear Sam Hamill:

I was delighted to hear from you again. I judge from the memo which you sent me that Harland Bartholomew has now departed and that you and the others who know and love Balboa Park so intimately can take over again.

I hope that among the first things that you will carry out will be:

(1) The closing of all vehicular traffic across the bridge and through the Plaza in front of the California Building

(2) The opening up of views of the California building from various directions by cutting out sufficient of the trees.

If at the same time it will be possible to move the Elizabethan theater a little further from the California building, I think it would help immensely. Don't misunderstand me. I think it is a fine thing to have a little theater there in the park. Friends of mine who have acted in it or seen it are enthusiastic about it. However, I think you would probably agree with me that it could be very much better placed.

I look back with much pleasure to the day that you, Hardie Phillip and I spend roaming around Balboa Park. By the way, do you know just where Hardie is at present? Did he return to Rancho Santa Fe?

When you last wrote to me you mentioned James Britten, the editor of the "San Diego Magazine". As you probably know, he has been in the east and I had the pleasure of meeting him for lunch some months ago. Since then I have seen him once or twice. We naturally spoke about you.

I do not know just when I will get to California again, but when I do I hope that we will be able to get together, either in Los Angeles or San Diego. Meanwhile I will be pleased if you will, some time in the future, let me know what progress is being made in redeveloping and conserving Balboa Park.

Cordially,

Clarence S. Stein

CSS:wb

Letter from Samuel W. Hamill to C.S.Stein

May 15, 1961

Mr. Clarence S. Stein, F.A.I.A.
1 West 64th Street
New York 23, New York

Dear Mr. Stein:

Your letter gives me great encouragement. There are vast distances between oasis in this desert of cultural appreciation which surrounds us all. It has meant much to me to discover en route, friends like yourself and Hardie Phillip. I regret that San Diego was denied the local approach to the master plan for Balboa Park with the two of you charting the course. Apparently the Bartholomew organization sent only the second team here, since their particular names do not appear on the firm letterhead. They have followed rather closely the report of the Citizens Committee. Controversial items which Bartholomew has injected into the plan can well be disposed of as the development progresses. I have felt it best to overlook these rather than run the risk of no plan at all.

Your suggestions are appreciated and will be followed through to the best of my ability. The struggle now is with lack of municipal finance, lack of public understanding and inertia engendered by the lethargy of many years.

One of the memo's sent to Hardie Phillip at the address given in the A.I.A. Membership list was returned to me. So I phoned a mutual friend at Rancho Santa Fe who told me that he had returned to New York expecting to sell his residence there, and who gave me the following address,

Mr. Hardie Phillip, F.A.I.A.
Hillsdale
Columbia County
New York

I am taking the liberty of sending a copy of this to Mr. Phillip so he will know that you have inquired about him and that we each think of him.

My very best wishes for your continued good health and happiness.

Sincerely,

SAMUEL WOOD HAMILL, F.A.I.A
Architect²⁸⁶

²⁸⁶ Letters between Clarence S. Stein and Samuel Hamill. Clarence Stein Papers. Cornell University Archives (CSP/CUA). Accessed October 13, 2007.

REFERENCES

1. Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg 1.
2. Alexander, Hartley Burr; Ralph Adams Cram; George Ellery Hale; Lee Lawrie; C. Howard Walker; Charles Harris Whitaker. *Bertram Grosvenor Goodhue- Architect and Master of Many Arts*. Press of the American Institute of Architects, Inc. New York City. 1925. Pg. 32-33.
3. Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg. 1.
4. Ibid. Pg. 2.
5. Ibid. Pg 75-76.
6. Stein, Clarence S. "Home Again". c. 1911, Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.
7. Ibid.
8. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 1.
9. Cuff, Dana. *Architecture: The Story of a Practice*. The MIT Press. Cambridge, MA. 1991. Pg. 23..
10. Cuff, Dana. *Architecture: The Story of a Practice*. The MIT Press. Cambridge, MA. 1991. Pg. 27-28.
11. Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg. 4.
12. Ibid. Pg 10-11.
13. Ibid. Pg 13.
14. Ibid. Pg 17.

15. Ibid. Pg 20-21.
16. Ibid. Pg. 23.
17. Ibid. Pg. 46.
18. Ibid. Pg. 46.
19. Ibid. Pg. 46-48.
20. Ibid. Pg. 46-48.
21. Ibid. Pg. 49.
22. Ibid.
23. Ibid. Pg 51.
24. Ibid. Pg. 75.
25. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 2-13.
26. Alexander, Hartley Burr; Ralph Adams Cram; George Ellery Hale; Lee Lawrie; C. Howard Walker; Charles Harris Whitaker. *Bertram Grosvenor Goodhue- Architect and Master of Many Arts*. Press of the American Institute of Architects, Inc. New York City. 1925. Pg. 11.
27. Ibid. Pg. 12.
28. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. 1983. Cambridge, MA & London, England. Pg. 1.
29. Alexander, Hartley Burr; Ralph Adams Cram; George Ellery Hale; Lee Lawrie; C. Howard Walker; Charles Harris Whitaker. *Bertram Grosvenor Goodhue- Architect and Master of Many Arts*. Press of the American Institute of Architects, Inc. 1925. New York City. Pg. 12.
30. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 3.
31. Ibid. Pg. 6.
32. Ibid. Pg. 6.

33. Ibid. 1983. Pg. 7.
34. Ibid. Pg. 9-10.
35. Ibid. Pg. 12-13.
36. Ibid. Pg. 13.
37. Ibid. Pg. 13.
38. Ibid. Pg. 14.
39. Ibid. Pg. 25.
40. Ibid. Pg. 27.
41. Ibid. Pg. 44-45.
42. Ibid. Pg. 46-48.
43. Ibid. Pg. 49.
44. Ibid. Pg. 120.
45. Ibid. Pg. 121.
46. Ibid. Pg. 122-123.
47. Ibid. Pg. 151-152.
48. Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg 76.
49. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 171.
50. Stein, Clarence S. "Home Again". c. 1911, Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.
51. Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg 76.

52. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 171.
53. Ibid. Pg. 171.
54. Benton, F. Weber. *Semi-Tropic California*. 1915. (Memorial to Woodrow Wilson). Department of Special Collections. University of California San Diego. Accessed 21 November 2007.
55. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 2-5.
56. Ibid. Pg. 5.
57. Hendrickson, Nancy. *San Diego Then and Now*. Thunder Bay Press. San Diego. 2003. Pg 5.
58. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 6.
59. Ibid. Pg. 7.
60. Ibid. Pg. 7.
61. Ibid. Pg. 8.
62. Ibid. Pg. 9.
63. Hendrickson, Nancy. *San Diego Then and Now*. Thunder Bay Press, 2003. San Diego. Pg. 5.
64. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 10.
65. Ibid. Pg. 11.
66. Murphy, Dan. *New Mexico: The Distant Land*. Windsor Publications, Inc. 1985. Pg. 71-73.
67. Hendrickson, Nancy. *San Diego Then and Now*. Thunder Bay Press. San Diego. 2003. Pg. 5.
68. Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. San Diego. 1988. Pg. 35.

69. Ibid. Pg. 35.
70. Ibid. Pg. 35.
71. Ibid. Pg. 35.
72. Ibid. Pg. 35.
73. Hendrickson, Nancy. *San Diego Then and Now*. Thunder Bay Press. San Diego. 2003. Pg 38.
74. Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. San Diego. 1988. Pg. 35.
75. Ibid. Pg. 35.
76. Ibid. Pg. 35.
77. McWilliams, Carey. *North from Mexico: The Spanish-Speaking People of the United States*. J. B Lippincott. 1949. Philadelphia. As referenced in: Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. xv.
78. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. xv.
79. Ibid. Pg. 13.
80. Bryant, Keith L. *History of the Atchison, Topeka and Santa Fe Railway*. Macmillan Publishing Co. New York. 1974. Pg. 95-96.
81. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 19.
82. Ibid. Pg. 19.
83. Barr, E.S. "John D's Roots: a historical perspective". *In Focus*. (1996, Summer Edition) Pg. 8-9.
84. Crawford, R. *Spreckels*. Written for a 1982 Showcase. San Diego Historical Society Research Library.
85. Barr, E.S. "John D's Roots: a historical perspective". *In Focus*. (1996, Summer Edition) Pg. 8-9.

86. Crawford, R. *Spreckels*. Written for a 1982 Showcase. San Diego Historical Society Research Library.
87. Ibid.
88. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 19.
89. Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. San Diego. 1988. Pg. 31.
90. Ibid. Pg. 32.
91. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 54.
92. Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. San Diego. 1988. Pg. 35.
93. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 20.
94. Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. San Diego. 1988. Pg. 35.
95. Ibid. Pg. 35.
96. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 21-22.
97. Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. San Diego. 1988. Pg. 36.
98. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. 2005. Albuquerque. Pg. 25-26.
99. Ibid. Pg. 27.
100. Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 36.
101. Ibid. Pg. 36.
102. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 109.

103. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 55.
104. Ibid. Pg. 55.
105. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 110.
106. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 56.
107. Kamerling, Bruce. "Letter addressed to Readers Write, The San Diego Union". Dated August 8, 1985. San Diego Historical Society Research Archives. Accessed November 21, 2007.
108. Olten, Carol. "One of Gill's treasures will shine again in Balboa Park". *The San Diego Union*. Sunday, December 21, 1986. Pg. F-4. The San Diego Historical Society Research Archives. Accessed November 21, 2007.
109. Amero, Richard W. "Gill's role in Balboa disputed". *The San Diego Union*. Sunday, January 4, 1987. Pg. F-10. The San Diego Historical Society Research Archives. Accessed November 21, 2007.
110. Kamerling, Bruce. "Letter addressed to Readers Write, The San Diego Union". Dated August 8, 1985. San Diego Historical Society Research Archives. Accessed November 21, 2007.
111. Ibid.
112. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 56.
113. Ibid. Pg. 57-58.
114. Ibid. Pg. 27.
115. Ibid. Pg. 60.
116. Ibid. Pg. 31.
117. Ibid. Pg. 31.
118. Ibid. Pg. 30.

119. Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988, pg 37.
120. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 37.
121. Ibid. Pg. 40-41..
122. Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 42.
123. Ibid. Pg. 43.
124. Ibid. Pg. 45.
125. Ibid. Pg. 46-48.
126. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 112.
127. Stein, Clarence S. Item dated 1911-1918, Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.
128. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 113.
129. Ibid. Pg. 112.
130. Reys, John. *Town Planning in Frontier America*. University of Missouri Press. 1980. United States. Pg. 27-30.
131. Ibid. Pg. 27-30.
132. Ibid. Pg. 27-30.
133. *The Official Guide Book of the Panama California Exposition San Diego 1915*. San Diego, California. January 1 to December 31, 1915. The San Diego Public Library. Accessed November 24, 2007.
134. Ibid.
135. Ibid.
136. Ibid.

137. Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg 43-55.
138. *The Official Guide Book of the Panama California Exposition San Diego 1915*. San Diego, California. January 1 to December 31, 1915. The San Diego Public Library. Accessed November 24, 2007.
139. Stein, Clarence. "A Triumph of the Spanish-Colonial Style", in *The Architecture and Gardens of the San Diego Exposition*. San Francisco. Paul Elder and Company 1916. Pg. 13.
140. Ibid. Pg. 12.
141. Alexander, Hartley Burr; Ralph Adams Cram; George Ellery Hale; Lee Lawrie; C. Howard Walker; Charles Harris Whitaker. *Bertram Grosvenor Goodhue-Architect and Master of Many Arts*. Press of the American Institute of Architects, Inc. 1925. New York City.
142. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. 2005. Albuquerque. Pg. 85.
143. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. 1983. Cambridge, MA & London, England. Pg. 114.
144. *Tres Siglos De Arquitectura Colonial*. The Department of Education of the Republic of Mexico. D. Appleton-Century Company. 1933. New York.
145. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. 2005. Albuquerque. Pg. 106.
146. Ibid. Pg. 108.
147. *The Official Guide Book of the Panama California Exposition San Diego 1915*. San Diego, California. January 1 to December 31, 1915. The San Diego Public Library. Accessed November 24, 2007.
148. Ibid.
149. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. 1983. Cambridge, MA & London, England. Pg. 116.
150. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. 2005. Albuquerque. Pg. 60.

151. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. 1983. Cambridge, MA & London, England. Pg. 118.
152. Bartholomew, Harland. *Master Plan for Balboa Park San Diego, CA*. June 1960. Pg. 6-10.
153. Goodhue, Bertram G. *The Architecture and the Gardens of the San Diego Exposition*. Paul Elder and Company Publishers. 1916. San Francisco.
154. Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 53-54.
155. Bartholomew, Harland. *Master Plan for Balboa Park San Diego, CA*. June 1960. Pg. 18.
156. Ibid. Pg. 18.
157. Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 53-54.
158. Ibid. Pg. 54.
159. Ibid. Pg. 71-72.
160. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 143.
161. Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 74,
162. Ibid. Pg. 81- 82,
163. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 150,
164. Ibid.. Pg. 156-157,
165. Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 81- 82.
166. Bartholomew, Harland. *Master Plan for Balboa Park San Diego, CA*. June 1960. Pg. 9.
167. Ibid. Pg. 7.

168. Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 84-87,
169. Austin, Edward T. "\$6,000,000 Added to Value of Park by Expo Estimate". *San Diego Union*. September 14, 1936. San Diego Historical Society Research Archives. Accessed November 21, 2007.
170. Bartholomew, Harland. *Master Plan for Balboa Park San Diego, CA*. June 1960. Pg. 6-10.
171. Austin, Edward T. "\$6,000,000 Added to Value of Park by Expo Estimate". *San Diego Union*. September 14, 1936. San Diego Historical Society Research Archives. Accessed November 21, 2007.
172. Christman, Florence. *The Romance of Balboa Park*. San Diego Historical Society. 1988. Pg. 99,
173. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 152,
174. Stein, Clarence S. *Toward New Towns for America*. Introduction by Lewis Mumford. The M.I.T. Press. 1971. Pg. 13,
175. Truett, Samuel. *Fugitive Landscapes*. Yale University Press. 2006. Pg. 55-56,
176. Ibid. Pg. 55-56,
177. Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 37,
178. Navin, Thomas R. *Copper Mining and Management*. University of Arizona Press. Tucson, Arizona. 1978. Pg. 9,
179. Ibid. Pg. 9,
180. Ibid. Pg. 10,
181. Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 38,
182. Ibid. Pg. 38,
183. Ibid. Pg. 38.
184. Ibid. Pg. 38,

185. Ibid. Pg. 29,
186. Ibid. Pg. 26,
187. Ibid. Pg. 38,
188. "The End of an Era: Cleveland Earl Dodge (1888-1982)". Silver City Historical Museum. Accessed November 18, 2007.
189. Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 32,
190. Ibid. Pg. 33,
191. Ibid. Pg. 36,
192. Ibid. Pg. 37,
193. Ibid. Pg. 43,
194. Ibid. Pg. 44,
195. Ibid. Pg. 46,
196. Navin, Thomas R. *Copper Mining & Management*. University of Arizona Press. Tucson. 1978. Pg. 11,
197. Ibid. Pg. 12,
198. Truett, Samuel. *Fugitive Landscapes*. Yale University Press, 2006. Pg. 55-56,
199. Ibid. Pg. 13-14,
200. Ibid. Pg. 65-68.
201. Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 57,
202. Ibid. Pg. 13,
203. Ibid. Pg. 12-13,
204. Ibid. Pg. 10,

205. Ibid. Pg. 12,
206. Ibid. Pg. 63,
207. Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 75,
208. Ibid. Pg. 73-77,
209. Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, London. 1995. Pg. 130-132,
210. Ibid. Pg. 130-132,
211. "Walter P. Douglas, President of Phelps-Dodge Corporation." University of Arizona. www.library.arizona.edu/exhibit/bisbee/history/whoswho/walter_douglas.html. Accessed April 24th, 2008.
212. Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, London. 1995. Pg. 130-131,
213. "Walter P. Douglas, President of Phelps-Dodge Corporation." University of Arizona. www.library.arizona.edu/exhibit/bisbee/history/whoswho/walter_douglas.html. Accessed April 24th, 2008,
214. Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, London. 1995. Pg. 130-132.
215. Ibid. Pg. 130-132.
216. Navin, Thomas R. *Copper Mining and Management*. University of Arizona Press. Tucson, Arizona. 1978. Pg. 34.
217. Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, London. 1995. Pg. 130-132.
218. Ibid. Pg. 132.
219. Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 119.
220. Ibid. Pg. 119.
221. Ibid. Pg. 120.

222. Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, London. 1995. Pg. 132.
223. Ibid. Pg. 136-140.
224. Schwantes, Carlos A. *Vision & Enterprise*. The University of Arizona Press. 2000. Pg. 120.
225. Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, London. 1995. Pg. 136-140.
226. Ungnade, Herbert E. *Guide to the New Mexico Mountains*. Sage Books, Denver. 1965. Pg. 135.
227. Navin, Thomas R. *Copper Mining and Management*. University of Arizona Press. Tucson, Arizona. 1978. Pg. 32.
228. Truett, Samuel. *Fugitive Landscapes*. Yale University Press. 2006. Pg. 173-174.
229. Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso. London. 1995. Pg. 150.
230. Truett, Samuel. *Fugitive Landscapes*. Yale University Press. 2006. Pg. 173-174.
231. Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso. London. 1995. Pg. 136-140.
232. Truett, Samuel. *Fugitive Landscapes*. Yale University Press. 2006. Pg. 73-76.
233. Ibid. Pg. 73-76.
234. Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, 1995. London. Pg. 136-140.
235. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 152.
236. "Letter from B.G.Goodhue Office to Mr. M.A. Nikkelson of the Architectural Record". July 3, 1918. Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.
237. Reps, John. *Town Planning in Frontier America*. University of Missouri Press. 1980. United States. Pg. 27-30.

238. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. 1983. Cambridge, MA & London, England. Pg. 152.
239. Gustafson, Connie. "Tyrone, New Mexico. Bertram Grosvenor Goodhue Architect 1915-1917". Silver City Historical Society. Accessed November 17, 2007.
240. Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, 1995. London. Pg. 136-140.
241. Ibid. Pg. 136-140.
242. "Letter from B.G.Goodhue Office to Mr. M.A. Nikkelson of the Architectural Record". July 3, 1918. Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.
243. Images from the Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.
244. Ibid.
245. Letter from B.G.Goodhue Office to Mr. M.A. Nikkelson of the Architectural Record. July 3, 1918. Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.
246. Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, 1995. London. Pg. 136-140.
247. Yampolsky, Mariana. *The Traditional Architecture of Mexico*. Thames and Hudson Ltd. 1993. London.
248. Crawford, Margaret. *Building the Workingman's Paradise: The Design of American Company Towns*. Verso, 1995. London. Pg. 136-140.
249. Letter to E.M. Sawyer of the Burro Mountain Copper Company. "Re: American Houses". September 20, 1916. Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.
250. Ibid.
251. *Ghost Towns of New Mexico*. "XII Tyrone: the Creation". Pg. 121-126. Silver City Historical Museum Research Archives. Accessed November 17, 2007

252. "Tyrone Hospital Uses Radium Treatment". *Silver City Enterprise*. 26 November 1920. Silver City Historical Museum Research Archives. Accessed November 17, 2007
253. "The New Mining Community of Tyrone, N.M.". *Architectural Review*. Vol VI. November 4, 1918, Boston Edition, Pg. 59. As quoted in Arthur, Greg "Historic Sites on Private Property". Paper dated March 13, 1981. Silver City Historical Museum Research Archives. Accessed November 17, 2007.
254. "Tyrone Camp to Open Up April 10". *Silver City Independent*. 4 April 1916. Silver City Historical Museum Research Archives. Accessed November 17, 2007.
255. *Silver City Enterprise*. 15 December 1916. Pg. 1. As cited in Conwell, Linda Irene. "A History of Old Tyrone". Paper Dated August 1971. Silver City Historical Museum Research Archives. Accessed November 17, 2007.
256. Phillips, Rick. "Centerfold". *The Enterprise*. 13 May 1982. Pg. 8-9. Silver City Historical Museum Research Archives. Accessed November 17, 2007.
257. Ibid.
258. "Tyrone Camp Will Close Down on the First of April". *Silver City Enterprise*. 18 March 1921. Pg. 1 Silver City Historical Museum Research Archives. Accessed November 17, 2007.
259. "One Way Excursions Leaving Tyrone Daily for Mexico". *Silver City Enterprise*. 8 April 1921. Pg.1 Silver City Historical Museum Research Archives. Accessed November 17, 2007.
260. Lynch, Phil. "Tyrone". Brochure no date. Silver City Historical Museum Research Archives. Accessed November 17, 2007.
261. Griffin, Sandra. "Tyrone's time in the spotlight". *El Paso Times*. 16 June 1986. Pg. 1A, 2A.
262. *Ghost Towns of New Mexico*. "XII Tyrone: the Creation". Pg. 121-126. Silver City Historical Museum Research Archives. Accessed November 17, 2007.
263. Jenkinson, Michael. "Tyrone: The Creation of a Model Ghost Town". *The American West*. Vol. V No. 2. March 1968. Pg. 38-42, 78-79.
264. Griffin, Sandra. "Tyrone's time in the spotlight". *The El Paso Times*. 16 June 1986. Pg. 1A, 2A.

265. Florin, Lambert. *Ghost Towns of the Southwest*. Promontory Press, 1987. New York.
266. Silver City Historical Museum Research Archives. Accessed November 17, 2007.
267. Arthur, Greg. "Historic Sites on Private Property". Paper dated March 13, 1981. Silver City Historical Museum Research Archives. Accessed November 17, 2007.
268. Bokovoy, Matthew F. *The San Diego World's Fairs and Southwestern Memory, 1880-1940*. University of New Mexico Press. Albuquerque. 2005. Pg. 17
269. "Walter P. Douglas, President of Phelps-Dodge Corporation." University of Arizona. www.library.arizona.edu/exhibits/bisbee/history/whoswho/walter_douglas.html. Accessed April 24th, 2008.
270. Stein, Clarence S. *Toward New Towns for America*. The M.I.T. Press. 1971. Pg. 13.
271. Ibid. Pg. 14.
272. Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. United States. 1998. Pg. 504
273. Stein, Clarence S. Et. Al. *Kitimat Townsite Report*. Edited and Reissued by the Corporation of the District of Kitimat, December 1960. (Book found at Cornell University Fine Arts Library NAC 6830 K62 581 v.1.)
274. Ibid.
275. Mumford, Lewis. Letter to Frederic J. Osborn, December 8, 1951, in *Letters of Lewis Mumford and Frederic J. Osborn*, ed. Michael Hughes. Praeger. 1972. New York. As quoted in Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. 1998. United States. Pg. 504.
276. Stein, Clarence S. Et. Al. *Kitimat Townsite Report*. Edited and Reissued by the Corporation of the District of Kitimat, December 1960. (Book found at Cornell University Fine Arts Library NAC 6830 K62 581 v.1.) Pg. 3.
277. Ibid.

278. Stein, Clarence S. "The Panama California Exposition". Written speech delivered to the NY chapter of the AIA, June 1915. Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.
279. Stein, Clarence S. Letter to Samuel Hamill. Dated May 10, 1961. Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.
280. Oliver, Richard. *Bertram Grosvenor Goodhue*. The MIT Press. Cambridge, MA & London, England. 1983. Pg. 235.
281. Stein, Clarence S. Letter to AIA Journal. Dated September 27, 1968. Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.
282. Parsons, Kermit Carlyle, etd. *The Writings of Clarence Stein: Architect of the Planned Community*. The Johns Hopkins University Press. 1998. United States. Pg 79.
283. Clarence Stein Papers, Cornell University Archives (CSP/CUA). Accessed October 13, 2007.
284. *The Official Guide Book of the Panama California Exposition San Diego 1915*. San Diego, California. January 1 to December 31, 1915. The San Diego Public Library. Accessed November 24, 2007. Pg. 22-23.
285. Ibid. Pg. 25.
286. Letters between Clarence S. Stein and Samuel Hamill. Clarence Stein Papers. Cornell University Archives (CSP/CUA). Accessed October 13, 2007.