

ANALYSIS OF THE ART DECO
STYLE OF ARCHITECTURE
IN TULSA, OKLAHOMA

By

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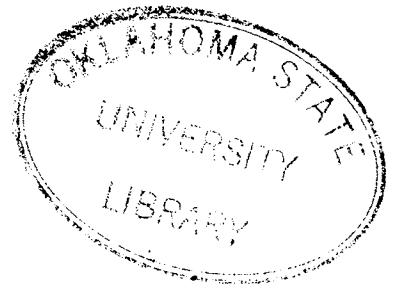
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CHAPTER I

INTRODUCTION

From 1925 through 1942 a new style of architecture emerged. This style is known as Art Deco. The term Art Deco was derived from the title of a 1925 Paris Exhibition: 'L' Exposition Internationale des Arts Decoratifs et Industriels Modernes'.

Art Deco has also been called 'Aztec Airways', 'Jazz Modern', 'Modernistic', 'Functional', or named after its chief artists, 'Style Poiret', 'Style Chanel', 'Style' or it was referred to by the date of the exhibition 'Style 1925', 'La Mode 1925', 'Paris 25' (Walker, 1973, pp. 33-34).

Art Deco was not just another architectural style, it was an expression of the times. For years Art Deco was not recognized as a style, it was dismissed as misguided architecture. Recent awareness of historical preservation has revealed the transition between the three Art Deco styles and modern American architecture. The first style of the Art Deco era was the Zigzag of the 1920's. The Zigzag skyscrapers were the symbol of progress. The second style is known as PWA (Public Works Administration). The PWA was a classical style during the depression and the New Deal. The third of the styles was the Streamline of the 1930's, this was identified by the curved lines

taken from the streamlined automobiles, ships, and railroad cars. These curved lines portrayed speed and progress. These three styles make up the Art Deco Era.

According to Sherrill Whiton (1974, p. 548), "The Art Deco movement was dedicated to ending the conflict between art and industry." The architects of the times had the challenge of creating a new image, coupled with the requirements of mass production. The image created reflected the economically hard times, the industrious society, and the new way of life. It has taken many years for the Art Deco Style to be fully appreciated.

Purpose

It is the purpose of this study to show the role of Art Deco architecture in Tulsa, Oklahoma. The architecture from 1925 through 1942 is a symbol of history, not only of Tulsa's history but also of the United States history. The writer wishes to show the contribution Art Deco made in the transition from past Architecture to contemporary architecture. The second reason for this study is to give students a source of information, through both the form of the architecture and the detailing of the era.

Assumptions

The following assumptions were made for purposes of this study:

1. The material collected from primary and secondary sources was representative of the Art Deco Architectural era.

2. The houses and buildings observed are representative of the Art Deco style.

Limitations

Literature regarding the Art Deco period was limited to articles found at the Oklahoma State University Libraries, the Tulsa County Libraries, the University of Oklahoma Libraries, and the University of Tulsa Library.

Data regarding the architects of the structures studied was limited to the information collected by The Junior League of Tulsa, Incorporated.

Photographs were limited due to accessibility to the private properties. The availability of past photographs of detailing were limited.

Definitions

Although the styles of architecture overlap one another, there are distinct characteristics of each style. In order to have a clear understanding of this study, the following definitions are relevant. They are as follows:

1. Art Deco: John J.G. Blumenson (1981), reveals that the period of Art Deco began in 1925 and persisted until 1940. He reports the style in the following manner:

Art Deco is characterized by a linear, hard edge

or angular composition often with a vertical emphasis and highlighted with stylized decoration. The facades of buildings often are arranged in a series of set backs emphasizing the geometric form. Strips of windows with decorated spandrels add to the vertical feeling of the composition. Hard-edged low relief ornamentation is found around door and window openings, string courses and along the roof edges or parapet. Ornamental detailing often is executed in the same material as the building or in various metals, color glazed bricks or mosaic tiles. Although straight-headed windows (metal sash or casement type) are more popular, an occasional circular window or rounded window and door jamb is found (p. 77).

Art Deco has also been defined by Bevis Hillier (1971), in the following way:

. . . an assertively modern style, developing in the 1920's and reaching high point in the thirties; it drew inspiration from. . . Art Nouveau, Cubism, The Russian Ballet, American Indian art and the Bauhaus. . . it ran to symmetry. . . and to the rectilinear (p. 16).

2. Zigzag Art Deco: (Figure 1) Carol Johnson (1980), defines the style in the following way:

The terms "Zigzag Art Deco" and "Skyscraper Style" are sometimes used interchangeably. Verticality was the emphasis of the soaring 20's. Tall buildings were made to look taller. A common device was the use of piers rising without interruption from the second floor to the top of the building. Window treatment was another artifice used to create a vertical look. Windows were run in vertical strips using spandrels of dark material or heavy texture. An illusion was created of windows and spandrels set in one continuous line to the apex of the building.

The typical Zigzag building was arranged in a series of set backs, culminating in a tower. The building itself was shaped like a ziggurat (a stepped pyramid), a preeminent Deco form, both ornamentally and structurally. The empire State Building and the RCA Building in Rockefeller Center are arranged in the ziggurat form.

Other recurring Deco designs were the fountain,

the chevron, the sun and its rays. Ecotic scenes followed exotic designs and materials. Jungles of animals were portrayed from snakes and lizards to deer, greyhounds, rabbits, and all sorts of birds, particularly the eagle. Symbols of energy, the lightning bolt (a ziggurat shape), stepped triangles, fragmented circles, and spirals were commonly used (p. 31).



Source: (Johnson, 1980, p. 84)

Figure 1. The Boston Avenue
Methodist Church
Tulsa, Oklahoma

3. Public Works Administration (PWA): (Figure 2)

The PWA was created during the depression in 1935. This organization was to provide several public work projects which would employ a large number of unemployed individuals. The PWA style is described by Johnson (1980), in the following way:

The PWA Art Deco is a transitional architecture. It incorporates elements of the Zigzag Art Deco of the 20's and the Streamline Art Deco of the 30's. Most of the buildings in this style are characterized by their monumentality. They are largely governmental buildings or buildings funded in part by governmental agencies. Their size and bulk convey an image of strength, solidity and permanence, a sign of reassurance to a disillusioned nation.

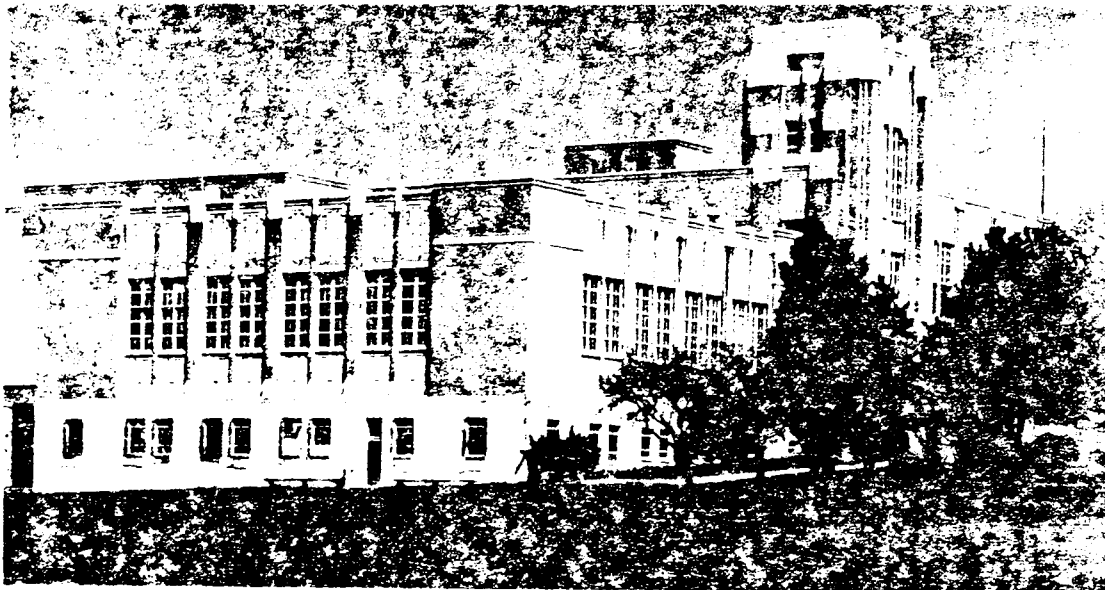
The classical use of symmetry in this architecture reflects the Zigzag 20's. The principal entrance to the building emphasized and there is an occasional suggestion of an entablature and cornice. The use of ornament in relief sculpture, murals and mosaics is traditional. The ornament often illustrates the building's function. Symbols of nature and of the machine are combined and the common laborer is often glorified in the ornamentation. Man is usually shown nude, his bulging muscles symbolic of strength and power.

The PWA style was more severe than the earlier Zigzag style and the ornamentation and building material relied less on the use of color. Horizontal features were adopted from the International style and the occasional use of curved corners suggested the Streamline. Windows were often placed together to give the impression of a horizontal band. The buildings are an interesting combination of the Zigzag and the horizontal emphasis of the Streamline (p. 100).

4. Streamlined Moderne: (Figure 3) The streamlined decade came about because of the new streamlined automobiles, railroads, and ships. The highways and automobiles brought a new way of life. This way of life was reflected

in the architecture. Donald J. Bush (1975), describes the Streamlined Moderne Style of architecture in the following way:

The Moderne is a variant of the International Style with much of that movement's starkness, severity and commitment to the processes and aesthetics of the machine age. But where the work of the Stijl and Bauhaus masters was uncompromising in its adherence to a canon of geometric functionalism, the Streamlined Moderne was less strident in voice, and its forms were relieved by organic lines. It was marked by a combination of flat and curved walls, light in tone and often topped with silvery hand-rails of tubular metal that enclosed terraces. Extensive use was made of glass blocks especially in the curved walls and around entranceways. Occasionally circular windows balanced rectangular elements (p. 133)



Source: (Johnson, 1980, p. 122)

Figure 2. The Will Rogers High School
Tulsa, Oklahoma



Source: (Johnson, 1980, p. 155)

Figure 3. The Delman Theater
Tulsa, Oklahoma

Summary

The architecture of the three Art Deco periods, during the late 1920's through the early 1940's reflected an important time in history. Art Deco is a symbol of the changing world. First with the Zigzag skyscrapers, then with the PWA transitional style of the depression, and finally the industrial style of Streamline Moderne.

These three styles are representative of American history from 1925 to 1942. Until recent years Art Deco was not accepted as a true style of architecture. With recent interest from the historical preservation organizations, the style has become recognized for what it was, an expression of the times. A period of architecture well worth remembering.

CHAPTER II

THE BACKGROUND OF ART DECO

(1925-1942)

Introduction

In order to fully understand the architecture of the Art Deco period, it is necessary to understand the era in which it occurred. The historical influences, the contributions of the machines, and the materials used in construction, play a major role in Art Deco architecture. Though it would take an entire book to cover the mentioned subjects, this chapter attempts to give the reader a better understanding of the times.

The Time (1925-1942)

During the 20's the nation was blessed with prosperity. Calvin Coolidge was the President of the United States from 1923-1929.

The four years of the Coolidge administration were the most prosperous in the history of the nation. International problems were not numerous, and domestic affairs were at a peak of production and increase in the national budget (Cole & Warren, 1955, p. 667).

In 1928 Herbert Hoover was elected President. The administration lasted from 1929 to 1933.

In October, 1929 the stock market crashed, ending a wave of speculation. The panic resulted in a general curtailment of industrial production, widespread business and banking failures, and accelerating unemployment (Cole & Warren, 1955, p. 668).

This was a major turning point in the American way of life. It was also a turning point in the style of architecture being practiced.

In 1933 Franklin D. Roosevelt became President of the United States. Roosevelt held the Presidential office from 1933 until 1945.

A new era in American History began under Roosevelt. He called his program the New Deal. For the first time, the federal government took strong action to help make the United States prosperous. Roosevelt said he wanted to help the average American, whom he called the 'forgotten man'. He promised relief for unemployed workers. He said he would aid farmers. Under his leadership, the government put stronger controls on business companies than ever before. It spent billions of dollars on relief and public works to 'prime the pump' of business activity. Dozens of new government agencies were set up. Many were known by their initials, such as CCC, TVA, and NRA (Nault, 1967, p. 412).

Through the New Deal the United States began to regain economic security.

Through the turn of events from 1923 to 1945, Americans became cautious in their way of thinking. They needed some form of security. The architecture of the times was one of the forms which gave visual security.

Architecture in Relation to The Era

From the prosperous times at the beginning of the era to the hard times of the depression, architects had one task in mind. This task was to create a new and different style of architecture. The architects and designers, not only had to create a new image, they also had to deal with innovations of materials, new production methods, and economic factors.

According to Ralph W. Hammett (1976), this era was a transitional period between World Wars One and Two. He described the period in relation to architecture in the following way:

During the first years of this period, and from the Great Depression until World War II, architects seemed to be searching for a new style or expression. Eclecticism was passe, but what was to take its place? Most cities adopted building codes and these often proved to be stumbling blocks for new ideas and structural innovations. Americans preferred monumentality, and large slabs of Indiana limestone could be used to veneer buildings almost as cheaply as terra cotta or brick.

Building technology progressed between the wars, but the building codes lagged behind. For example, it was not until after World War II that the codes began to allow 2-inch metal curtain wall panels backed by blanket insulation or similar material, instead of heavy masonry.

Architectural education in the first two decades of this period (1920-1940) still emphasized the eclectic tradition. Students had begun to talk about the Bauhaus School in Germany under Walter Gropius and Mies van der Rohe but then Hitler closed the Bauhaus and it was not until World War II that architectural educators began to

appreciate its philosophy.

In the United States the Society of the Beaux Arts in New York City dominated architectural education. Schools imported French critics, and students accepted the jargon of the Ecole des Beaux Arts of Paris as their vocabulary.

Thus eclectic styling went out of fashion, and Beaux Arts teaching for Architects was finally given up. A breathing place during the Great Depression; because of economic failure, buildings were designed without the expensive and extraneous detail of the past. They were blocks of masonry, simple in mass and outline, even though they remained monumental in effect and continued to stimulate solid masonry. Nevertheless they were economically planned, and function became the pass word (pp. 229-231).

Through the turn of events from 1923 to 1945, architects had learned to change their philosophy.

In addition to the desire for novelty and change in America, the other factors that render 'ultimate' designs obsolete are 1) innovations in materials, fabrication methods and tools which help to shape forms and create new potentials for designers, 2) the emergence of new functional and performance requirements, and 3) changing social conditions and attitudes which the designer expresses through new forms. In light of the economic and political upheavals of the 1930's, the notion of an ultimate form appears in retrospect to have been a naive one (Bush, 1975, p. 184).

As indicated in the preceding information, it was more than the attitude of the times that changed, the American lifestyle had changed.

Historical Influences

Although Art Deco set out to be a completely new style of architecture, it was not. Art Deco borrowed from several past sources of design. The motifs and

philosophies which were borrowed, however, were not always used in the same form.

Americans were not the first to have the Art Deco style of architecture. It was used extensively in European Countries. Though the Americans used a similar philosophy, the architecture produced in the United States was a different version of Art Deco. According to Greer (1938), one of the qualities that helped distinguish the American version from the European version of Art Deco was:

The American fascination with things ancient and primitive. While the architecture and artifacts of Egypt and Assyria readily entered into the Continental and English Art Deco, they became even more stylish and fashionable in the United States, via the great Hollywood silent film sets of the teens and 20's. And while for many decades Europeans had been intrigued by art from Africa and the South Pacific, Americans tended to look to their own primitive past in the art and architecture of the Mayans of Mexico and Central America, and the native American peoples of the American Southwest (p. 38).

The American form of Art Deco was virtually the same of that produced elsewhere, with the exception of the sources and inspirations.

According to Theodore Menten (1972, p. I), the sources of Art Deco included Egyptian and Mayan Art, Cubism, Fauvism, and Expressionism. The Egyptian and Mayan art were used in the motifs, which were applied in some form to the detailing of the Zigzag and PWA styles of Art Deco.

"Cubism (1910), was a revolt against representational

art. A movement that reduced painting and forms into sharply angular, three-dimensional geometric planes." (Dizik, 1976, p. 31) Cubism is represented in the Art Deco style by both the form of the buildings, and the endless use of geometric patterns in the detailing. It has also been stated that: "Art Nouveau plus machine art plus Cubism equals, according to some calculations, what is now called Art Deco." (Hilton, 1973, p. 29) Cubism is just one of the forms practiced in the Art Deco style of Architecture.

Fauvism was a movement in the early 1900's. Fauvism emphasized the use of vivid colors and abstract art.

The Fauve or 'wild beast' painters got their name from the horrified response of a critic to their first exhibition in 1905. For these artists color was an almost arbitrary device, meant to be used for the sheer visual pleasure and excitement it could evoke (Bevlin, 1977, p. 92).

Because Art Deco incorporated the use of vivid colors into the designs, it is said that Fauvism is one source of Art Deco Designs.

Expressionism was a movement in the arts, originating in Europe at about the time of World War I, that had as its object the free expression of the inner experience of the artist rather than the realistic representation of appearances. Expressionism is also a source which affected the Art Deco movement.

Assyrian, Egyptian, Aztec, the angular, rectilinear shapes of the oldest civilizations were restored in the name of modernism and

applied to everything in sight. The angles of antiquity echo the lightning flashes of the electric age (Ingram, 1984, p. 93).

These forms were mainly used during the Zigzag and PWA styles of Art Deco.

Bevis Hillier (1971), identifies Art Nouveau, Cubism, the Russian Ballet, American Indian Art and the Bauhaus as sources which Art Deco drew inspiration from.

The Art Deco, or Art Moderne Movement was derivative from the European International style and became popularized in America in the late 1920's as an architectural symbol of progressive commerce and industry (Henderson, 1978, p. 111).

The International style started in 1920 and paralleled the Art Deco movement.

The International style is characterized by flat roof tops, smooth and uniform wall surface, large expanse of windows, and projecting or cantilevered balconies and upper floor. The complete absence of ornamentation also is typical. The asymmetrically balanced composition is at times placed in a dramatic context or orientation with the landscape. Projecting eaves are closed or boxed and covered with the same finish as the wall surface. Roofs without eaves terminate flush with the plane of the wall (Blumenson, 1981, p. 75).

The International style was of particular influence to the Streamline style of Art Deco.

The discussed influences played a major role in the styles. Though not all were used in every structure, the inspiration from all of the philosophies, art and architecture were the foundation of the three Art Deco Styles.

Machines Contributions

Throughout history both the general appearance of buildings and their style of ornamentation have been determined by the knowledge of building technique available as well as by the materials used and the tools with which they were worked and of course, as well as by fashion and taste (Richards, 1948, p. 34).

Because the United States was in the height of industrial innovation, both the manufacturing process and the materials available were of prime importance in the development of the Art Deco styles.

Within the American Art Deco of the 20's, the fact of the machine via new technology, new structural forms, and new materials, was fully endorsed by the middle class. With no urgent desire to directly symbolize the machine in the design of buildings, the machine in America was seen as a means, not an end (Gebhard, 1983, p. 38).

In the thirties the streamline style began to indirectly symbolize the automobile, ships, and railroad cars in the design of buildings.

Designing for machine production was a new feat for the designers of the time. They had to readjust their current way of accomplishing things. The machines being used could not duplicate the intricate detail that had been used in past architecture. Production work for buildings was done in a shop away from the site of the structure. The work done in shop was transported to the site, where it would be installed. The amount of time needed for construction was shortened drastically.

Machines have taken the place of the individual

workman in modern industry and the most satisfactory products of industry are those which have been designed for machine production without any attempt to make them look like the work of the craftsmen. Modern design accepts the machine and expects its products to look like machine-made things (Bradley, 1946, p. 60).

The Art Deco design which was most successful followed the guidelines outlined by Bradley. Simplicity of the design was particularly recognized in the Streamline Art Deco Style.

The influence industrialization had on the character of the architecture was significant. The architectural flowing forms were taken from the automobiles, airplanes, and ships of the times. The Streamline Art Deco was a symbol of speed and modernity.

Materials

The materials used during the Art Deco period varied from the beginning style "Zigzag" to the last style "Streamline". In the Zigzag and PWA styles, terra cotta (latin for burnt earth) was used extensively. Terra cotta is a sheathing material, suitable for skyscrapers, because of its light weight and durability. It also has excellent fireproofing capabilities. In response to stricter fire codes, terra cotta became more widely used. Terra Cotta was also very popular because the substance could be formed into detailing and designs. The detailing in terra cotta was used abundantly on the facades of buildings.

Terrazzo is another material used in the Art Deco

designs.

Terrazzo is a dense, durable floor and wall material consisting of a topping mixture of colored stone granules with either a matrix of portland cement (white or gray) and water or a matrix of synthetic resins. Another form of terrazzo, called mosaic, is made by combining small pieces of stone, pottery, glass, marble, metal, and other materials to create a design of some sort and placing them in a thin bed of cement (Hornbostel, 1978, p. 731).

Terrazzo is a very durable material, which requires minimal maintenance.

Brick and cement block were also used extensively during this period. The design quality of these materials, was determined by the color and pattern in which they were used. Stucco was often used, because it is pliable and could be formed in the free flowing lines of the Art Deco Style.

Special glass work became popular in all of the styles of Art Deco. Etched, engraved, beveled, and silvered glass were all used. Glass block and glass brick were widely used during the Streamline period. Glass block had no structural powers but had good insulation qualities. It allowed for diffused light, yet from the outside a person could not view the interior. The blocks were available in standard sizes of 4", 6", 8", and 12" squares, all were 4" thick. Curved and corner blocks were also available. Black glass was used on the facades of many structures. The black glass was striking stark, and gave the reflections of the surrounding items.

Wrought iron was incorporated into much of the Art Deco detailing. Wrought iron is an "iron that contains very little carbon. It is tough and hard to break, yet soft enough to be rolled or hammered into shape when hot." (Dizik, 1976, p. 158)

Chromium metal and stainless steel were used for much of the metal work. Stainless steel was also used for light fixtures. These metals were mainly used during the Streamline Style of Art Deco.

Vitrolite, carrara, and shiny porcelain were other materials used during the period. Porcelain was used for its fireproofing qualities and also because it could be made in many different colors. It also cleaned easily and was ideal for illumination.

Vitrolite and carrara were structural glass materials first used in Tulsa in the early 30's. The difference between the two was imperceptible in terms of appearance. Vitrolite, produced by Libby Owens Ford, was a rolled material. Consequently, it tended to have a wavy appearance. Carrara probably named for the pure marble, was a ground and polished material made by Pittsburgh Plate Glass. The polishing made it less wavy than Vitrolite, but it was produced under so much heat that it was extremely difficult to keep the color constant (Johnson, 1980, p. 143)

Summary

The discussed materials are very much a part of the Art Deco style. Because, simplicity was the philosophy of design, the materials were a focal point of the design. The materials gave texture, color and pattern to the

structures.

The machines contributions, started a new philosophy in the design profession. The fact that machines could not duplicate the intricate detailing of many of the past styles, led to a simpler style. Machines also, changed the building techniques. This change in the process of building, gave the architects and builders a new challenge.

Historical influences were another inspiration for the architecture of the Art Deco period. Art, architecture, and the philosophies of the past, all affected the style.

The period between 1925 and 1942 was an unstable time in the United States. The economy went from being very prosperous to an economic disaster. The country was in upheaval. The architecture of the times reflects the turn of events. The first architectural style "Zigzag", is a period of skyscrapers soaring into the sky. There was a tremendous amount of intricate detail. The Zigzag style represents the prosperous times in the country.

The transitional style of Art Deco was the "PWA" style. The PWA was a direct fallout of the Great Depression. It incorporates some of the Zigzag style with the simplicity of the Streamline period. The majority of the PWA structures were federally funded. They were to show power and strength to the government.

The last style of the Art Deco period is "Streamline". Streamline represents the stabilization of the economy, and the progress of the industrial world. The horizontal

elements, free flowing lines, curves, and simplicity of the streamline designs portray the commitment to the processes and aesthetics of the machine age.

The background of Art Deco, historical influences, contributions of the machine age, and materials used during this time are important elements in having a full understanding of the three Art Deco Styles. The three styles form an overall understanding of the Art Deco movement.

CHAPTER III

A REVIEW OF ART DECO

Introduction

Art Deco derives its name from the great 1925 Paris Exhibition, "L'Exposition Internationale des Arts Decoratifs et Industriels Modernes". The term Art Deco is generally used in reference to the art and architecture of the 1920's and 1930's.

It might best be characterized as an attempt to unite arts with industry, embracing the machine age and repudiating the old antithesis of 'fine' and 'industrial' art (Menten, 1972, p. I).

Mentens' statement was supported by Sherrill Whiton (1974), in the following phrase:

The Art Deco movement was dedicated to ending the conflict between art and industry. Creative design was adapted to the requirements of mass production. The design was radical. Detail was sacrificed to function (p. 548).

Art Deco was a movement which supported the use of machinery in design. It was clear the industry was there to stay, inturn the supporters of the Art Deco movement worked with modernization, not against it.

According to Victor Arwas (1980), the designers adapted the architecture to contemporary modernity through stylisation. He states:

Indeed, style and stylization were the distinguishing marks of Art Deco, which is another way of saying that surface treatment was the essence of the style, not a radical rethinking or reworking of the problems (p. 17).

The stylized detailing was practiced in the Zigzag, PWA, and Streamlined Art Deco Styles. Though the treatment varied between the three styles, the facade and form remained the emphasis of them all.

The Art Deco movement encompasses three different styles, which represented a transition from past architecture to modern architecture. These three styles are:

1) Zigzag, also known as the American Perpendicular Skyscraper style, 2) PWA "Public Works Administration", which was closely associated with the great depression, 3) Streamline, which was a symbol of simplicity. There was some overlapping of the styles, but they were virtually three separate styles, each representative of the Art Deco Movement.

Zigzag Art Deco

The Zigzag style became popular in the mid 1920's. It was a time when architecture was pursuing a graceful transition from the past to the present. The Zigzag style created a gentle transition which was more readily accepted than a drastic style would have been. David Gebhard describes the transition in the following way:

The continual modernization of traditional imagery which occurred during this decade paved the way for one of the new fashionable styles of this

century, that of the Art Deco (the Moderne). As a style the Art Deco provided a gentle transition to the new age without in any way severing our ties with the past. The abstracted Classic and Gothic skyscrapers of the late twenties had suggested that we could have the best of both the past and the future; the Art Deco went one step further and said it is here now! It accomplished the 'here it is' primarily by employing the full range of decorative art that had come to be seen by its middle class audience as 'modernistic'. It was the decorative elements, more than any other single feature, which urged us to respond to a building as Art Deco as opposed to it being traditional.

The Art Deco Zigzag vocabulary of chevrons, triangles, stepped patterns, spirals, fronds, etc., often realized through brilliant pure colors, were the architectural elements which then, and now, prompt us to label a building as Art deco. In most instances, if we were to replace the decorative detailing of a Art Deco skyscraper with a classical, Romanesque or Gothic ornament, we would then respond to it as Byzantine, Gothic or Classical (Johnson, 1980, p. 19).

The Zigzag period was identified by its detailing.

The many designs consisted of the chevron, the sun and its rays, and the fountain. Exotic scenes were used in many of the designs. Other symbols used were the lightning bolt (a ziggurat shape), fragmented circles, stepped triangles, and the spiral. These details were used in many places, but it was particularly common for the designs to be used around entranceways.

Terra cotta was the material most used in the Zigzag period. This material allowed architects to surround their skyscrapers with a light weight sheathing material. "Above all, its plastic qualities enabled architects to use terra cotta to embellish their structures with artistic and highly original ornament." (Darling, 1979, p. 172)

Designs of the Zigzag period were consistent inside and out. Everything down to the lighting fixtures, door-knobs, grille work, etc. were of the same character. Ornament was one of the major characters of the Zigzag Art Deco period. The vertical emphasis of the design is another character which identifies the Zigzag period of architecture.

PWA Art Deco

By the early 30's the economy in the United States had drastically declined. The unemployment rates were up and little building was going on.

Construction was stimulated under the auspices of two New Deal agencies, the Public Works Administration (PWA), and the later Works Progress Administration (WPA). International Stripped Classicism, a style of architecture that has humorously been referred to as "PWA" was beginning to emerge in major projects even before the enactment of the PWA programs. Although PWA and WPA did not decree design, certain labor and material restrictions that were inherent in the programs resulted in fairly uniform practices. Generally, these buildings were massive, bulky, and ornamental (Johnson, 1980, p. 100).

The PWA is a transitional style of architecture. It uses elements of both the Zigzag and the Streamline styles. The ornamentation of the PWA style is not as severe as the ornamentation of the Zigzag period. It also does not rely on color as much as some Zigzag designs.

Classical use of symmetry in this architecture reflects the Zigzag 20's. The principal entrance to the building is emphasized and there is an occasional suggestion of an entablature and

cornice. The use of ornament in relief sculpture, murals and mosaics is traditional. The ornament often illustrates the building function. Symbols of nature and of the machine are combined and the common laborer is often glorified in the ornamentation (Johnson, 1980, p. 100).

The horizontal influence of the Streamline is used in the PWA style of architecture. Often times rows of windows are used to create the horizontal feeling. Simplicity is stressed more in the PWA style than in the Zigzag style.

This transitional style was a symbol to the working man; a symbol of strength and permanence. Americans needed this sign of permanence during the Great Depression. The PWA Art Deco Style symbolizes the times, needs, and the values of the people.

Streamline Art Deco

The 30's were known for their speed; the widespread use of the automobile changed the American way of life. The economy and the extreme pace of society were both reflected in the architecture.

The depressed 30's built horizontally and simply. Everything went flat - the economy, the buildings, and their surfaces. The complexity of machinery, the betrayal of the economy, the delusion of all that had been the 20's inspired a return to the basics. The new ideal was simplicity (Johnson, 1980, p. 137).

Simplicity was adopted for two reasons; first, the simplicity of the architecture symbolized the simple lifestyle of Americans, and secondly, the architecture had to be

adapted to the production methods available.

Streamline Moderne was stripped of ornament and easily adapted to mass duplication. Furthermore, it was thought to be symbolic of the dynamic twentieth century, of speed and machines, fast motor cars, railway trains, and steamships (Whiffen, 1981, p. 331).

The streamline as a scientific fact is embodied in the airplane, as an aesthetic style mark, and a symbol of twentieth century machine-age speed, precision, and efficiency, it has been borrowed from the airplane and made to compel the eye anew, with the same flash-and-gleam beauty reembodyed in all travel and transportation machines intended for going fast (Cheney, 1936, p. 98).

The streamline form began with the machine and infiltrated the architecture of the 30's. Meikle (1983), views the streamline style in the following manner:

Streamlining as a popularly accepted style expressed desire of the public to overcome the economic and social frictions of the Depression, to flow through time with as little resistance as a teardrop auto through air. And by shrouding complicated mechanisms in streamline housings, designers at least implied that a machine civilization not be complex, that its functioning might be made smooth, effortless, and indeed nearly automatic. Beyond that, streamlining also expressed the essence of industrial design itself as it had developed in the 30's (p. 55).

The Streamline style is identified through its use of flat roofs, soft rounded corners, smooth wall finish, lack of surface ornamentation, and horizontal bands of windows. Many times curved window glass or glass blocks were used to wrap the corners of structures. The advent of steel frame construction made this possible. Where corners used to be loadbearing, they could now be opened.

Ornamentation consists of mirrored panels, cement panels, and an occasional metal panel with low relief decoration around doorways and windows. Aluminum and stainless steel often are used for door and window trim, railings and balusters. Metal or wooden doors may have circular windows, large panels of glass or patterns with circular and angular outlines (Blumenson, 1981, p. 79).

The Streamline style was the conclusion of the Art Deco Movement. The three Art Deco styles; Zigzag, PWA, and Streamline, all represent the transition from the past to modernism. Although these styles overlap each other and are all categorized as Art Deco, the three styles are separate and represent different values.

Art Deco In Tulsa

Art Deco in Tulsa, Oklahoma was similar to the rest of the United States. The major difference was that, when the depression hit the United States, Tulsa was not as affected, because of its status as an oil producing capital. Income generated from the oil industry kept the city expanding. Growth in Tulsa eventually stabilized.

A strong influence on the design of buildings in Tulsa, was the regional interpretation of the Art Deco movement. Architects such as Bruce Goff, Joseph Koberling Jr., and Frederick Kershner, adapted the Art Deco style to fit Tulsa's economy and lifestyle. The buildings are not mere copies of earlier works in other places, but stand on their own.

Summary

Art Deco is an all encompassing term, used to represent the three styles of architecture which occurred from 1925 to 1942. Art Deco was a movement which supported modernization. Its' challenge was to unite art and the machine. The Art Deco designs met this challenge by drawing inspiration from the past, yet continuing to work with modern theories and construction methods.

The Zigzag, PWA, and Streamline styles all represented the Art Deco philosophies. These styles made possible a smooth transition from classical architecture to contemporary architecture.

CHAPTER IV

ANALYSIS OF TWO ZIGZAG STRUCTURES

Introduction

There are many examples of the Zigzag Art Deco Style in Tulsa, Oklahoma. The Medical and Dental Arts Building (1927), The Oklahoma Natural Gas Building (1928), The Halliburton - Abbott Building (1929), and The Boston Avenue Methodist Church (1929) are just a few of the structures in Tulsa, that represent the Zigzag style of architecture. The writer chose The Public Service Building of Oklahoma (1929), and The Philcade (1930) to research. These structures were chosen for two reasons; 1) lack of past research on the structures, 2) the influence the buildings had on Tulsa.

The Public Service Building of Oklahoma

The Public Service Building, completed in 1929, is located at 600 South Main Street, Tulsa. Through the use of creative lighting, a dramatic flair was incorporated into the building. The Public Service Building, though unique, is an excellent example of the Zigzag style.

Arthur M. Atkinson, of Kansas City, Missouri, was the architect of this significant structure. Lacking a formal education, his training came through an apprenticeship. Atkinson gained recognition for the dramatic lighting affects he incorporated into the facade of the building.

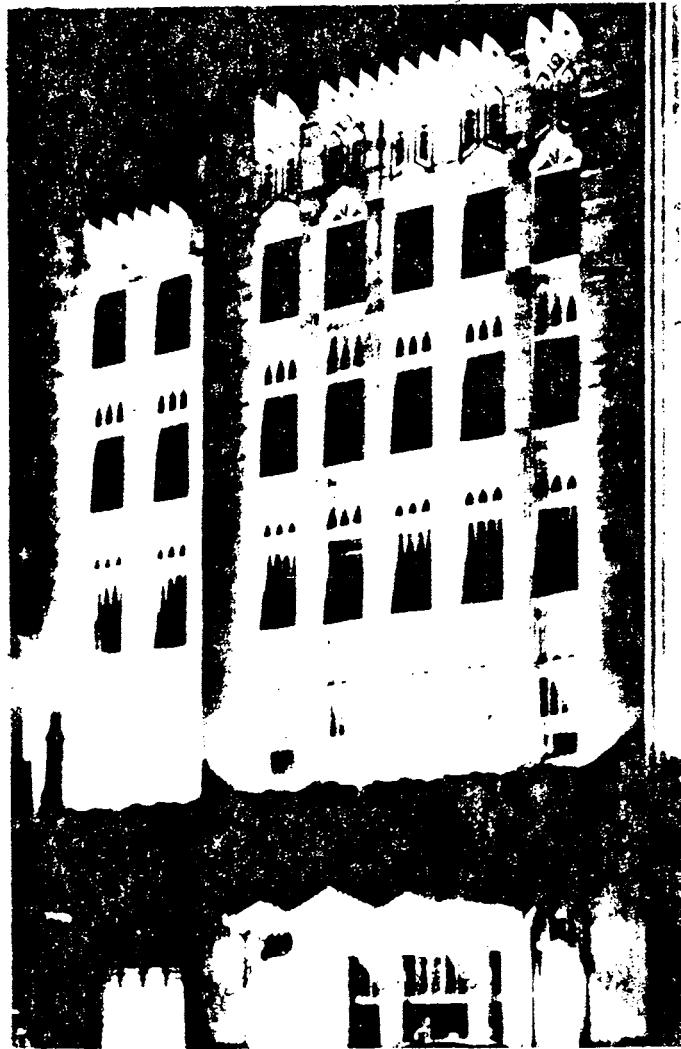
Joseph R. Koberling, Jr. AIA was the designer of the Public Service Building. He was born in Budapest, Hungary. After receiving a B.A. in Architecture from the Armour Institute in Chicago, Koberling moved his practice to Tulsa. Other than the lighting, Koberling was responsible for the design of the buildings facade.

The five-story building with a basement has a strong emphasis on verticality. Though the windows are placed in rows, the use of rectangular narrow windows with detailing above, give the sensation of upwardness rather than a horizontal feeling, which usually is portrayed from bands of windows. "Two more floors were added to the building in 1961." (Johnson, 1980, p. 36)

The reinforced concrete structure is covered by buff Bedford stone, with the base of the building being covered in terrazzo. Ironwork was used on the windows, grilles, and shields over the entrances.

The Public Service Company wished to feature lighting in their headquarters to feature their product. The use of up and down flood lights, placed in insets at the second floor and at the top levels of the building, created a

dramatic sensation. The recessed designs and windows create numerous patterns with shade and shadow. (Figure 4)



Source: (Gebhard, 1983, p. 40)

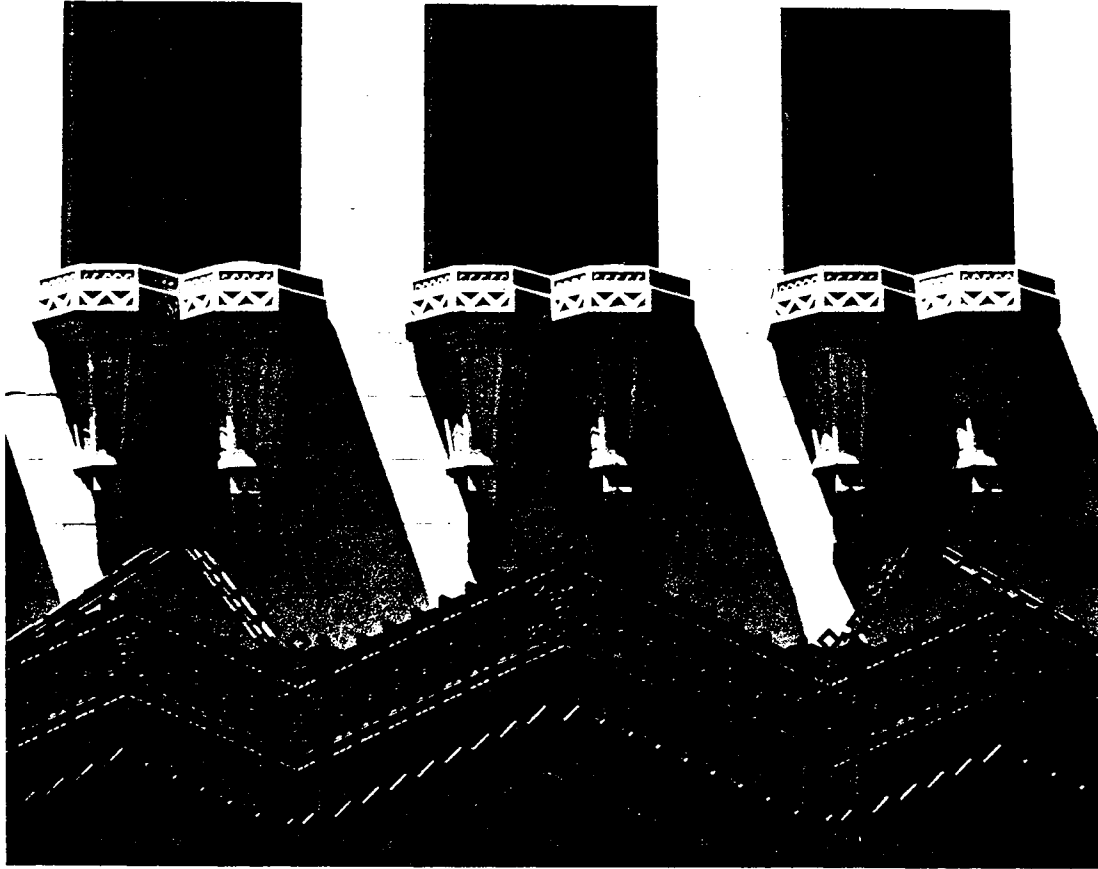
Figure 4. Night View of The
Public Service
Building of
Oklahoma

The triangular shaped protrusions (Figure 5), enclose the down flood lights. They also cast interesting shadows in the daylight. The octagonal, cone shaped projections (Figure 6), on the second floor are the shell for the upward flood lights. With the combination of up and down lighting, it gives the illusion of a floating building.



Source: (Steinman, K., 1984)

Figure 5. Detailing on East Facade of The Public Service Building of Oklahoma

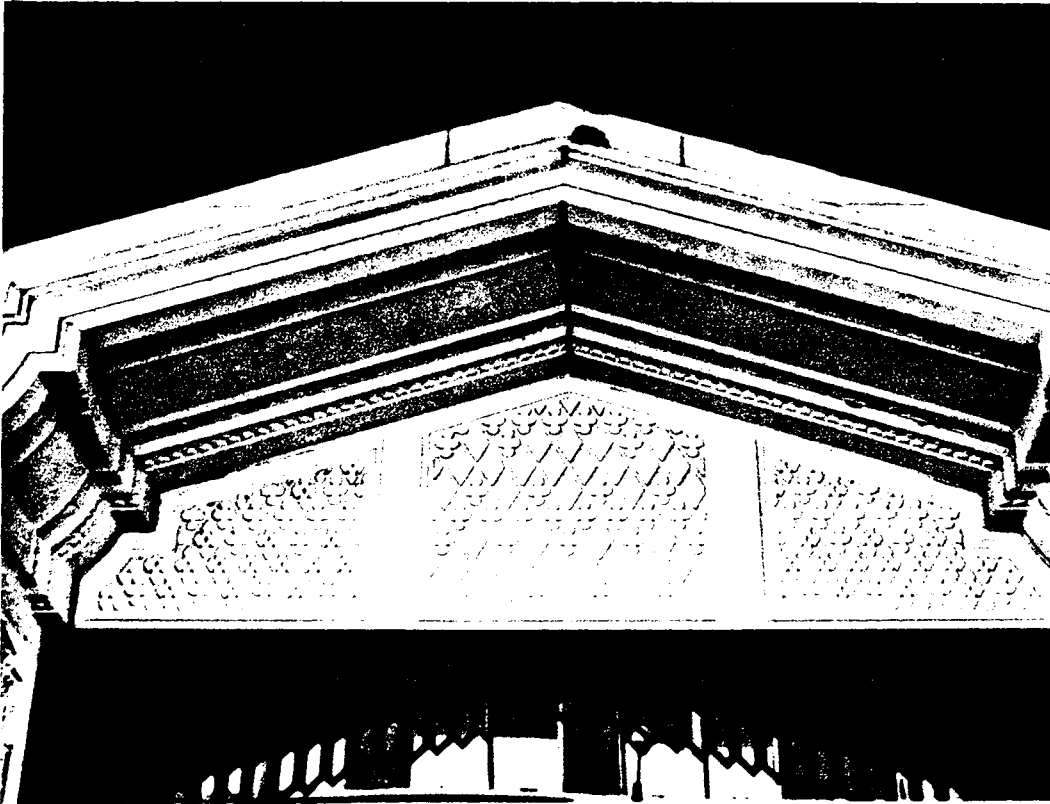


Source: (Steinman, K., 1984)

Figure 6. Detailing of the Iron Canopy and Containers for up lighting, Public Service Building

The entrances are more ornate than the other details used on the building. Detailing of the Public Service Building tends to be more geometric than the detailing of the Philcade. Though the patterns are still ornate, they originate from simple geometric forms. Above the doors (Figure 7), simple patterns such as; diamonds, octagons and other simple shapes are placed together to form a pattern.

This not only gives pattern to the facade, but also texture. Simplified floral patterns are also used in the detail.

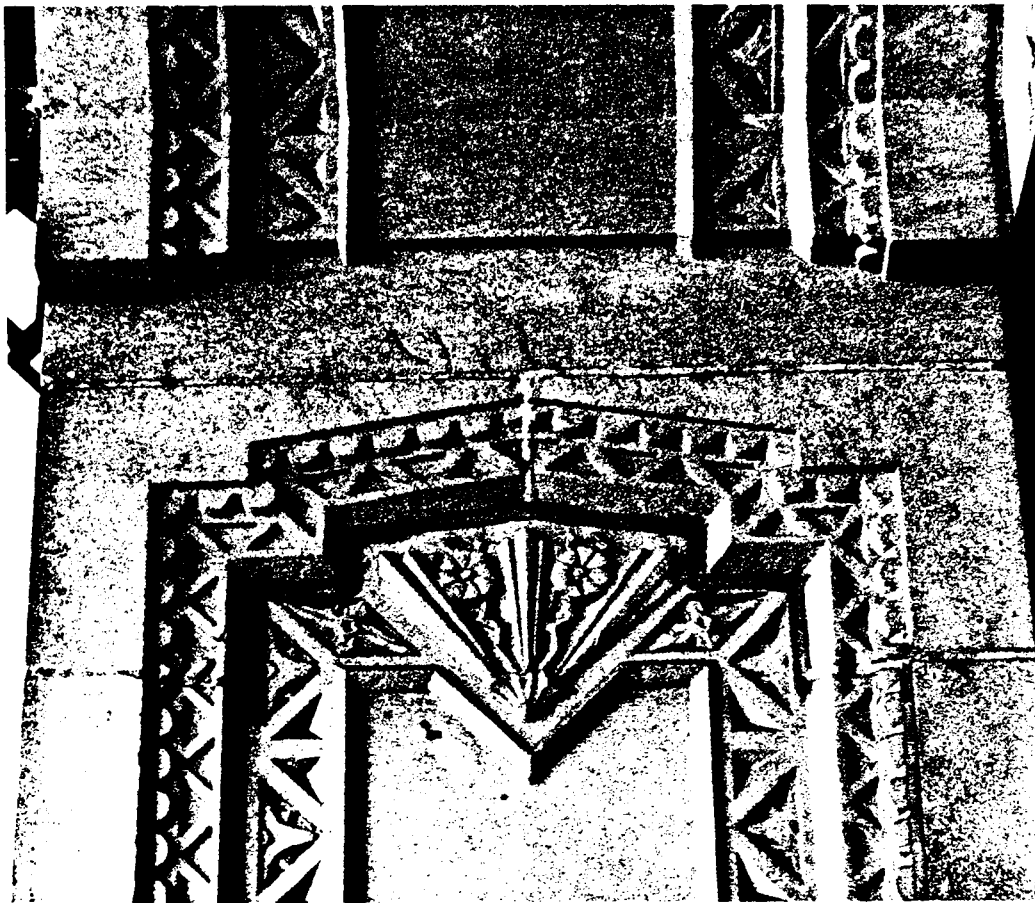


Source: (Steinman K., 1984)

Figure 7. Detailing above the doors, Public Service Building of Oklahoma

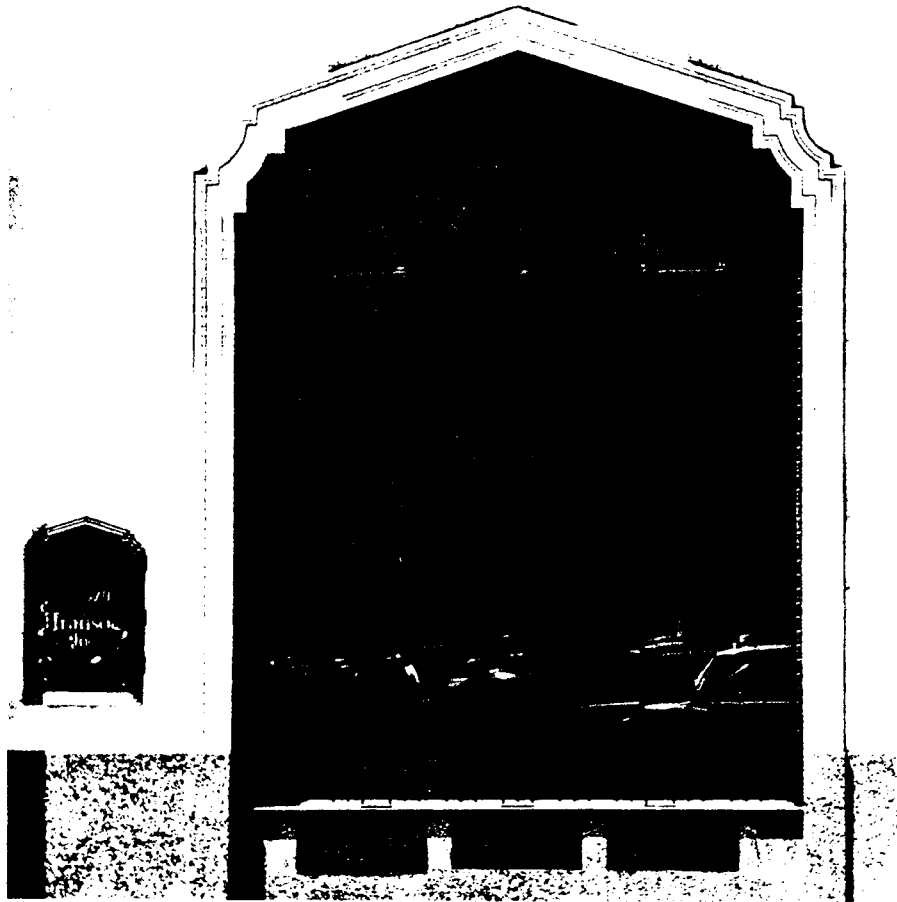
Ironwork is used around the windows, over the entrance, and on the grille work. The canopy over the entrances is constructed of wrought iron (Figure 6). The design carries through the three upward pointing arrows of the window

frames below. The intricate detailing consists of geometric shapes with flora within those shapes. The bottom row of canopy has glass in the spaces, at night the light shines through and gives the image of the shapes. The ironwork on the windows and grilles (Figure 9), is extremely simple, using only geometric forms.



Source: (Steinman, K., 1984)

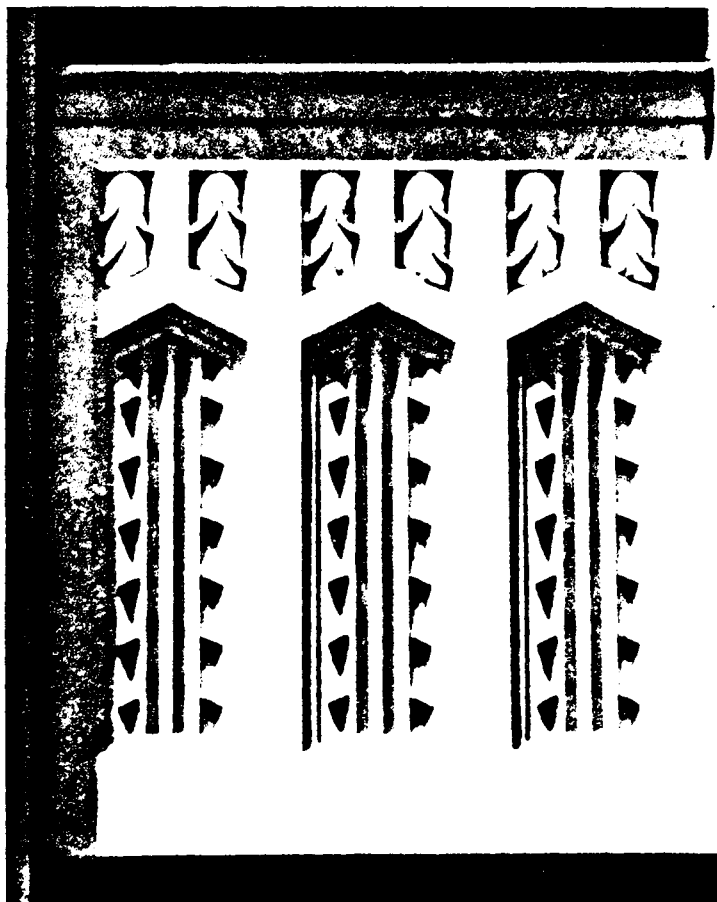
Figure 8. Detailing on inset by the North Entrance,
Public Service Building of Oklahoma



Source: (Steinman, K., 1984)

Figure 9. Ironwork of windows and grilles,
Public Service Building
of Oklahoma

The use of texture and lighting created magnificent patterns of shade and shadow. The innovative use of lighting was a pace setter. The vertical emphasis of the detailing and form of the structure are characteristic of the Zigzag Style.



Source: (Steinman, K., 1984)

Figure 10. Detail above windows,
Public Service
Building of
Oklahoma

The Philcade

Another structure which deserves recognition as an example of Tulsa, Zigzag Art Deco, is the Philcade. This building is located at 511 South Boston Ave., Tulsa. Waite Phillips, a millionaire oil man, "was a major figure in Tulsas' philanthropic and business communities." (Johnson, 1980, p. 49) Phillips provided the financial backing for the Philcade. The construction of the Philcade was to control the direction of Tulsa's downtown growth. Phillips suspected the Philcade, offering new office space and retail shops, would promote Boston Avenue as the most desirable location for growth.

On November 26th and 27th, 1928, the Building Planning Service met in Tulsa to discuss Waite Phillips's proposed office building. This committee was a service of the National Association of Building Owners and Managers, and was composed of owners of major buildings from across the country (Johnson, 1980, p. 53).

The committee was to determine the soundness of the project.

Originally the building was to be a two-story structure for retail shops. In January of 1929, construction of the Philcade was underway. At the time construction began, the building was to be five floors with the idea of further expansion. During the construction of the Philcade the plans were redesigned for a nine-story building with allowance for further addition. The Philcade was completed in 1930.

Leon Bishop Senter, AIA, FAIA, was the architect for

the Philcade. At the time of the Philcades construction, he was in partnership with Charles A. Smith. Senter was born in Morris, Kansas. He recieved a degree in Architectural Engineering, from International Correspondence Schools, Scranton, Pennsylvania, in 1910. Senter practiced in Tulsa from 1928 to 1965, much of the Art Deco period.

The Philcade (Figure 11), has features of both vertical and horizontal influence. The first two stories are faced in a different material than the towers to each end of the building.



Source: (Johnson, 1980, p. 51)

Figure 11. Fifth Street Exterior,
The Philcade

The lower section creates a horizontal effect with vertical detailing. Verticality is the affect of the total structure, which is a visual sign of the Zigzag period.



Source: (Johnson, 1980, p. 50)

Figure 12. Original 5th Street Elevation,
The Philcade

Terra cotta was the material used for the first two

floors and the pinnacles at the roof line. Terrazzo was used to finish the base of the ground level. Brick is used for the upper floors of the building. Metalwork is used between the pinnacles and over the entrances. The metalwork over the main entrance (Figure 13), is incorporated with glass.



Source: (Steinman, K., 1984)

Figure 13. Entrance to the Philcade

The geometric shapes of the simple ironwork are enhanced by the more ornamental ironwork, directly above the door and the suspended iron light fixture. The ironwork of the entrance is recessed and surrounded by pilasters, integrated with vertical fluting in terra cotta (Figure 13). Symmetry is another element used in the entrance and overall structure. The ornamentation involves foliage, upward pointing arrows, simple motifs, fountains and the initials of Waite Phillips. Though the detailing is ornate, there is a simplistic aire about the building.

The detailing above the ground level windows was done in both ironwork and terra cotta. The wrought iron is used over the six inside windows facing Fifth street. (Figure 14), shows the upper corner of a wrought iron detail used on the windows. The eagles with upspread wings, which symbolized progress are placed at either corner of the window, with a flora and fish design spanning between them. The terra cotta design used over the two large corner windows includes a garden of animals - lizards, birds, turtles, rabbits, frogs and snakes (Figure 15). Flora and fountains were used on the terra cotta detailing above the second floor windows (Figure 16).

Upon completion, the Philcade was described as, "a practical application of conservative modernistic architecture to (a) business structure." (Tulsa Spirit, 1930, p. 21) The Philcade had an impact on the direction of architecture in Tulsa, not only in the location expan-

sion, but also in the direction of the styles. The materials, symmetry, and the detailing terra cotta used in the Philcade are representative of the Zigzag style of Architecture.



Source: (Johnson, 1980, p. 52)

Figure 14. Wrought iron eagle and Terra Cotta detailing over the Entrance and windows of the Philcade



Source: (Steinman, K., 1984)

Figure 15. Terra Cotta detail over corner windows
The Philcade



Source: (Steinman, K., 1984)

Figure 16. Terra Cotta detail above second floor windows
The Philcade

Summary

The Philcade and The Public Service Building of Oklahoma are two prime examples of the Zigzag Art Deco Style in Tulsa, Oklahoma. Though both structures are unique, they symbolize the Art Deco Movement. Symmetry and a vertical emphasis are major elements of both buildings. The Philcade is more ornate in its detail than the Public Service Building. The elements of these buildings represent the character of the Zigzag Style of Art Deco.

CHAPTER V

ANALYSIS OF TWO PWA STRUCTURES

Introduction

The majority of the PWA structures in Tulsa were federally funded. The Fairgrounds Pavilion (1932), The Tulsa Municipal Airport Administration Building (1932), The Union Bus Depot (1935), Will Rogers High School (1938), are all representative of the PWA period in Tulsa, Oklahoma. The writer chose to research two distinguishing buildings; The Tulsa Union Depot (1931), which has a great deal to do with the character of downtown Tulsa, and The Tulsa Fire Alarm Building (1931), which is also an excellent example of the PWA Style.

The Tulsa Union Depot

The Tulsa Union Depot was a much needed structure. Until the construction of the Depot each railroad had their own separate stations. The Depot brought organization to the downtown area.

The first step toward the eventual construction of Tulsa's Depot was taken on December 6, 1927, when voters approved a bond issue of \$1,250,000 to finance a share of the cost of grade separations and the resulting property damage. With that money earmarked, in 1928 the railroads and

the city settled on the following plan (Johnson, 1980, p. 100).

On May 12, 1931 the grand opening was held for the magnificent new Depot.

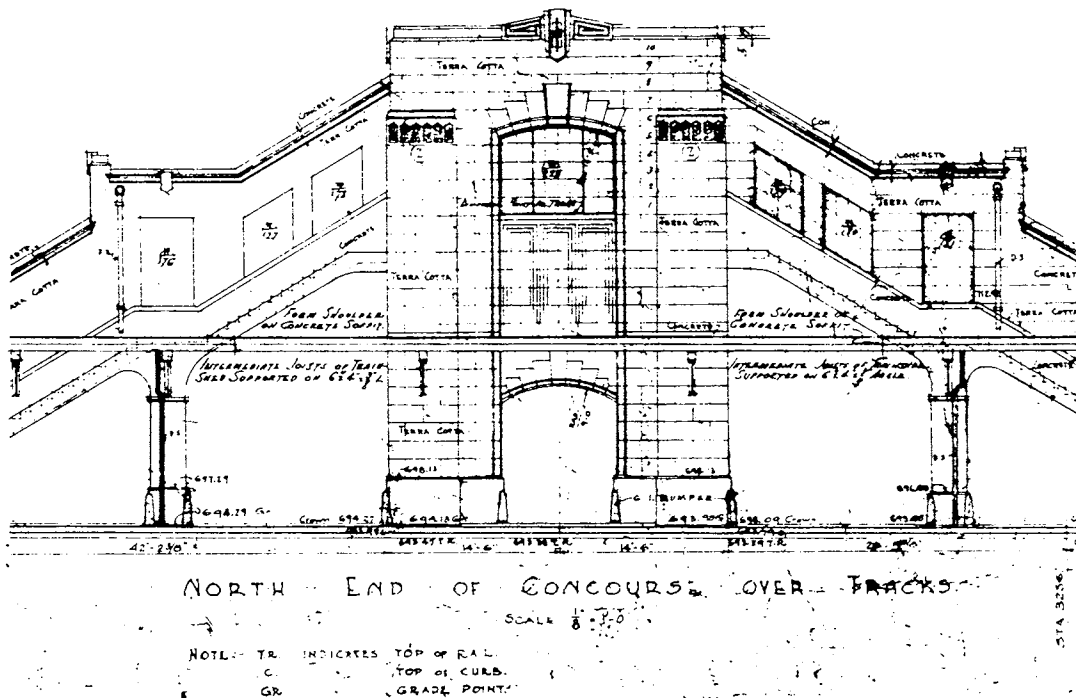
The monumental structure was designed by R.C. Stephens, chief architect for the Frisco Railroad. Extending a full block from Boston Avenue to Cincinnati Avenue, the massive structure portrays power and endurance. The massive structure of stripped classicism has qualities of both the Zigzag and Streamline styles. The Tulsa Union Depot is an excellent example of the PWA Style.

Variegated Bedford stone was the material used on the facade of the building. The detailing was constructed of polychrome terra cotta. Though the two-story, bone structure is massive in its own right, it has a simplistic manner about it.



Source: (Johnson, 1980, p. 101)

Figure 17. Northwest Exterior 1932



Source: (Johnson, 1980, p. 101)

Figure 18. North end of Concourse over tracks
Tulsa Union Depot

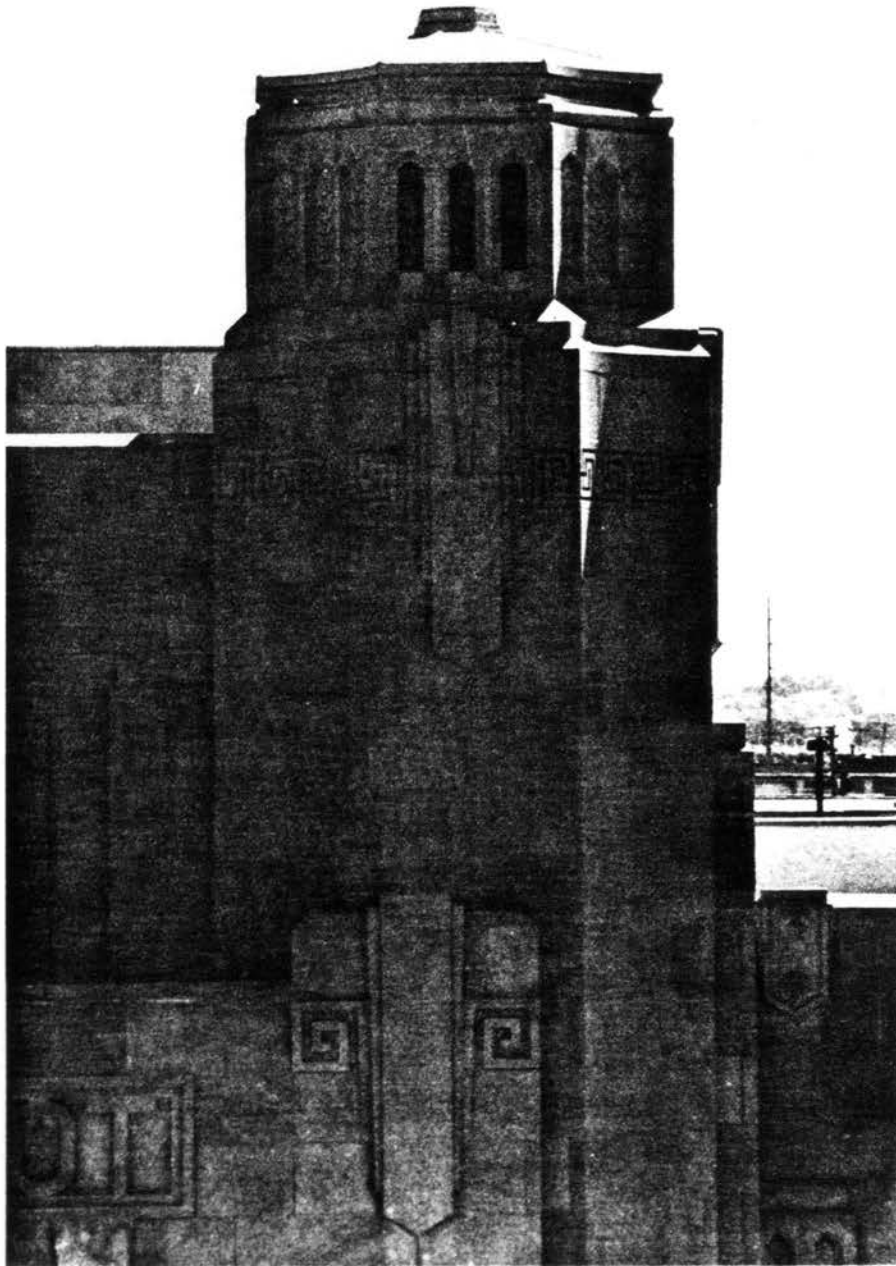
"The entrances to the depot were segregated. The blacks entrance was to the east; the white's to the west. Both entrances had octagonal towers astride a triple arch." (Johnson, 1980, p. 105) Today the existing entrance function as windows. The octagonal tower (Figure 20), with its slightly concave sides, Greek key motif, and floral motif (Figure 21), portrays a simplistic grace protruding toward the sky. The three arched windows beneath the inscription 'Tulsa Union Depot', create a horizontal balance. Other ornamentation includes shields and motifs

inspired by Central and North American Indian art (Figure 22 & 23).



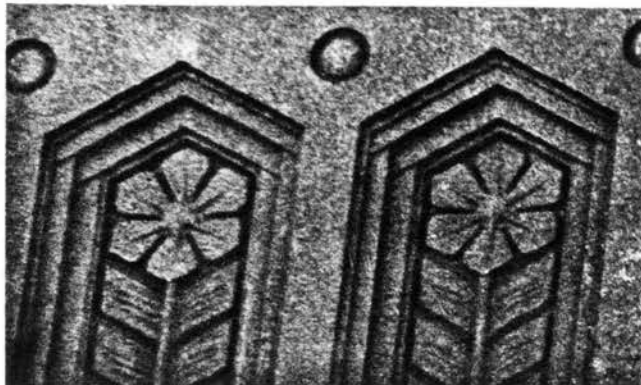
Source: (Steinman, K., 1984)

Figure 19. View of the East end
Tulsa Union Depot



Source: (Steinman, K., 1984)

Figure 20. Octagonal tower astride entrance
Tulsa Union Depot



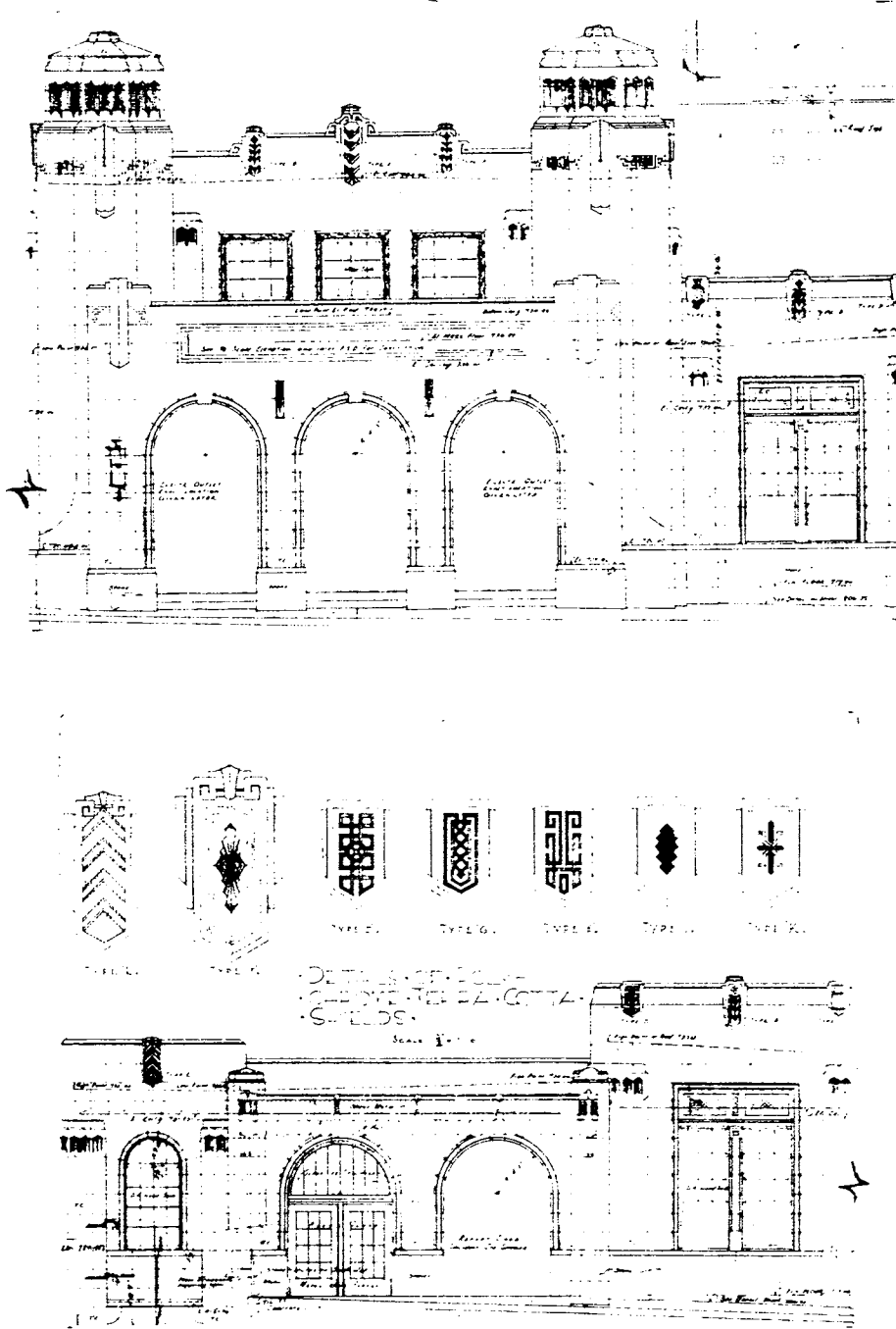
Source: (Steinman, K., 1984)

Figure 21. Floral Motif, Tulsa
Union Depot



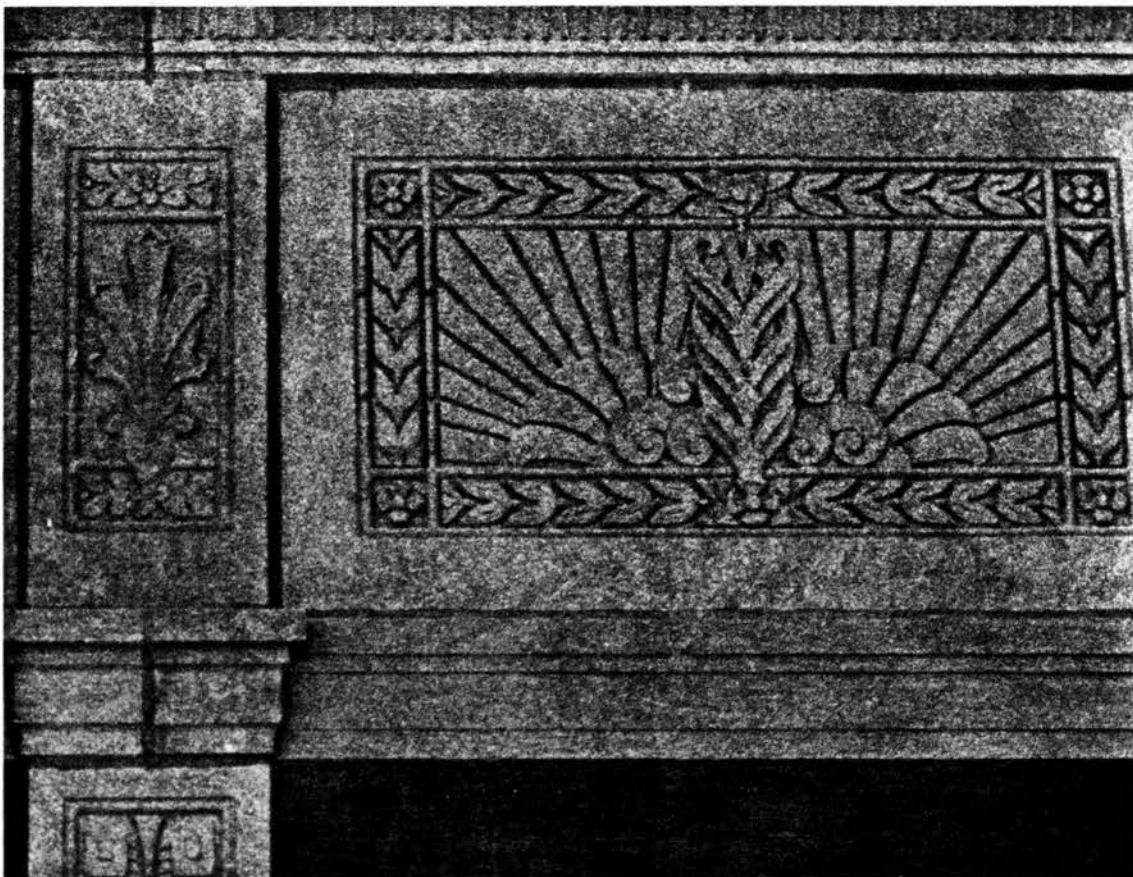
Source: (Steinman, K.,
1984)

Figure 22. Shield, Tulsa
Union Depot



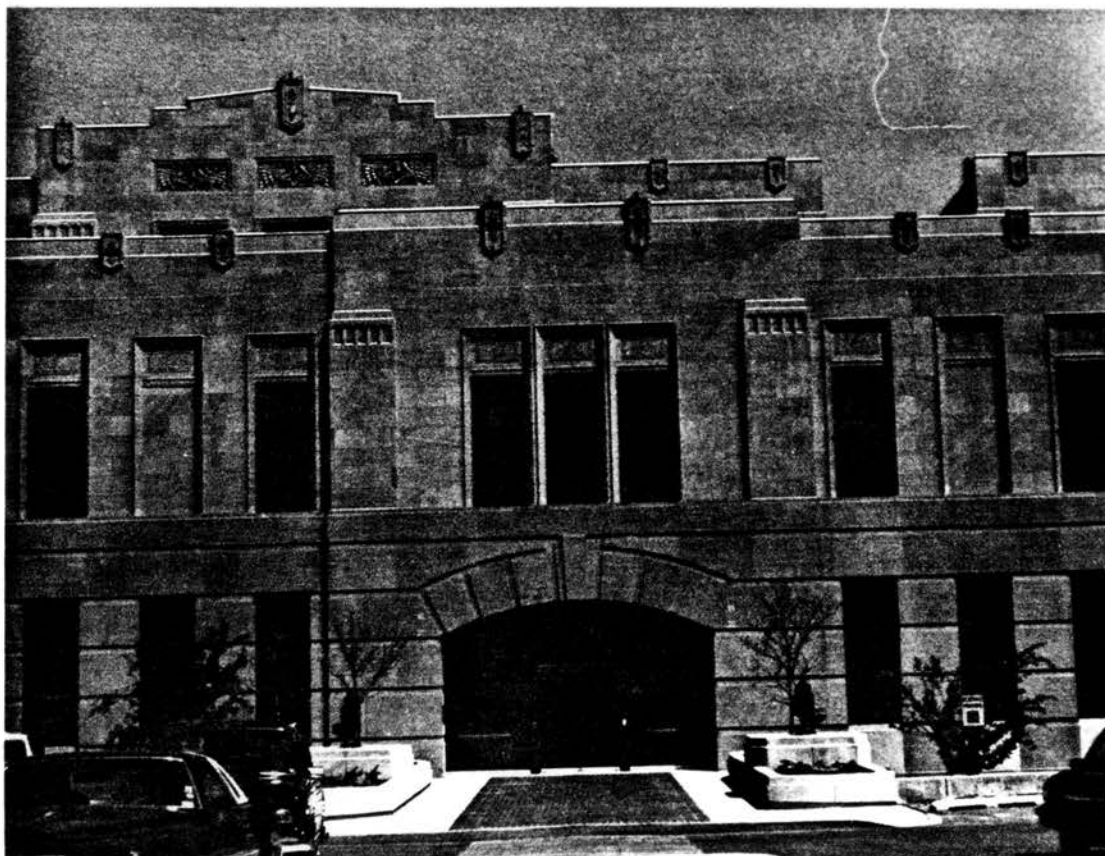
Source: (Johnson, 1980, p. 104)

Figure 23. Boston Street elevation with details of the terra cotta shields Tulsa Union Depot



Source: (Steinman, K., 1984)

Figure 24. Terra cotta detailing used over windows
Tulsa Union Depot



Source: (Steinman, K., 1984)

Figure 25. View of South facade
Tulsa Union Depot

By the late 1970's, Union Depot in Tulsa, Oklahoma, had become a public embarrassment, a way station for tramps and pigeons. Closed in 1967, just 36 years after a proud opening, the cavernous structure - one of the nations most important buildings - faced demolition (Walters, 1984, p. 18).

The depot was saved, and is now used as office space. Now a focal point of downtown Tulsa, the Depot is receiving national recognition.

The Tulsa Fire Alarm Building

Another of Tulsa's PWA Art Deco buildings which is unusual and elaborate in its use of terra cotta is the Tulsa Fire Alarm Building. The building was the center of an alarm system which was one of the two major municipal improvements necessary in 1930-31 for the city to obtain a lower fire insurance class rate. To be approved the station had to be located at a minimum distance of 150 feet from any other structure. The clearance requirement was to protect the building from fire in an adjacent building. Thus, the Central Park site was selected (Johnson, 1980, p. 109).

A bond issue paid for the building and alarm system. Completion of the Tulsa Fire Alarm Building (1931), gave Tulsa another beautiful Art Deco structure.

Frederick V. Kershner, was the architect of this PWA structure. At the time Kershner designed this building, he was employed by Smith & Senter. Kershner was a native Oklahoman, and received his degree in Architecture from Oklahoma A & M (Oklahoma State University), in 1926. He also attended the American School of Fine Arts in Fontainebleau, France. Kershner practiced in Tulsa from 1925 to 1980.

The elaborate use of terra cotta is the focal point of the building. Buff terra cotta, combined with a blond brick add grace and texture to the building. The entrance (Figure 26), is topped with a bold design in terra cotta. Dragons, firehoses and simplified floral treatment surround the inscription; 'Tulsa Fire Alarm Building'. Above the inscription is a symmetrical design showing a muscular man with nude torso, with Gamewell alarm tape running through

his hands. On either side behind him are two firefighters. Through the design are winding firehoses, appearing to be fire breathing dragons. Lightning bolts radiate in all directions from the central figure. This stylized design portrays speed and strength. To either side of the panel are plaques representing Gamewell alarm boxes.



Source: (Steinman, K., 1984)

Figure 26. Entrance to the Fire Alarm Building



Source: (Steinman, K., 1984)

Figure 27. Terra cotta detailing above entrance
The Tulsa Fire Alarm Building



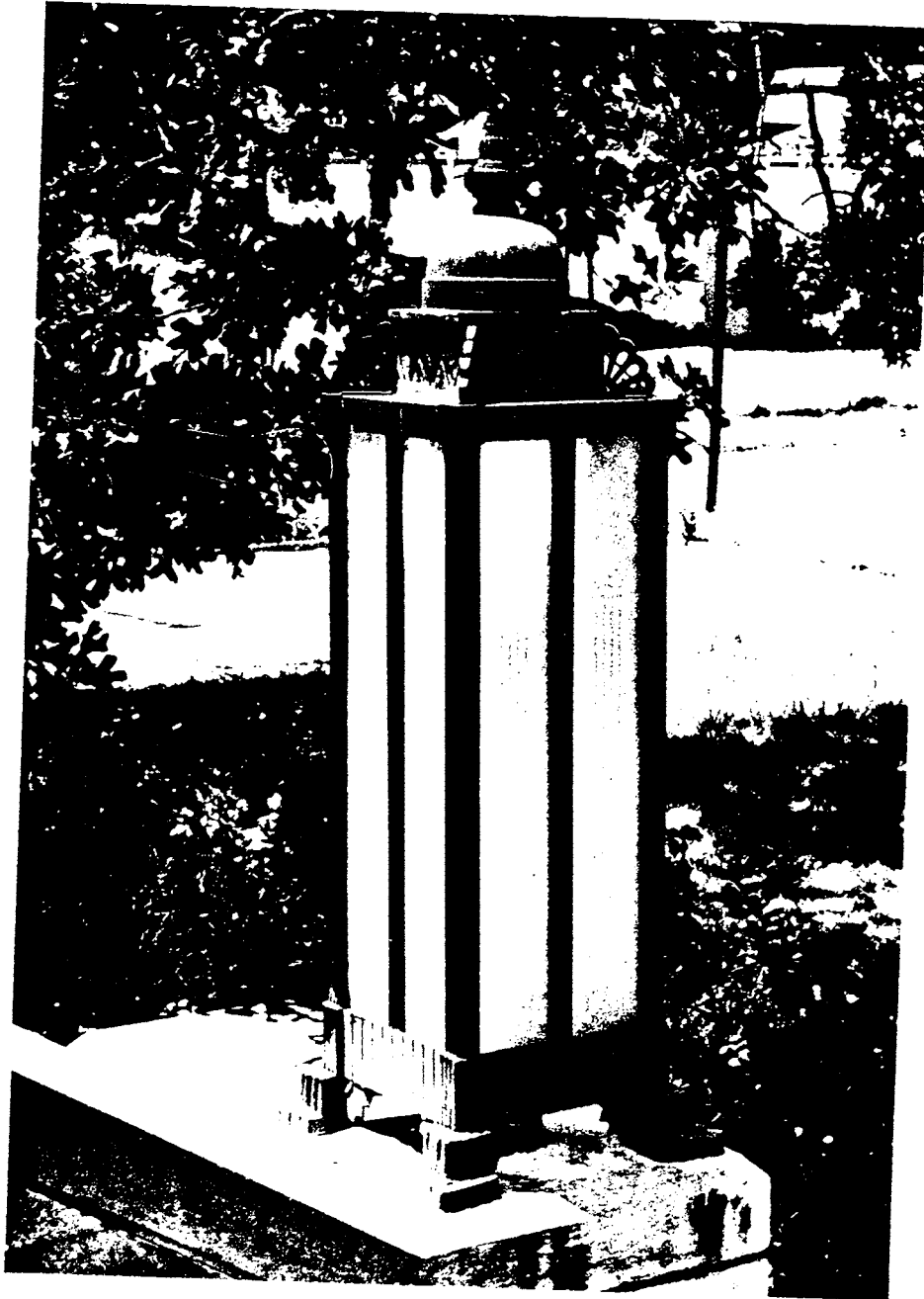
Source: (Steinman, K., 1984)

Figure 28. Terra cotta detailing above front windows
The Tulsa Fire Alarm Building

Astride the central panel runs a band of terra cotta detailing above the windows (Figure 28). Fire breathing dragons and winding firehoses enclose a design incorporating axes, wings and other stylized forms. The front facade is topped with a band of dentil trim.

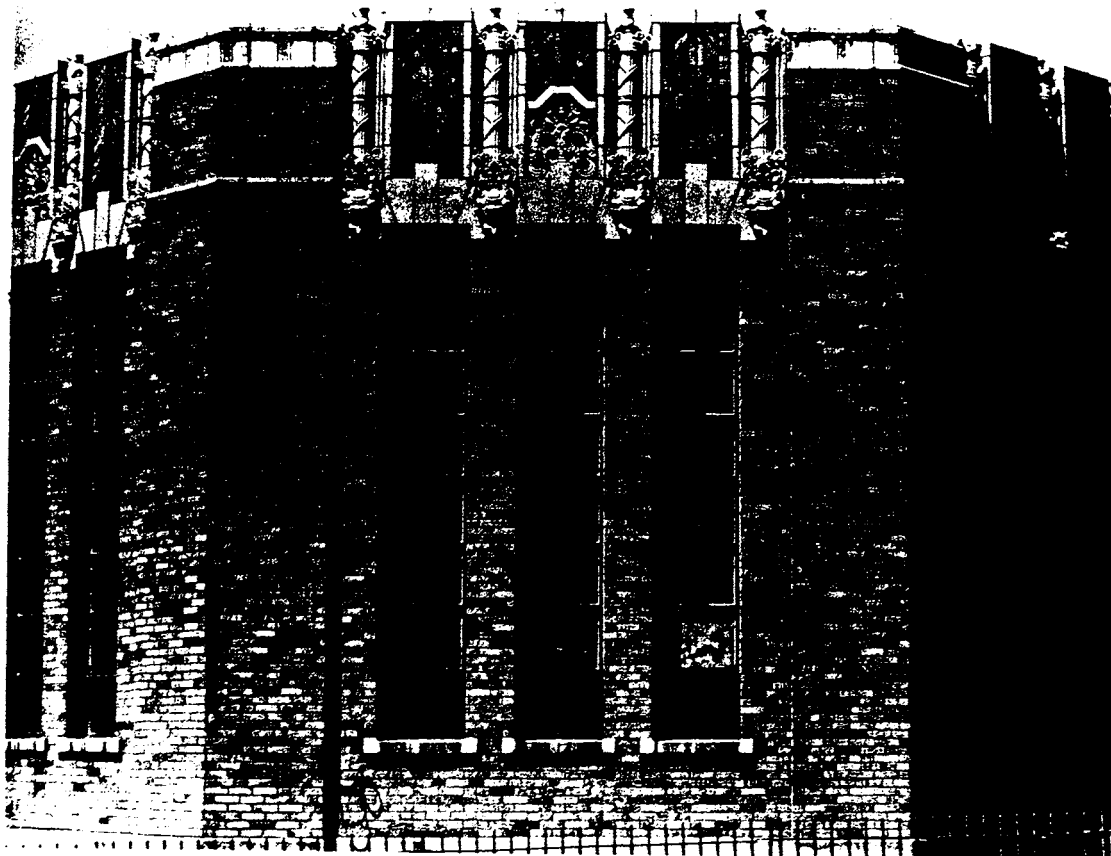
Wrought iron lanterns are placed to either side of the entrance. The lantern (Figure 29), is also symmetrical in form. The glass panels are etched with a geometric design, enhancing the verticality of the fixture. The lantern is in a stepped form, from the four feet up to the crown. The open lacework is simple and adds flair to the four upper corners. The domed crown is topped with a stepped ornament. The two massive lanterns add depth to the building.

An octagonal section of the structure, in the rear of the building is topped with terra cotta Gargoyles (Figure 30 & 31). The brick work framed by these creatures is layed in a pattern which gives texture and the affect of rising upward. It is said, "the Fire Alarm Building was inspired by Kershner's Mayan temple design which had received an award from the Beaux Arts Institute of Design in New York City." (Johnson, 1980, p. 113) The design of the Tulsa Fire Alarm Building is unique, yet representative of the PWA (Public Works Administration) Style of Art Deco Architecture.



Source: (Steinman, K., 1984)

Figure 29. Iron Lantern at entrance
Tulsa Fire Alarm Building



Source: (Steinman, K., 1984)

Figure 30. Rear, octagonal portion of structure
Tulsa Fire Alarm Building



Source: (Steinman, K., 1984)

Figure 31. Terra cotta gargoyles
Tulsa Fire Alarm Bldg.

Summary

Massive, bold, and impressive are characteristics that place the Tulsa Fire Alarm Building and the Tulsa Union

Depot in the category of the PWA Art Deco Style. Though the two structures are different in many ways the use of certain elements, forms and materials tie the two together. Horizontal elements, massive forms and materials such as terra cotta and wrought iron are a few characteristics that place these two structures in the PWA style. These two buildings are representative of the PWA Style of Architecture in Tulsa.

CHAPTER VI

ANALYSIS OF THREE STREAMLINE STRUCTURES

Introduction

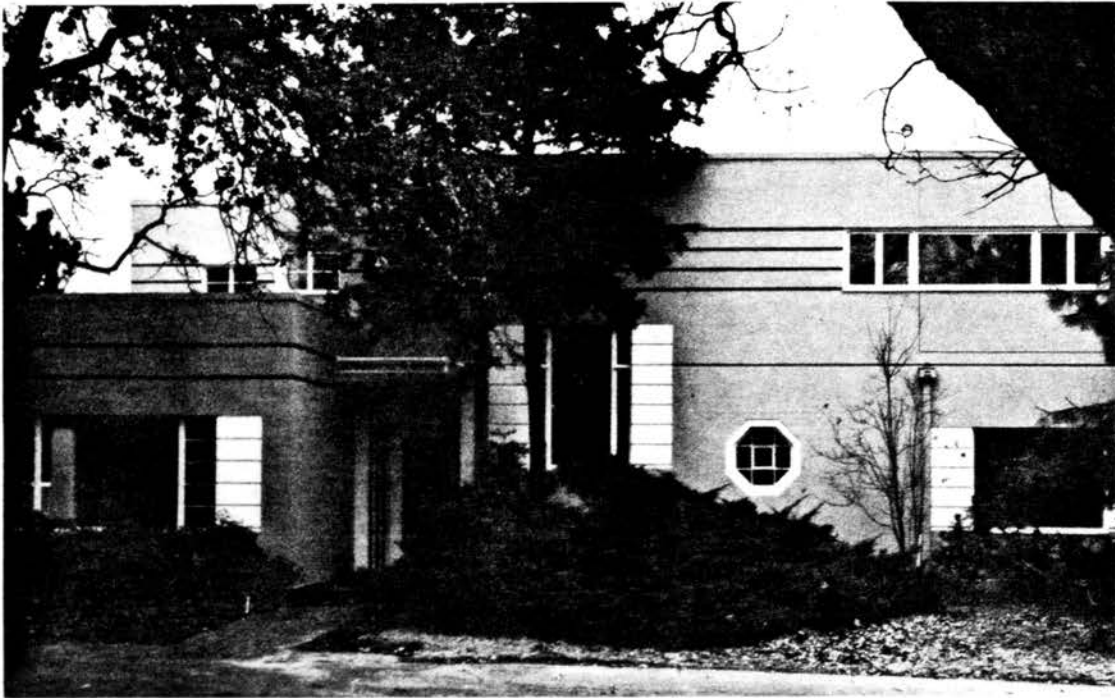
The quantity of Streamline structures outweighs that of both the Zigzag and PWA structures in Tulsa. Many service stations, diners, theaters and residences were of the Streamline style. Skelley Oil Company Service Station (1938), Silver Castle Restaurants (1936-40), People's State Bank, The Delman Theater (1938), and the McGay Residence (1935) are just a few of the Streamline structures built in Tulsa. The writer chose the Shakely Residence (1937), the City Veterinary Clinic (1942), and the Tulsa Monument Company (1936) to analyze. These three structures are representative of the Streamline Style in Tulsa.

The Shakely Residence

"The home was built in 1937, by John Shakely, a prominent civic worker and leader in the oil-field equipment supply industry." (O'Shea, 1984, p. 97)

The use of relief horizontal bands running the perimeter of the home, sculptured glass, octagonal and ribboned windows, and the use of metal railing and stairs on

the second level, all create the image of a ship. The rounded bay represents the bow of a streamlined ship. The octagonal window resembles a porthole. At different levels the flat roof carries out the cubistic forms. The continual flowing horizontal lines are symbolic of the Streamlined Decade.

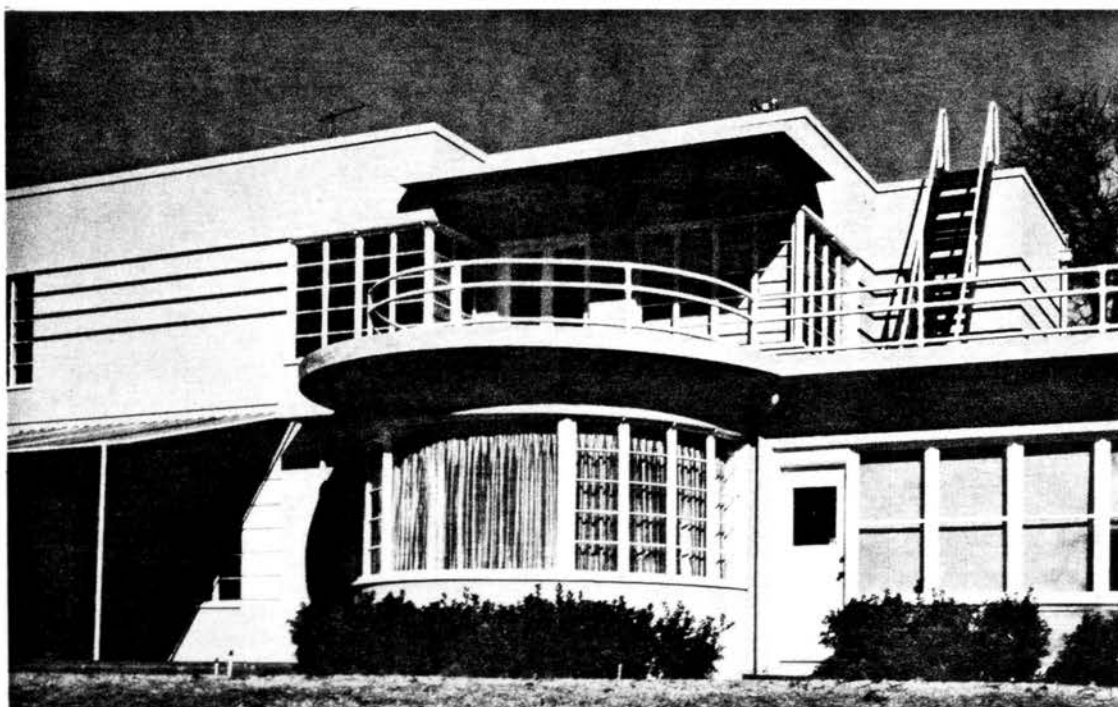


Source: (O'Shea, 1984, p. 96)

Figure 32. Front view, Shakely
Residence

The steel reinforced concrete structure is now painted gray with the bands highlighted in hunter's green. The

owners of the home have continued the flavor of Art Deco into the interior. The continuity and simplicity are representative of the Streamline Moderne form of architecture.



Source: (O'Shea, 1984, p. 96)

Figure 33. Back view, Shakely
Residence

The City Veterinary Hospital

Joseph R. Koberling, Jr. designed the clinic for Dr. William F. Irwin in 1942. The functional design of

the structure was successful, the clinic is still in use today.

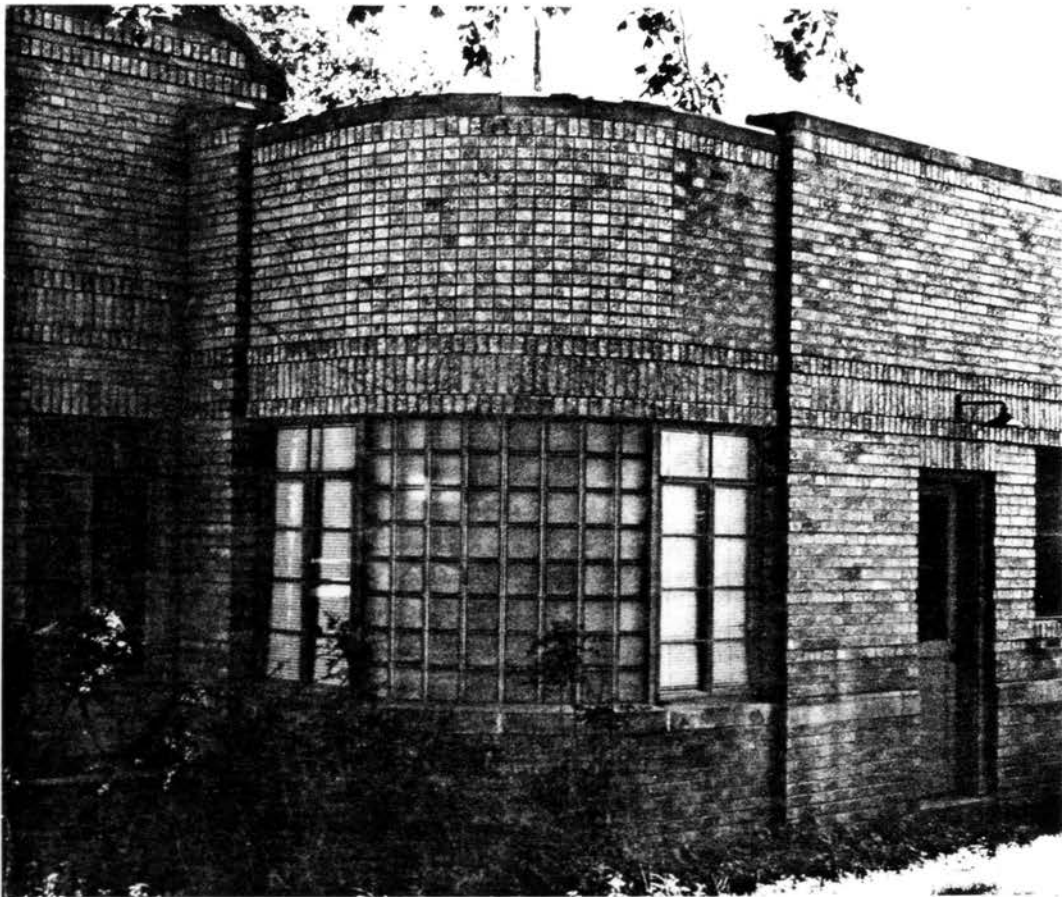


Source: (Steinman, K., 1984)

Figure 34. Front view of the City
Veterinary Hospital

The one-story structure is constructed of a buff brick. Continuous bands of brick and the use of glass

block are streamline in character. The entrance (Figure 34), is recessed with curved corners of glass block. Curved glass block is also used on both corners of the building. The extensive use of glass block, multi-level flat roof, octagonal window and emblem, and rounded corners and canopy are characteristics used in much of the Streamlined Art Deco Style. The City Veterinary Hospital is one of Tulsa's better examples of the Streamlined period.



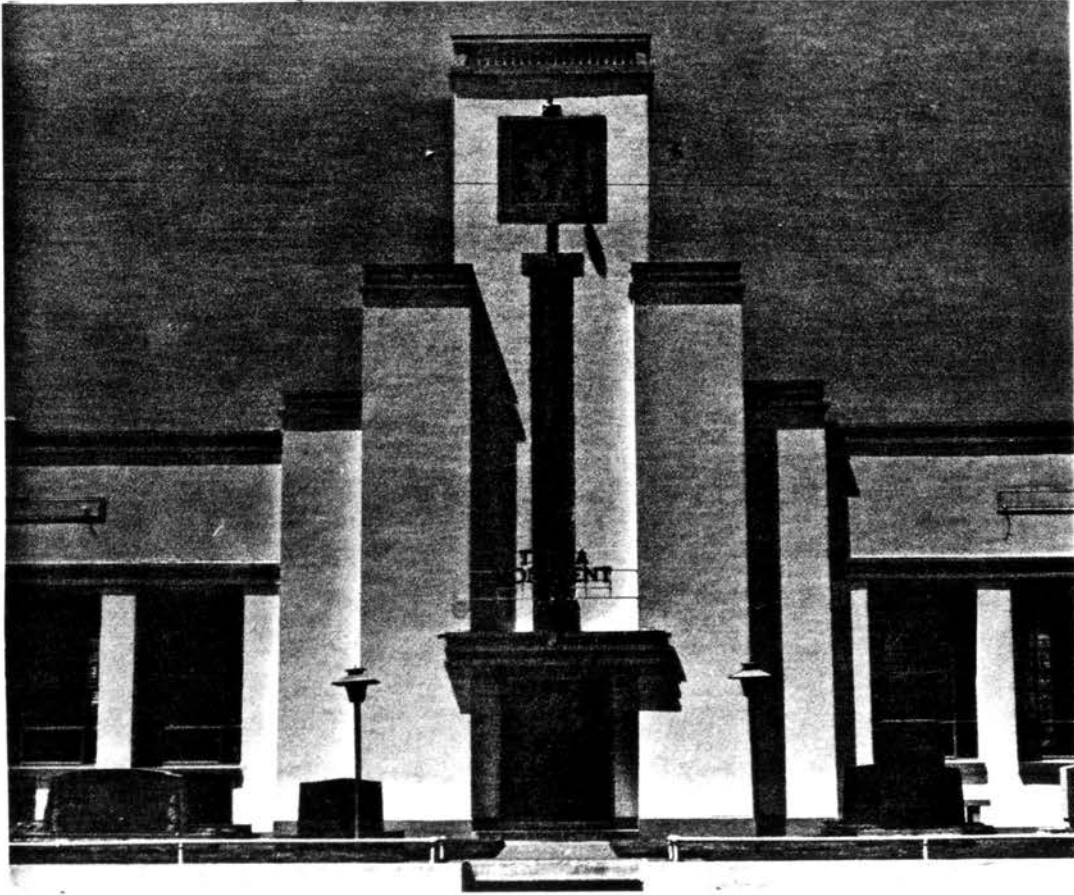
Source: (Steinman, K., 1984)

Figure 35. View of rounded glass block corner
City Veterinary Hospital

The Tulsa Monument Company

In 1936 the Tulsa Monument Company was built, the architect, Harry H. Mahler, "suggested that the monument company's new building simulate the appearance of a monument." (Johnson, 1980, p. 150) The single story building of white plaster concrete contains both horizontal and vertical elements. The horizontal strips are accented in gray. The flat roofed horizontal wings extend out to both sides of the main entrance. Above the door is a simple banded header with the companies name above. From there a tower extends up, at the crown of the tower there is a strip of small vertical indentions between two horizontal bands. A recessed clock is placed just below the top of the tower, below it extends a vertical strip of glass block. To either side of the tower stands two levels of columns. The columns are capped with three continuous bands.

The symmetry, vertical and horizontal elements, and the materials used, create a monumental structure. The Tulsa Monument Building is still occupied by the Tulsa Monument Company, and used for the original purpose. This structure is another example of the simplistic Streamline Style.



Source: (Steinman, K., 1984)

Figure 36. South view of the Tulsa Monument Building

Summary

The three Streamlined structures discussed represent the style in Tulsa, Oklahoma. Though the three are somewhat different the same elements and philosophies shine through. The flat roofs, horizontal emphasis and simplistic design and detailing characterize the Streamline Style.

CHAPTER VII

CONCLUSIONS

The purpose of this study was to show the role of Art Deco in Tulsa, Oklahoma, and the contribution Art Deco made in the transition from past architecture to modern architecture. The Art Deco movement helped bridge the gap to a modern architectural style. Through the Zigzag, PWA and Streamline styles a gradual change was made, rather than a drastic alteration.

In the Fifties the Art Deco movement was discarded as a misguided style. Art Deco was not fully appreciated until recently. Currently, there is a revival of the Art Deco Style, through both renevation of original Art Deco structures, and modification of the Art Deco style in current architecture. The form of the Art Deco architecture and motifs are being revitalized in todays designs. Function and simplicity are key elements of the Art Deco period. These elements are still stressed by most of todays architects and designers.

The architects and buildings discussed all played a part in making Tulsa what it is today. Though only limited structures were discussed, they are representative of the progression of the Art Deco Styles, not only in Tulsa,

but also in the United States. Tulsa Art Deco structures are true in form and character, if any regional contributions were made, it is the art of the indians. The Indian art, in some cases, influenced the motifs used in the stylized detailing of the Zigzag and PWA designs.

Suggestions for Further Research

During the course of this study it became evident that little information on the Art Deco Style of architecture is available. The Art Deco architecture of only a few prominent architects and cities have been dealt with in available writings. The writer recommends that further research be done on the regional differences in the Art Deco period, and the architects and designers behind the movement.

Further research will lead to a better understanding of the Art Deco Era. The relationship between architects and their architectural designs, and the effect the economy, environment, and lifestyles can have on the architecture implemented.

Summary

The Art Deco Architecture of Tulsa, Oklahoma reflected the history of its people, economy, and the lifestyles of the time. The structures were built as an expression of the hopes, needs, values, and beliefs of the architects, society and government.

Many of the Art Deco structures of Tulsa have been demolished and forgotten, but more importantly are the number of existing Art Deco Buildings in use today. Tulsa is renowned for its examples of existing Art Deco Architecture. Many are not used for their original purposes, but serve as a needed facility. Whether it be a bank, office building, diner, or a home they all represent an important era of the past. An era which had an impact on the direction of architecture and design. The Art Deco Movement made apparent the fact that design could work with the machine rather than against it. This was a major accomplishment which developed a direction for future styles. Simplicity and functionalism in design, the philosophies of the Art Deco movement remain prevalent in the design world today.

The Art Deco movement provided a smooth transition from classical architecture to modern architecture. The use of machines became part of design. The movement also made available philosophies which have given direction to the design world. These contributions establish the importance of the Art Deco Movement.

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