

ROCK

the creation

LIGHT

of an immersive

TRAINING

experience

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ROCK LIGHTING

The Creation of an Immersive Experience

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Introduction

senses perceive; physico chemical reactions that allows us to sense the "tastes", the "smells", the "textures", the "sounds" and especially the "lights" and how it reacts with objects, revealing their colors and forms. They allow us to live special moments, moments which gave us unique experiences and stay in our memories for the rest of our lives. One of this moments is the experience of a live concert.

Nowadays we can live the music experience in two ways:

Our perception of the world is basically throughout our senses. They give us the capacity to perceive what surrounds us. The word "sense" also means orientation (right, left, up, down), it give us a spatial vision of the place in which we are. The expression "to make sense" help us to find the logical meaning of what we see and learn, of what we find right or wrong. It is connected to our inner self; to how we perceive the reactions to our interactions with the world; to the sensations that this reactions cause and the feelings that are born from this sensations: good, bad, warm, cold, etc. This sensations are created from what our

1 : Throughout what we call portable music (CDs, MP3, LPs, etc), music which we can play anywhere we like: at home, at the car, in the street, at the metro. We can hear it alone or share it with someone else.

2 : The second way is in a Live Music event. This is an artistic manifestation which has evolve since the beginning of mankind. In our time is known as Concert, Rave, Parade, etc. It is a collective experience especially created to live the sensation of music.

The Music Concert has been transformed into a multisensory experience. Light has become a very important element in the achievement of a complete performance. The task that it has in the construction of the scenography is to unite all the elements of the show: the place, the stage, the audience, the images, the artist and the music itself.

With the arriving of the MP3 technology, the music industry has been forced to evolve. It can't only survive by selling CDs. It has turned into the selling of a experience. A concert or a music festival give the consumer a complete and unique experience. *David Bowie, U2, Rolling Stones or Roger Waters*, among others, are examples of how concerts have become more "theatrical". We hear the music but now we also see it. The Lighting Designer has been born. He manipulates the light to create a different atmosphere for every moment of the show, transforming the concert in a hole new experience.

The people who live that experience knows exactly what the show is about. They are the *FANs (Fanatics)*. A person that has devote his life to an artist. With them the artist is capable of construct an image, a visual representa-

tion of his alter ego; that is how he wants to be seen by his fans. In this way he is able to convert himself into an idol, an icon, a visual style to follow. The validation of the teenager as a consumer segment in the 50s and 60s in U.S. make possible this construction of Idols. From the teenage girls that yell in *Frank Sinatra's* or *Elvis Presley's* concerts to the contemporary "HipHopper", "Punk", "Emo", and "Headbangers", which have transform the visual esthetic of the city and created their own Urban Tribes based upon the looks and ideology of their favorite artists. They identify themselves with the lyrics and translate them into their style, fashion, looks and way of thinking.

During a concert, the fan and the audience in general, live the feelings of each song. They have a bond with the artist; by singing along the lyrics, they share their emotions transforming the concert in a complete interactive experience. The artist feels this and gives him energy to continue with his show. The audience has begun to manifest their emotions, mainly in the most sentimental moments of the show, by taking their lighters and flash them in the sky while singing along, what we can now

call "modern hymns" of each generation: *Pink Floyd's* "Wish you were here", *U2's* "With or without you", *Queen's* "Bohemian Rhapsody", *Lennon's* "Imagine", *The Animals'* "House of the rising sun", *Red Hot Chili Peppers'* "Under the bridge", *Bowie's* "Space Oddity", among many others. The anxiety of the audience leads them to take the initiative and participate creating light by themselves which gives the illusion of a sea of stars. Little by little this lighters have been replaced by smart phones and digital cameras which allows them to record their experience and share it with the world, allowing them to experience the same unforgettable moment.

This thesis will study the development of lighting in a concert, from the beginning of their first scenic manifestations in Greece up to the contemporary Rock World Tours. Although concert lighting has evolve throughtout all the genres of music, we will concentrate in the evolution of Rock and Roll and how it has influenced different types of artistic manifestations. From the beginning of the *Hippie Era* and their sensorial experimentations, the *Trips Festivals*, to the cases of *David Bowie* and *Pink Floyd* with their theatrical evolution of scenography and

finally the examples of contemporary bands such as *U2* and *Nine Inch Nails* who constantly pushes the boundaries in lighting and scenography to create a concert experience. We'll see light as a gathering element, its role as an atmospheric creator, its capacity of extend the scenography to the audience and the evolution of the Lighting Designer. We'll study the evolution of the idol, how the image of the musician created a hole new theatrical concept in concerts and how the audience as a collective entity was influenced by this. We'll see the development of the audience since the revolution of the post-war generation and its social and commercial impact as a *FAN*. And finally the technological development of stage lighting and how it has been adapted from clubs to stadiums and large arenas.



L i g h t

t i n g

C H A P T E R 1

t h e

S t a g e

History of Music and Stage Lighting

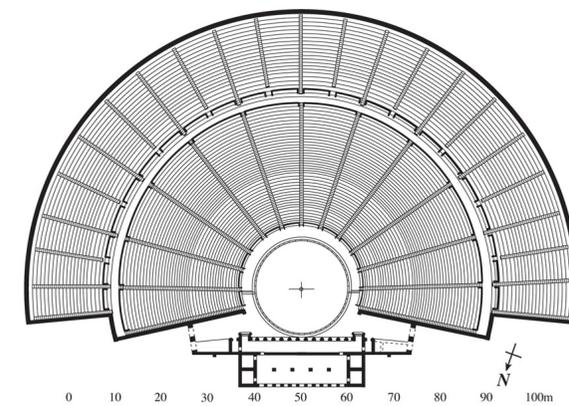
Music and theatre had evolve together throughout the history of mankind. In order to learn the history and the development of concerts we'll need to study a portion of the history of theatre.

The evolution of stage lighting began with our primary source of light, the sun. In Ancient Greece the theatre were built in a way that they could take the best advantage of sunlight. In addition to that they used mirrors to spot different places on the stage and if they needed a different kind of light for a special moment in the play, they would take an intermission until the right hour arrived. Among the theatres con-

structed in this period we can find the Odeon (made for musical purpose) and the Epidaurus Theatre. The propagation of sound waves in the Epidaurus Theatre (fig.1) is exceptional due to its spiral-like architecture. The Romans were the ones who introduced torches and candles to the theatre as first controlled source of light, this allowed them to create different moods for different parts of the play.

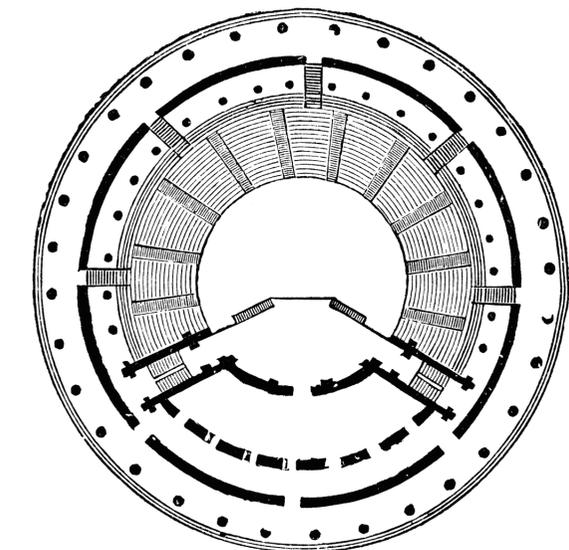
During the Middle Ages, music was basically controlled by the church. The Gregorian Chants are the most well known of that period. It was used for worshipping God with vocal melodies that spread throughout the temples. In popular culture the musical manifestations were lead by minstrels and troubadour who travel from town to town telling stories or poetry. They use to gather people in the central town square where they play, creating a primitive version of a popular concert. During the XII and XIII centuries the theatre plays begun to move out of the churches, the lighting was based in candles, oil lamps and torches.

By the time when nations and kingdoms rose, music was an important part of entertainment. Kings use to have saloons and chambers specially dedicated for musical acts and plays. In the period of the Renaissance (XV - XVI),



Epidaurus (modern Epidauros, Greece)
Cavea width: 119 m, orchestra width: 24.85 m; capacity: 11,750-14,700; ca. 300-340 BC.
Plan (T.H. after Gerkan)

FIG.1 : EPIDAUROS THEATRE



ODEON OF HERODES ATTICUS | ATHENS

music started to spread throughout universities and became a real career. It began the construction of very important theatres, as the *Teatro Olimpico* de Vicenza which used candles as principal source of illumination. A couple of years before, in 1545, *Sebastiano Serlio* began experimenting with different colored light liquids in bottles, creating the colors red, blue and yellow for theatrical lighting. This way the early lighting designers could manage 3 different elements: Distribution, Intensity and Color.

During the Baroque period (XVII - XVIII) the privilege of music spread throughout the court and entered the aristocratic families. As

well as the royal family, they began to have private concerts at their mansions and castles. This period also gave birth to the Opera as a scenic genre and as an architectural venue.

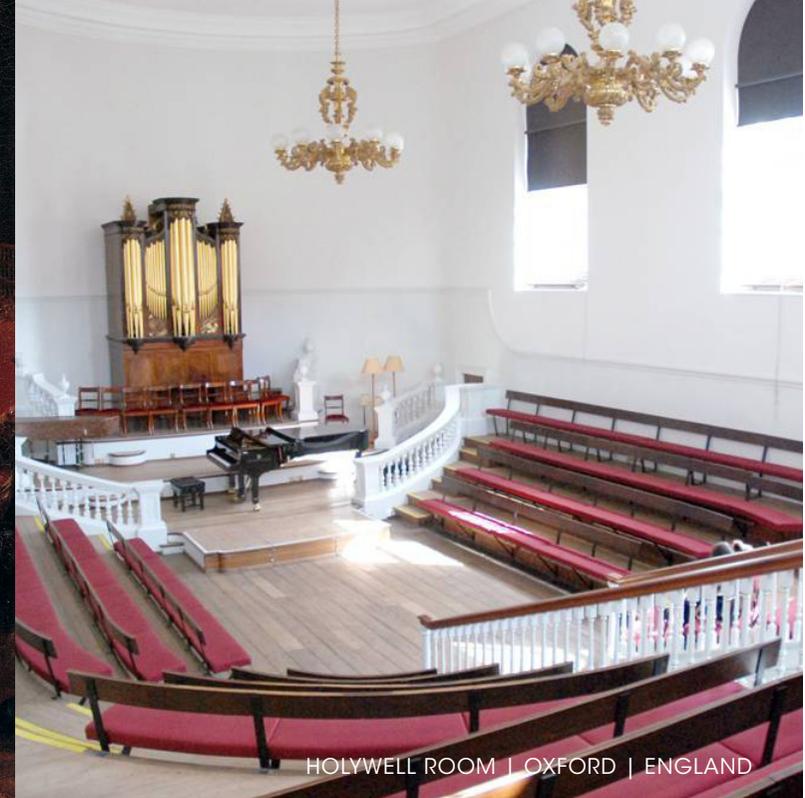
As the Opera demanded more work in the scenic field, architects who by that time were in charge of everything from the construction of the theatres to the scenography itself, gave the way to scenographic artists who were able to create new pictorial looks and changed the perception of the space. They intent that the set could be seen from different angles not only from the front as was actual tradition. In the past years, the scenography have been not so artistically developed, it was only an envelope to the play. But during the XVII century, the customs and decoration of the Opera, demanded a more realistic view. This changed the way in which sets were constructed; they began to represent real places, to become a representation of reality itself. Lighting stayed the same as in theatre, based on chandeliers and hundreds of candles distributed in the set. In early paintings of *La Comédie-Française, ou Théâtre-Français*, in 1680 we can see the first uses on footlights in theatre. They usually were lightened by candles or oil lamps. They were put at the edge of the stage principally be-

OPERA NATIONAL DE PARIS

PALAIS GARNIER - MARBLE GRAND STAIRCASE



CHAMBER MUSIC



HOLYWELL ROOM | OXFORD | ENGLAND

cause it was an accessible position for replacing the candles or light them when they turned off without interrupting the play.

In 1675 the first venue dedicated to music was constructed in London in the yet know *York Buildings, at Villiers Street*, it was essentially a theatre for music. In France they were well known the private concerts in palaces and aristocratic mansions. Usually the kings and nobles use to have big celebrations with live plays and concerts. Even themselves used to play and make their own compositions, *Frederick II of Prussia* and *Philippe II, Duke of Orléans*

were well known for their musical skills. Professional musicians as *La Barre* and *Sainte-Colombe* in France, also used to gather together at their own houses to have private music sessions.

By 1725, concert began a public matter. In Paris *l'Académie Royale de Musique* limited the quantity of public concerts but the *Concert Spirituel* became very important. These concerts were related to religious festivities though the music that was played, was only of religious content. In the rest of Europe many benefit concerts were organized by academies

or by masonic lodges. Later on in 1748 the *Holywell Room* in Oxford was opened. It is considered the oldest concert room yet existing. Nowadays is part of the University of Oxford Faculty of Music it has a capacity of 300 people.

In the times of the French Revolution, the monopoly of the theatres imposed by *l'Académie Royale de Musique* was abolished. This encouraged the creation of different kinds of show rooms. By 1791 the café-concert became well known, one of the first ones was the *Café d'Apollon*.

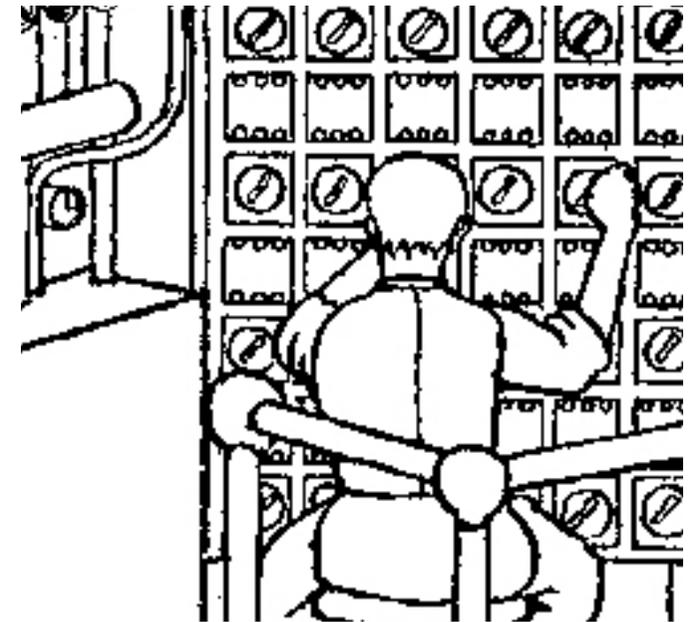
"Theatre became a respected entertainment."

The 19th century began with the impact of gas lighting. In 1804, *Frederick Albert Windzor* did the first demonstration of gaslight in a stage of the *Lyceum Theatre* in London. But wasn't until 1816 that the first fully gas light theatre became operative, the *Chestnut Street Theatre* in Philadelphia U.S.. Gas lighting spread quickly throughout the theatres. In 1840 the introduction of the gas table changed the way the set was illuminated. Its function was to distribute the gas through the theatre and separate it throughout the different parts of the set. By the regulation of different gas supplies, early lighting designers were able to create variations of intensities in the illumination of the set, giving the stage a new dimensionality. The gas table became the first switchboard.

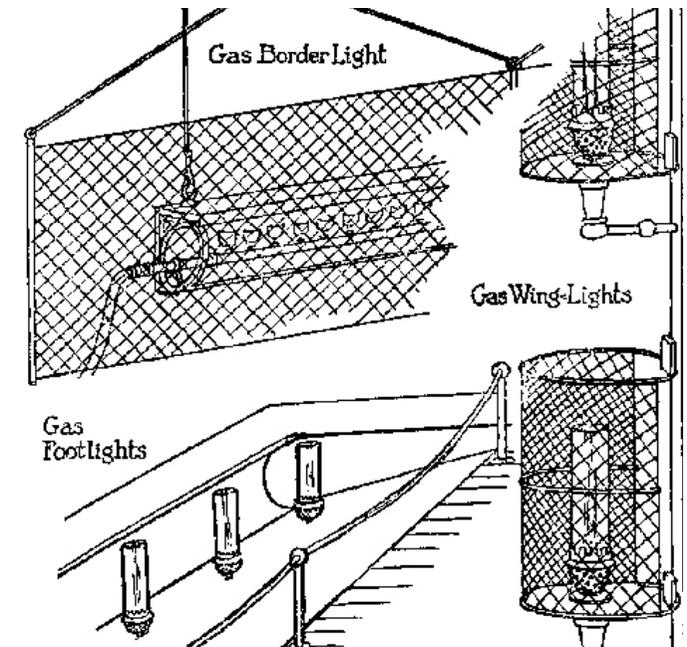
The stage was brighter than never before. The actors could use less makeup and

didn't need to exaggerate their performance. In addition to this, the brightness of the light got the attention of the public towards the stage. The riots and shouting that were common during the theatrical performance, were over. Theatre became a respected entertainment.

Two of the biggest installations of gas system were in Paris, one in the *Théâtre du Châtelet* in 1862 and the other in the *Paris Opera* in 1875, "Its lighting system contained more than twenty-eight miles of gas piping, and its gas table had no fewer than eighty-eight stop-cocks, which controlled nine hundred and sixty gas jets." ⁽¹⁾. Gas lighting was more economical and used less manpower than candles as it was controlled from a central point. "It was easier to light a row of gas jets than a greater quantity of candles high in the air" ⁽²⁾. One of



ILLUSTRATIONS OF THE FRENCH GAS SYSTEM



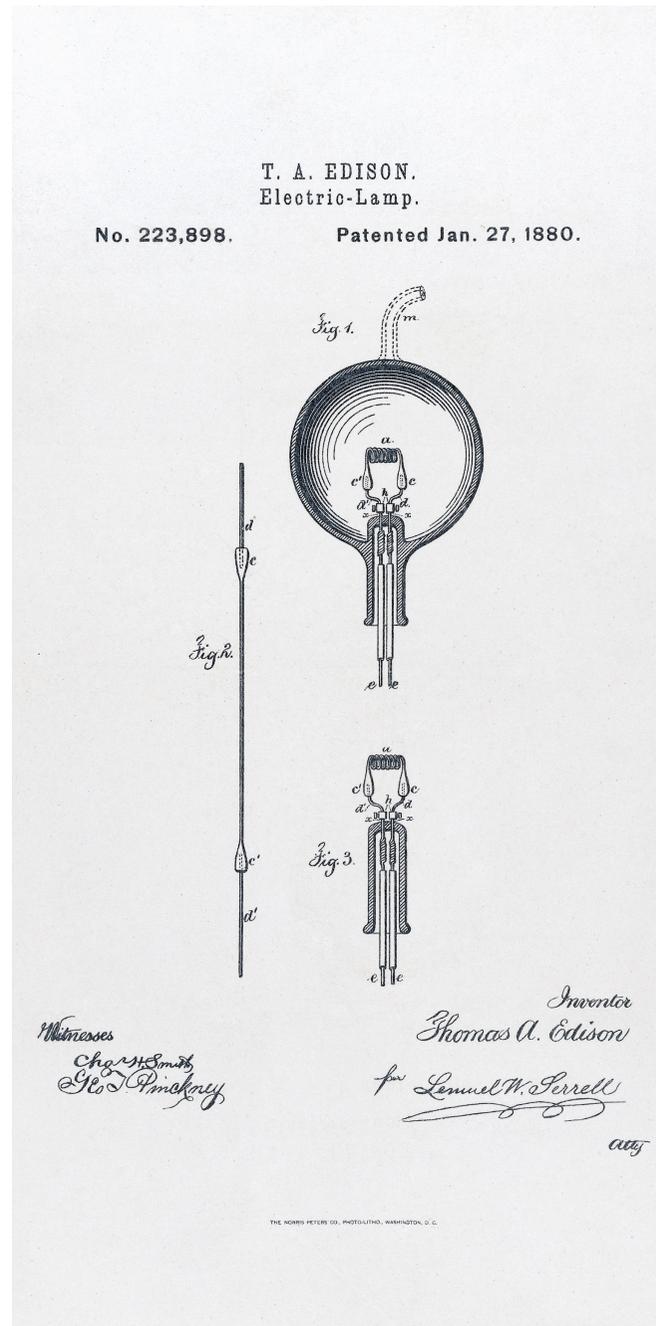
(1) *Theatre Lighting Before Electricity*; Frederick Penzel, 1st ed. Middletown, CT; Wesleyan University Press, 1978. p.69

(2) *Theatre Lighting Before Electricity*; Frederick Penzel, 1st ed. Middletown, CT; Wesleyan University Press, 1978. p.174

the great disadvantages of gas lighting was the risks of explosions and burning. Hundreds of theatres were burned down throughout the 19th century, until the arrival of electricity.

In 1879, *Thomas Edison* perfects the first practical incandescent electric lamp. Two years later, in 1881, the first building entirely illuminated by electric lamps was opened, *The Savoy Theatre* in London. Electricity was wide more secure than gas. By the end of the 19th century most modern theatres have switched from gas lights to the much safer electric lights. To control the intensity of the light, barrels with salt water and electrodes inside were used as dimmers. But in the beginning of the 20th century they were replaced by resistance dimmers.

In 1903, the *Metropolitan Opera House* in New York City had an electrical lighting system with 96 resistance dimmers. In 1926 the *Stroboscope* or *Electronic Strobe* was introduced, giving the possibility to create different effects on stage; using a single flashing light source, a stop action effect of all moving objects on stage could be achieved. ■



Perception and Scenography

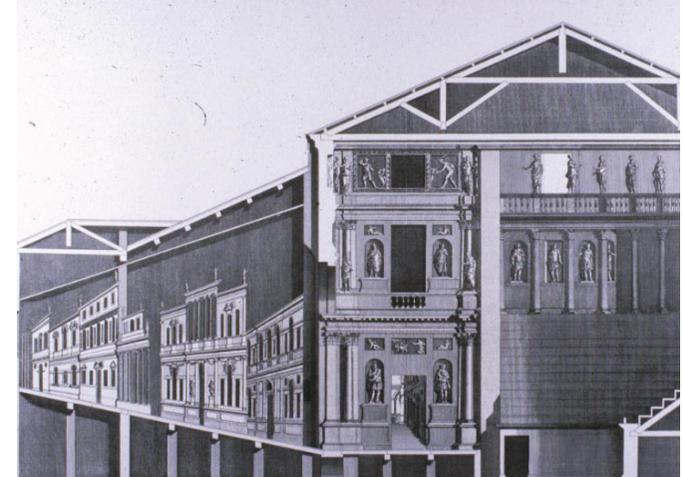
The concert, as well as theatre, had been always suffer the enclosure of a set. For the set designer, change the perception in which the spectator see the scenography, it has always been a challenge. Their goal is to brake the architectural boundaries of the scenario and provoke a sensation of infinite space. By the use of lighting techniques, they are been able to trick the eye and change the perception of the viewer towards the spaces.

Throughout history artists had always tried to make the illusion of bigger spaces. In 1694, *Andrea Pozzo* finished his frescoes at the ceiling in the *Church of St. Ignazio* at Rome. As



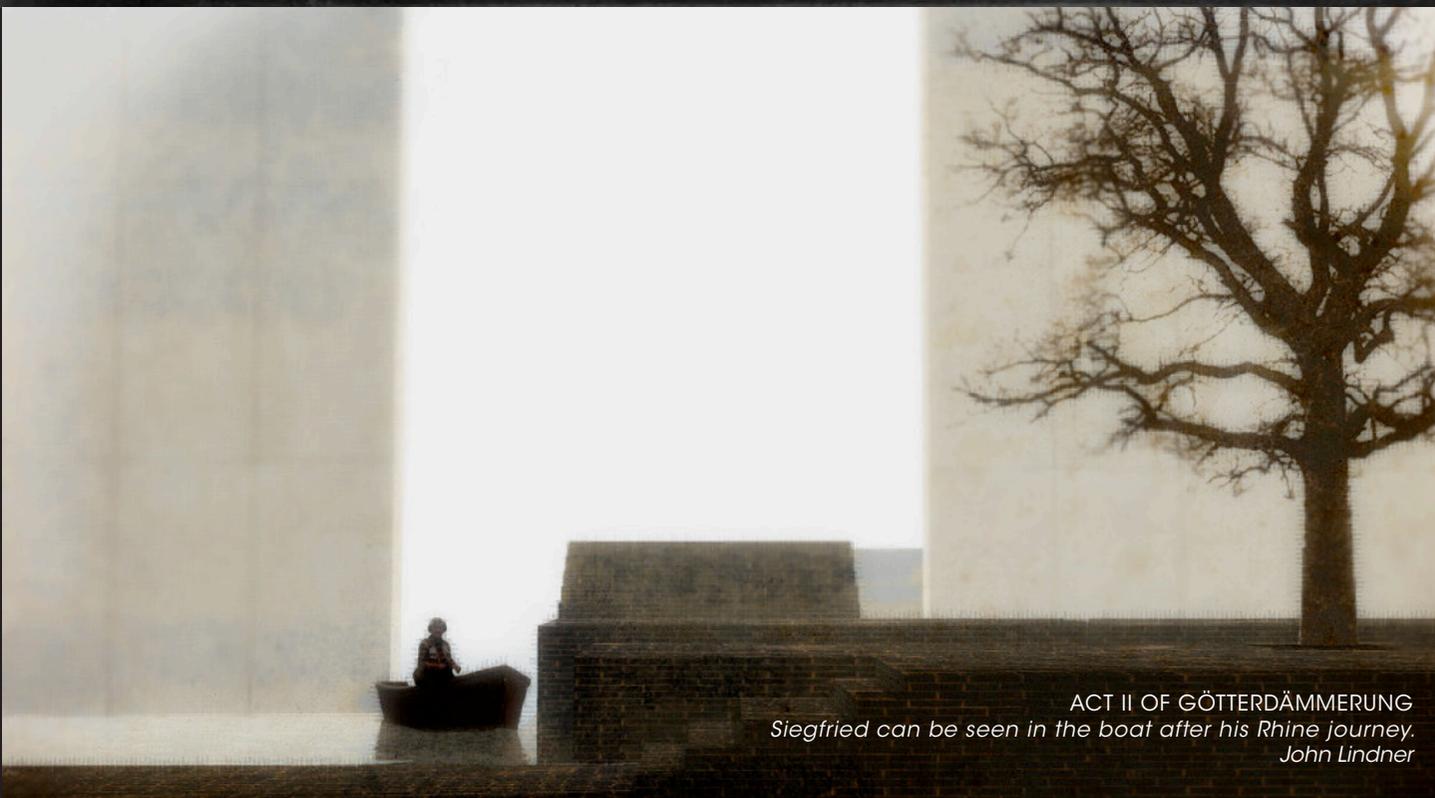
◀ shown in the picture (fig. 1) this fresco gives the illusion of a higher ceiling, as if there is another floor habited by angels. The ceiling gives the illusion of being open to the heavens. His work in the chapel is magnificent (fig. 2). He gives the ▶ illusion as if there is a dome where there isn't. In 1582, Ottavio Bertotti Scamozzi using the designs of the original architect, Andrea Palladio, opened the expansion of the *Teatro Olimpico* in Vicenza, Italy. This expansion was a revolutionary advance in construction of the stage. Using the techniques of perspective created by *Filippo Brunelleschi* in the early 1400s, Scamozzi was able to manipulate perception and created the illusion that the streets were longer than what they really are (fig.3). As theatre and ▶ opera were the principal scenic manifestations in the modern ages, most of the advances in scenography came from these fields.

Major part of the scenographers in history were architects which construct the settings. Their architectural background gave them an strict point of view towards light in the set. But one of the firsts who develop his interest in extend the dimension of scenography, was Swiss architect and decor *Adolphe Appia*. He is best known for his scenic designs of Wagner's Operas "*Der Ring des Nibelungen*" during the beginning of the 20th century. His manipulation





ADOLPHE APPIA
ESPACES RHYTHMICS | 1909



ACT II OF GÖTTERDÄMMERUNG
Siegfried can be seen in the boat after his Rhine journey.
John Lindner

of light give the set a new perception based on geometric shapes, lights, colors and shadows. *He believed that shade was as necessary as light to form a connection between the actor and the setting of the performance in time and space* ⁽¹⁾. The vision of Appia included the synchronicity of lights with the music and performances. This is an extremely important point in concert lighting. The lighting designer must consider the performance of the musician as a spontaneous artist. He should be aware of the possibilities and eventual changes that the perform could have and consider this in all his movements.

Appia considered light as the primary element, which fused together all aspects of a production and he consistently attempted to unify musical and movement elements of the text and score to the more mystical and symbolic aspects of light. He was one of the first designers to understand that stage lighting would give atmosphere and dimension to the play rather than just illuminate the actor.

Years later a new generation of designers based on the studies made by Appia tried to expand the theatrical experience. *Antonin Artaud* a french playwright, actor and theatre director was well known for including cinemat-

(1) Adolphe Appia: A Biography; John R. Stevenson, DJD; Institute for Jaques-Dalcroze Education, LLC

ic elements in his plays. The intention of Artaud, as he described it, is to create a theatre that could be immersive: "s'étendra, par suppression de la scène, à la salle entière du théâtre et, parti du sol, (il) gagnera les murailles, enveloppera matériellement le spectateur, le maintiendra dans un bain constant de lumière, d'images, de mouvements et de bruits" (2).

As well as Artaud, many directors and scenographers in Europe experimented with projections and elements from the cinema in a way to expand the theatrical experience to the crowd. In 1930 Jirí Frejka and his decorator Frantisek Tröster experiment with projections in their scenography. In those years, Eastern Europe theatre was well known for being very experimental. This influenced two of the most visionary scenic designers of the last century, the Czech Josef Svoboda and the French Jacques Polieri. They both had a vision of transforming the set into a kinetic and luminous space. Svoboda as technical director of Prague's National Theatre, was able to transform the decoration department into an *experimenting lab* in which he hired optical engineers, chemists, projectionists and electro-acoustic specialists with whom he was able to explore different kinds of materials and their

reactions to light. On the other hand, Polieri experimented with the language of the play itself. In his version of "Une voix sans Personne" de Jean Tardieu in 1955, he created a scandal by not putting an actor in the set, he used just their voices and then played with lights and shadows to recreate the action. In "The Steps" and "Intérieur" he replaced actors with their projected images. In his version of "La sonate et les trois messieurs" he worked with the experimental filmmaker Hy Hirsch. Here they used projections of the actors and placed them in front of the actors themselves, creating an uncoordinated effect between them and their own image and sound. But his real goal, was to achieve his project *Théâtre du mouvement total*, which he presented in the 1970 World's Fair in Osaka, Japan. His idea was to create a 360 degrees theatre in which the actors and the audience were able to move in platforms. In the walls he will project images all around. The platforms will move with the ongoing music giving the crowd a full spatial immersion in the spectacle. This project stayed without realization. ■



JACQUES POLIERI
Models and Illustrations
"Théâtre du mouvement total"

(2) *Autour de Jacques Polieri - Scénographie et Technologie; Bibliothèque Nationale de France, 2004; p.35*

The Origin of Rock and Roll

The real origin of Rock & Roll has always been in debate by historians of music. It is sure that it comes from the southern regions of U.S. and begun principally from the cultural exchange between the black and white races. It begun as a mixture between blues, jazz, country, folk, swing, etc. but it's for sure a product of this cultural collision. In the 1920s and 1930s swing bands were very popular in dances balls. They are believe to be the first notes of what we can consider *Rock and Roll*. They emphasis the solo-riffs a key part of *Rock and Roll*.

Radio stations started to diffuse black music as well as white music. Radio disc jockeys

shows became popular such as Hunter Hancock's "*Huntin' with Hunter*" which mixed blues, jazz and spiritual with rhythm and blues. In 1951 the disc jockey Alan Freed in his program "*Blues for Moondog*" introduced the country music to these type of shows, three years later the show changed its name to "*The Rock and Roll Show*". But as the develop of rock and roll was an evolution and a mixture of different styles, nobody can say which is the first song or the first album of Rock & Roll. *Rolling Stone* magazine wrote "*It was a way of distinguishing the new rhythm and blues from just plain blues and the old corny Mills Brothers style*" ⁽¹⁾. ■

The Rise of Concert Lighting

Rock and Roll concerts in the U.S. started as an expansion of the music business. In the 1950s, independent record companies in U.S. were managers, producers and owners of musicians and their music. In a way to gain more money they came out with the idea of concert touring. Which was basically go to every town which had a Town Hall or Theatre and place a show as swing bands did before in the 1930s and 1940s. This way they get money from selling tickets and stimulate record sales. But this venues didn't use to have lighting or sound equipment for a music show. So, usually the band had to carry their own equipment. By the 1960s

(1) *Concert Lighting - Techniques, Art and Business; Dr. James L. Moody Ed.D - p. 5*

this practice became common and once the artists got used to carry heavy sound equipment, lighting soon will follow. But just basic illumination for places where were needed not for special lighting effects. In mid 1960s Harry Belafonte was one of the first artists how carry their own lighting equipment.

Light shows appear spontaneously in the mid 1960s as response to the acid rock scene in *San Francisco, California*, which include such names as *Jefferson Airplane* and *Big*

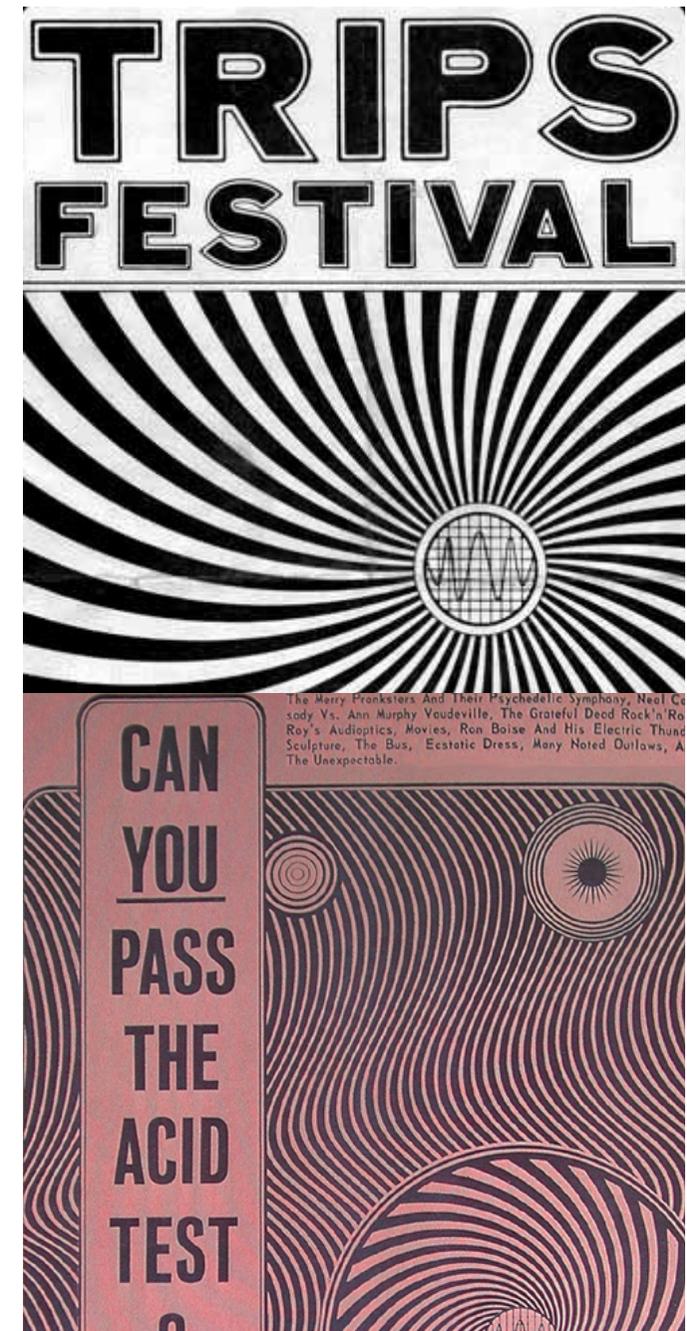
“...he’d ask -
“What are you talking about?”

They would reply
- *My screens; I’m a liquid projectionist”.*”

Brother and the Holding Company. During their concerts, people just started making “*happenings*” that were not planned; this may include dances, painting, films, etc. *Bill Graham*, which later on become the producer of the famous “*Trips Festivals*” in 1966 at *Longshoremen’s Hall*, said that people would show up and ask if they could hang sheets on the walls, and he’d ask, “*What are you talking about?*”. They would reply, “*My screens; I’m a liquid projectionist*” (1).

The Trips Festival was an multimedia experience at Longshoremen’s Hall in San Francisco, California, in January of 1966. The idea was to create an “*America Needs Indians*” event, this was the image they sell to the media, but the real purpose was to make people live a “*LSD experience without LSD*” (2). Among the organizers there was a group of people called the Merry Pranksters, they were known for promoting the use of psychedelic drugs. To accomplish this, the organizers gathered a

group of local musics, visual artists, performers, dancers, painters and every branch of the arts to perform for a hole weekend inside a theatre. The result was one of the most immersive three-day experience ever and marked the beginning of the Summer of Love and the Hippie Era. It combined the music, the performances and the dances with the lights, movies, visuals and costumes. They had a closed-circuit TV connection, hidden cameras and monitors



(1) *Concert Lighting - Techniques, Art and Business; Dr. James L. Moody Ed.D - p. 5*

(2) *Acid Test Chronicles - Page 17 - Trips Festival 3-Day Acid Test - www.postertrip.com*



everywhere. This in addition to the electrical boxes needed for the lights, projections and sound equipment, it created an *Sci-Fi* scene from other dimension. There were strobe lights, black lights, liquid projections, street lights at every entrance flashing red and yellow, two bands, the *Grateful Dead* and *Big Brother and the Holding Company*, dancers, people in costumes as spacemen. It was the first multimedia experience which combined lights, drugs and rock music.

After this, Graham rented the *Fillmore Theatre* at San Francisco and started arranging concerts for individual bands. He welcomed light performers, who made this for free and started paying for light shows that he could control. The shows were based on liquid light projections, strobe lights, black lights, all elements that created a special mood in which the audience, the music and the band were immersed. They projected their lights into everything they could: walls, screens, dancers, even the audience and the band. Graham wanted to give the audience a great experience. He encouraged this designers to experiment even more with their tools, all in a way that will create a better mood for the show. His goal was

to provide the better experience for the audience.

The *Grateful Dead* was one of the bands that encourage light projection in their shows. Their frontman *Jerry Garcia* said: "People just started doing things, we just played and things happened. If it felt good we'd say do it next time" *Graham Autobiography* ⁽³⁾. By this time, many groups of artists and technicians were formed providing the services of liquid projections to TV Shows, movies (*Midnight Cowboy*) and concerts. For the creation of these projections they used a horizontal projector and two pieces of glass with dish form. One glass was placed on the projector and filled with various oils, alcohols and waters, colored with dye. The other dish was gently placed on top of the mixture and then 'squashed' in time with the music. When projected on a 20 ft. x 20 ft. rear screen behind a performer, the effect was spectacular. It looked like a giant, kinetic, dancing blob constantly changed in color, complexity and form. *The Pablo Light Show* and *The Joshua Light Show* were two of this groups from New York which performed at the Fillmore East in New York, the east coast response to the club scene of the Fillmore Theatre in San Francisco.

(3) *Bill Graham Presents: My Life Inside Rock And Out*; B. Graham, R. Greenfield; Da Capo Press; 1st Ed; May, 2004 - p. 232

FRANK ZAPPA AND THE MOTHERS OF INVENTION

JOSHUA LIGHT SHOW | New York City 1967



Joshua White, one of its creator noted: "Kip Cohen always said that the reason the light show worked so well was that musicians didn't realize that people had eyes as well as ears" (4).

Inspired by the music young artists start creating visual experimentation with materials where they could find anywhere. They used the same projector as the ones that teachers used in schools for their classes and try to imitate White's experimentations. *They were trying things that no one had ever tried before (5).*

In the UK, bands were playing in community halls and schools assembly rooms where there were no stage lighting. *Michael Tait* who was a roady for the band *YES* in 1968 and how had studied electrical and mechanical engineering, started building light equipment especially made for the bands specific needs. But the development of lighting was slow in England because of the costs. Tait said: *"We were taking light bulbs and putting them in coffee*

cans". He mentioned getting 12 automobile fog lamps, attaching them to a piece of pipe, and connecting them to wire-wound potentiometers to make mini-dimmers (6). At the *Marquee Club* In London, Tait begun his experimentation with light effects. He just used the switches on the wall, which controlled a red a blue light above the stage in a *YES* presentation, and coordinated the lights and the music. In U.K. the audience was not as big as in the U.S. and there were few bands who were interested in light shows, *Pink Floyd* and *The Who* among them. *Pink Floyd* use to play with *Liquid Light Projectors* and *strobe light* to create moving shadows at the back of the band (7). This will give the desirable environment for their music. Afterwards they will associate with light artist *Mike Leonard* who developed many types of light projection machines for their shows.

When the *Spectrum*, a sports arena in Philadelphia, was opened for concerts in the

(4) - (5) - (6) *Concert Lighting - Techniques, Art and Business; Dr. James L. Moody Ed.D - p.5 p.6*

(7) *Pink Floyd - Astronomy Domine, live; The look of the week, TV program, BBC1, 1967*



JUNE 16 · 17 · 18 · 1967

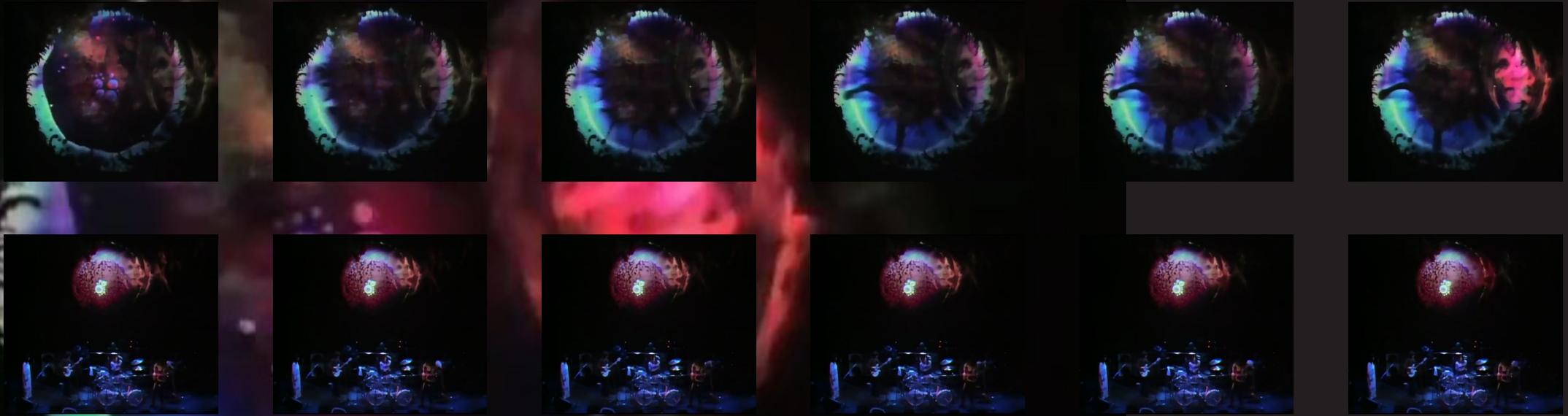


late 1960s, it changed the way things were done in live shows. Artists which demanded 5.000 or 7.000 seats started using this type of places. As the arenas were used for sports events, their sound and light equipment was very poor for concerts. This marked the beginning of portable light and sound companies which became necessary for these type of events. The *See-Factor* in New York is one of

the companies which began with the business and still does. In June of 1967, it took place the *Monterey International Pop Festival* in Monterey, California which gathered 55.000 people. It followed *Woodstock Festival*, officially the "*Woodstock Music & Art Fair*" in 1969 at White Lake, New York. The attendance went up to 500.000 people ⁽⁸⁾. The era of the music halls was ending and it gave birth to the era of the National

Tours. Bill Graham became a producer of several tours which included bands as *The Rolling Stones*, *George Harrison*, *CSNY (Crosby, Stills, Nash & Young)* and *Bob Dylan*. In this shows, he continued developing his idea of creating the perfect atmosphere for the public by giving them an astonishing sound and visual experience. ■

(8) "State Investigating Handling of Tickets At Woodstock Fair". *New York Times*: p. 45. August 27, 1969.



Jefferson Airplane - Wooden Ships
Fillmore East 1970



PINK FLOYD - Astronomy Domine Unedited
BBC 1 1967



CHAPTER 2

The Rock Icon

The Birth of Teenagers

The definition of "youth culture" given by Carles Feixa in his book *"De Jovenes, Bandas y Tribus"* ("Youth, Bands and Tribes") says: "the social experiences of young people are collectively expressed by building distinctive lifestyles, located primarily in leisure time or in interstitial spaces of institutional life" ⁽¹⁾. As young people live under the guardianship of the "adult institutions" (family, schools, etc.), they don't have real power towards the big decisions in their lives. Because of this, they establish their own "sub-culture" where they can apply their own rules and ideologies. Sub culture because it is under the macro culture or society in which we

live. In a way to grow up, they need this autonomy which will help them to defy their position in society. This "micro-societies", as Feixa says *are found in an specific time and place and have been principally developed in the countries of the western hemisphere and europe after WWII due to the economical, ideological and social changes* ⁽²⁾.

The construction of these societies usually take place in common places as neighborhoods, schools, clubs, street and places where they have fun. Here, young people meet with each other and start to identify themselves with others that have their same behaviors or background, they share common values or memories. This can be due to their social conditions; social class, territory, ethnic group or gender, or due to their cultural images; arts, music, society or fashion. They are commonly recognized by the public attention and start been label by the mass media.

After the *Second World War*, mainly in the U.S., economic conditions were stable. Young people didn't have to worry about any war, economic depression or any other situation of the "adult world" as previous generations did. They had the time to hang out, have fun and spend money. The term "teenagers" started to

be recognized. All under a strict supervision of the conservative society of the time. By gathering together in the already mentioned common places they started to develop their sub-culture sharing their experiences and tastes.

With their money power, the started consuming a lot of music, specially the brand new Rock & Roll artists such as *Chuck Berry, Little Richard and Elvis Presley*. This type of music was consider by the adults as non suitable for children for the "sexual content" of their lyrics and loud sound. This defined the first "generation gap" between parents and their children in the 1950s and 1960s. As *Dr. S. Akhilesh* says in his article "A Sociological Analysis of Generation Gap" referring to the veterans of the WWII: "*The veterans, being slightly tough in nature, naturally detested the youth, who were highly influenced by the introduction of the rock culture*" ⁽³⁾. The teenagers started being identify with the new Rock and Roll scene, their look and attitude. They started to look up to these new rockstars rather than their parents. It took place the first *teen-hysteria* and by that the establishment of the new *Pop Idol* and the "Fan", as is the cases of *Frank Sinatra, Paul Anka and Elvis* and later on *The Beatles*. ■

(1) - (2) *De Jovenes, Bandas y Tribus; Carles Feixa, Editorial Ariel S.A. Barcelona, 2da edicion Marzo 1999*

(3) *A Sociological Analysis of Generation Gap; Dr. S. Akhilesh; Research Journal of Arts, Management & Social Sciences, Volume-VII-I, Year-IV, September, 2012*

Idols and Subcultures

"The dictionary defines idol as:

- 1. An image used as an object of worship.*
- 2. One that is adored, often blindly or excessively."⁽¹⁾*

Let's concentrate in the first definition *"An image used as an object of worship"*. The musical artist develop its image throughout his performance. He shows his intimate emotions in the stage and expresses what he feels through the lyrics. As he develop his carer, he creates an image that represent who he is, what is his message. As I already mention, in the 1940s and 1950s, young people follow what was stablished by the society of the time. But *Elvis Presley* had a great influence in the youth of the time. His popularity was founded on his transgressive position with respect to racial and sex-

ual boundaries, his dance moves and attitude. This represented the difference of opinion between adults and teenagers. The bew generation found an new leader, an Idol in which they can look up. His clothing came to be seen as embodiments of *rock and roll*. He became a national phenomenon and teenagers came to his concerts in unprecedented numbers. They copied their dance moves, hairstyle, and clothing.

In the beginning of 1966, the *"Hippie Era"* begun. Musicians started to use long hairs, the *Trips Festivals* and all the hippie culture started

to spread throughout America and Europe. The same boys and girls that were born due to the young males returning from the WWII, the so called *"1940s Baby Boom"* (which was a dramatic increase in births in EEUU between 1946 and 1964) ⁽²⁾, were the great consumers of music in the 1960s. The started following these movement that was talking about politics, criticizing societies standards and demanded a new world without wars. Unlike the 1950s, a complete ideological, cultural, sexual and aesthetic rebellion occurred. Male started to use long hair and wide clothes. It begun a search

(1) www.thefreedictionary.com

(2) *Concert Lighting - Techniques, Art and Business; Dr. James L. Moody Ed.D - p. 3*

for the origins of men, a connection with nature the real core of existence. The use of hallucinogenic drugs helped in these search; LSD, mushrooms, etc. And they develop a new kind of artistic experience, the already mentioned *Trips Festivals*.

Musicians started a search of their own motivations, a more artistic approach to music making. We can see this clearly in the change of *The Beatles* between 1965 and 1970. It begun the recognition of the musician as an artist, not as an entertainer who is just there for selling records. This created a different way in which musicians wanted themselves to be seen by the audience, the record companies and people in general. They started provoking the conservative society with statements against war, politics and mass consuming. Lyrics started to be related to what was happening in the world. Music, as an art form, was reclaiming its right to criticize society.

It was at this point where music started massively influencing the audience in the way how they see the world that surrounds them. Rock became a voice for people. The *Hippie counterculture* promoted their own ideology and way of living. This influenced a whole new generation of teenagers who started to follow

their idols in the way they look and in their way of thinking. Many of their leaders started creating their own way of living and started living in communities. Many young people followed them blindly.

The *Baby Boom Kids* didn't wanted to look like their parents, they wanted their own independence, they needed other figures to follow and this rise of musical iconography came just in time for them to consume. As young people develop, they look for idols to admire and follow. They are in a personal search of their own personality as they became aware of their own identity. But they imitate only what are their interests, idealizing and not considering the reality.

The second definition of *Idol* is: "One that is adored, often blindly or excessively". An excessive admiration would be consider negative or even an obsession or sickness. There are certain kind of people in which the fanaticism exceeds rationality. It was the case of certain groups during the *Hippie era*. Even now we are able to see people who devoted their life to worship an artist as if they were a religion. They suffer their losses and cherish their joys



PINK FLOYD

"THE WALL TOUR" 1980-81

"Goodbye Cruel World"

without even know them in person. They even put in risk their financial or family situation in function of fulfilling their fanaticism. This type of fanatic could be seen in many sorts of fields: music, sports, movies, TV, literature etc. The figures that they follow can be real or fictitious. They admire the qualities that they would like to have but they don't. They reflect their own personality in their idols to have a sensation of self confidence.

This adoration or "appropriation" of the Idols statement is sometimes misunderstood by the Fan. As he takes what is his main concern towards the message of the artist, he creates a wrong path to follow, away from what the artist was trying to communicate. This was the case of Pink Floyd before "The Wall".

By that time they had become a major success band which crowds will follow and create myths around their concepts and songs. Usually the people that went to their concerts

wanted to have a "trip" experience and associated that to party and drugs. Roger Waters became frustrated and angry with Floyd's Fans and their attitudes in concerts. In the documentary "Behind the Wall" they said:

David Gilmore - "quite a lot of the people who came, came not necessarily for the music, they came for the elements of the show and the party that goes with it."

Roger Waters - "it was full of souls who were shouting and screaming all the time... I just arrive to a point when I didn't want to do this anymore."

Nick Mason - "what we were doing and what they thought we were doing or what they thought they were coming to see was so different".⁽³⁾

This frustration with their fans and what they were provoking in themselves was one of

(3) PINK FLOYD: Behind the Wall, Documentary; Sonia Anderson; April 2011

the factors that created an idea of being completely isolated from the audience. So in 1979 they took the concert performance to another level in the tour of their most emblematic LP, their double album, *"The Wall"*. The primary concept was to construct a gigantic wall between the band and the audience and for half the concert, play without been seen. With his desire of alienate himself from the public, *Roger Waters* reject the presence of the spectator from the artistic performance of the band, forc-

the song, they fully disassociate the band from their fans. This was an action took by the artists which changed the role of the spectator and the role of the artists themselves, in relation to the artistic performance.

It is true that behind these, the industry has found its way to commercialize and create a dependent consumer based in what people desire to be or become. They constantly show us iconic music, fashion or movie figures in

the movement now were rich rockstars. According to *Ramones* drummer *Tommy Ramone* - *"In its initial form, a lot of (1960s) stuff was innovative and exciting. Unfortunately, what happens is that people who could not hold a candle to the likes of Hendrix started noodling away. Soon you had endless solos that went nowhere. By 1973, I knew that what was needed was some pure, stripped down, no bullshit rock 'n' roll."* ⁽⁴⁾ Youth movements were starting to be consider part of the natural society and part

"By 1973, I knew that what was needed was some pure, stripped down, no bullshit rock 'n' roll."
- *Tommy Ramone*

ing them to change their position and transforming them into viewers of just the artistic work: the music and the visual experience. The Fans interpreted the music in a different way as the band did, so their work became the art and they as creators choose to exile their image from the attention of the audience. In fact, in the live performances of the first song of the album, *"In the Flesh?"*, a band of backing musicians wearing masks to make them look like the real members of *Pink Floyd* were playing

marketing campaigns selling an ideal of what would we become by consuming this product. And from the beginning of the music business, the using of the artist as iconic figure has been the base of the consuming society.

By the late 1970s, rock was included part of the mainstream consumer society. The days where the hippie movement fight for their political rights of been against the system were over, and many of the musicians that started

of the consuming industry. But as their predecessors, the *Punk* movement was ready to demonstrate its disagreement to the economic situation in the UK and to the dominance of corporate-capitalism in U.S. As all subcultures, *Punk* did it in the way it should, by shocking society, braking up stereotypes, and being disident to the mainstream but most of all, anarchy. As all cultural movements, its intention was to provoke. *Punk* was against everything that society stablished and considered appro-

(4) *Tommy Ramone interview "Fight Club"; Uncut MAGAZINE; January 2007*



priate. It did an statement by its fashion and image. They took elements of others subcultures and art movements, including *glam rock*, *skinheads* and *greasers*, combined them and crated their own unique style. They Purpose-ly ripped clothes and held together by safety pins or wrapped with tape or girls would combining a ballet tutu with big, clunky boots. All of this to criticize the stablished society. It was an ongoing performance. But as all previous subcultures, punk also began to be part of society. *Like their subcultural predecessors, early punks were too dependent on music and fashion as modes for expression; these proved to be easy targets for corporate coöptation* ⁽⁵⁾.

Some consider that with the end of punk, the classical *subcultures* ended. No one anymore fight for their own believes towards society and culture. By *subcultures* I refer to the definition of cultural anthropologist *Dylan Clark*: "*groups of youths who practiced a wide array of social dissent through shared behavioral, musical, and costume orientations*" ⁽⁶⁾. But as the last of the subculture was transformed into a stereotype, youth movements were been immerse into the consuming society. Rock became once more a product until the next rebels claim it as their voice.

After the Punk scene, in the beginnig of 1980s a new generation of rock bands ap-

peared. The *post-punk* era bread new musical movements and styles. All the influence of *rock*, *disco*, *punk* and *electronic music* created a visual universe in which 1980s teenagers could fly. The *New Wave*, the *Synth Pop*, the *Gothic Rock*, the *Heavy Metal*, the *Glam Metal* among others appeared. Each kid founded itself into a different group. The musical evolution of the 1970s and the development of mass media, opened the range of music and styles. As TV became the dominant way in communication the *image* became even more important than the ideology. In 1981 *Mtv* appeared, and with it, the visual music, the videoclips. ■

(5) - (6) *The Death and Life of Punk, The Last Subculture*; *Dylan Clark*; *David Muggleton and Rupert Weinzierl (eds.), The Post-Subcultures Reader*; *Oxford: Berg. pp. 223-36; 2003.*



SID VICIOUS
Sex Pistols



JERRY ONLY
Misfits



THE BEATLES
1962



THE BEATLES
1970



CHAPTER 3

T h e
C o n
c e r t
E x p e r i
e n c e

Theatrical Concerts



During the 1970s, the image of the band became an important element for their identity and for marketing. *Progressive Rock* bands placed a lot of attention on the album cover artwork while they develop the idea of theme/concept album. Their lyrics tended towards philosophical idea. By their performances, they intend to extend their show and provide a *trip* to the audience as well as the hippie rock intended in the late 1960s. This was very common in the new European *Progressive Rock* movement with bands such as *Pink Floyd*, *Yes*, *Jethro Tull* and *King Crimson*. They started experimenting with light and projections in a way

to create a unique environment. But the artist who was able to perfectly mix concept, music and image was *David Bowie* with his alter ego *Ziggy Stardust* in the concept album "*The Rise and Fall of Ziggy Stardust and the Spiders from Mars*" in 1972.

Bowie was able to create one of the first visual icons in Rock and Roll history. Influenced by the energy of *Little Richard*, the *theatrical chanson* of *Jacques Brel* but mainly by the world of *Andy Warhol* and *The Velvet Underground*, he created a unique show like no one before. Mixing theatrical performances, kabuki and mime theatre, dancers and the galactic costumes of an "*alien rockstar*" he created a worldwide phenomenon. This androgen alien was the beginning of the "*glam rock*" or the "*glitter rock*" movement which was exactly the opposite of what was the rock scene by that time, the leftovers of the *hippie era*, jeans and long hair. Immediately hundreds of teenagers in England cut their hair as *Ziggy Stardust*. Bowie constructed an image from himself, a character who represented his evolution as an artist. By this he created a icon, an image, a new theatrical experience for his shows ⁽¹⁾.

Other bands such as *New York Dolls*, *Alice Cooper*, *Kiss*, and *Roxy Music* were influ-

(1) *David Bowie & the Story of Ziggy Stardust*; Documentary Dir. James Hale; BBC4; TV 2012



SCREAMIN' JAY HAWKINS



SCREAMING LORD SUTCH



ANDY WARHOL AND THE VELVET UNDERGROUND

enced by this kind of theatrical creation and started building characters among themselves. In the mid 1970s and based on the theatrical performances of *Screamin' Jay Hawkins* and his hit "I put an Spell on You", 1953, and british singer-songwriter *Screaming Lord Sutch* in 1964, *Kiss* and *Cooper* created the concept of "Shock Rock" which will be developed later on by *Marilyn Manson* in the late 1990s. It was called Shock Rock because in their performances they would mix costumes, masks, blood and other elements of horror. *Kiss*, well known for the creation of their particular char-

acters, use to have fire and blood in their performances. The 1976 "Destroyer Tour" was one of the first overtly theatrical sets to be taken on tour by a rock band. It was a 80 feet wide stage, designed to fit into large indoor arena's and stadiums. The idea being that different portions of the stage would thematically correspond to a different band member's stage persona ⁽²⁾. This new dimension of musical concept, a mixture of theatre, music, message and performances created a whole new look for the rock scene. There where costumes, make-up, haircuts, things that teenagers could make at

home and start playing as they were the band members. They where taking the image of their favorite artist as a representation of their generation.

In 1975, the *Rolling Stones* hit the U.S. with one of the the largest and most expensive production at the time. The *Lotus Flower stage* was the first tour with a lighting systems entirely rigged from the ceiling with no support towers. The design featured huge triangle shaped petals that were closed at the beginning of the show and would slowly open during the opening number. As they opened, *Mick Jagger*

(2) *Kiss Alive Forever: The Complete Touring History*; Billboard Books; 1st Edition; Sep. 2002



ROLLING STONES "TOUR OF THE AMERICAS '75" The Lotus Flower Stage

would be towards the top of the center petal peaking over into the audience as it lowered down revealing the band. The show would also featured an inflatable phallus, a confetti puffing dragon, and Jagger on a trapeze rope. At some of the major dates the audiences were treated to calypso dancers, steel drummers, a chinese dragon that would weave through the crowd, as well as billowing fabric drapes and blinking lights that arched up from the lighting truss and flew over the crowd. The *Rolling Stones* transformed the arena of the concert into magical Asian themed temples of rock

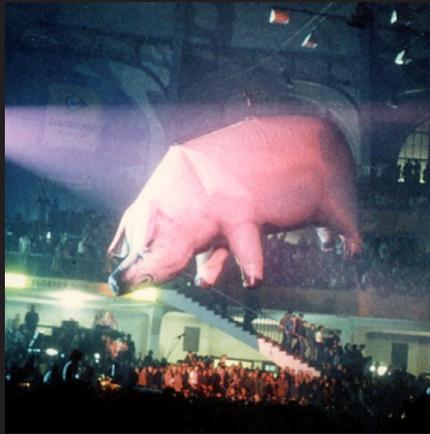
(3) www.concertstagedesign.com

and roll This tour marked the beginning of the Rolling Stones stage spectacle that has continued until this day (3).

As an artists, musicians started experimenting with all types of visual imaginary, sets, lighting and pyrotechnical effects in their concerts. Light begun very important as a way to unify this type of performance. The image, music and performance had only one goal, absorb the entire audience into the spectacle that the band is offering. Create a complete experience with the use of music and visual elements. One of the bands that was able to ac-

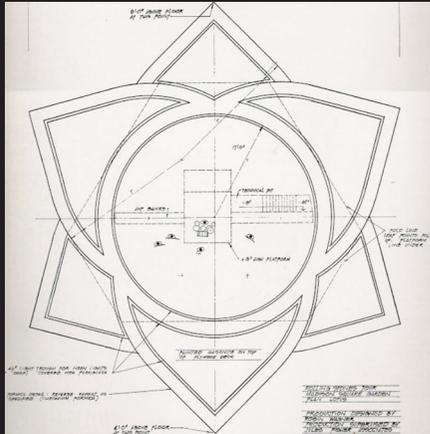
complished that throughout its carrer, was Pink Floyd.

The Floyds has been always a breakthrough in matters of technological and visual performances. They created a hole visual experience based on the concept of their albums. With the major success of "*The Dark Side of the Moon*" in 1973, Pink Floyd was able to finance a gigantic circular screen for their tour where they were able to project images and edited films which were synchronized with the music. This screen became an recurring element on Floyd's shows. Keyboardist *Rick Wright* said in



PINK FLOYD "IN THE FLESH" TOUR 1977

PINK FLOYD "THE WALL" TOUR 1981



ROLLING STONES "TOUR OF THE AMERICAS" 1975



IRON MAIDEN

KISS

an interview "People always expect the Floyd to come up with something different, new and better, when its comes to visuals" ⁽⁴⁾, they were one on the first band to use pyrotechnics in their concerts. Later in 1977 with their "In the Flesh Tour" they introduce gigantic inflatable animals which represent the characters of the "Animals" album, based on *George Orwell's* "Animal Farm" and other characters. These balloons have lights inside which turns on their eyes and the pig balloon would become an icon of all of their concerts.

Unlike Bowie, Pink Floyd created a hole visual concept around the band and the show,

not around themselves. They used to play dressed up like common people, they used long hairs as was the way of the style of the 1970s. No makeup nor costumes, all their imaginary was focused in the show for the people, only the music and the concept of the album. But one of their major achievements was the performance of "The Wall" in 1979. In these tour, the whole arena became a theatre. They used gigantic puppets which represent the characters in the story, pyrotechnical effects, their traditional circle screen with mechanical light around it and even an airplane crossed the sky over the audiences heads and strike one part of the gigantic wall that was been constructed in front of the band. Pink Floyd created an hypnotic effect in the audience by their use of the ultimate technology in lighting a theatrical effects which leads the spectator to completely focus on the music experience.

The theatrical concert took a huge development throughout the 1980s. As the *image* took a disproportionate importance the band tried to be one more spectacular than the other, specially in the *Glam Metal* movement which was the most popular genre at the time. Bands such as *Mötley Crüe*, *WASP*, *Poison*, *Bon Jovi* and *Twisted Sisters* use to have

PINK FLOYD "IN THE FLESH" TOUR 1977

PINK FLOYD
"IN THE FLESH" TOUR 1977

(4) www.concertstagedesign.com

pyrotechnics, lasers, fire, flying people, gigantic machines and inflatable creatures. They invested everything that they could to give a "circus like experience" in their concerts. The heavy metal band *Iron Maiden* transform its mascot *Eddie* in a trademark of their shows. Every tour will include a different gigantic inflatable version of *Eddie* which appeared as part of the stage, and a puppet like smaller one, which appeared when they played their song entitled "*Iron Maiden*". In *Mötley Crüe's* shows, drummer *Tommy Lee* used to elevate his entire kit revolving and spinning, or having the entire kit float above the crowd while he continued to play.

The intention of give a astonishing spectacle remain until now. It is a way in which the artist connects with the audience. In a way an artist construct an image around him, he is capable to create a visual universe in which he introduces the crowd.



The Lighting Designer

In theatre there are 3 artists who basically are in charge of the look of the stage; the *Director*, the *Set Designer* and the *Lighting Designer*. The *Lighting Designer* or *LD* would work closely with the electricians to construct the lighting for the production. In meetings with the rest of the staff he elaborated the *Lighting Plot* detailing the position, color and type of all the lights that they are using. By these, the *LD* is able to create the illusion of different times of the day and locations. Also he is able to evoke feelings and different type of moods. He can focus the audience's attention in a certain point in the stage depending of the narration of the story.

Light design for a concert basically was born in the 1960s when the Trips Festivals and the psychedelic era took place. In the beginning they used the same type of equipment as theatre but as years goes by, they introduced *projections, strobe lights, black light, etc.* The techniques and equipment changed by the needs of the show. In theatre the main purpose of light design is to enhance the set and the performance of the actor. Stanley McCandless says in his book "A Method of Lighting the Stage": "the actor is the point of emphasis in the stage picture." ⁽¹⁾. In concerts, there are a variety of forms a light designer can create a show. The first key is to consider than the lighting show is there to complete the concert experience. This is an issue that's been in debate among *LDs* for many years. There are practically two currents defining its role:

1: Who think that the *LD* is an artist as well as the musician, so in a concert they should perform as if they are showing their own piece of art. Lighting designer *Kevan Shaw* believes in *Percy Corry's* view of theatrical designer applying it to a concert viewpoint, "the lighting designer became just as much

of an artist as the actor, doing with light-waves what the actor does with sound-waves"⁽²⁾.

2: The ones who think that light designing is a discipline that is only part of the show and it should be in direct link to the music performance. It is there just to complement the musicians role. As lighting designer *Paul Dexter* says "You are there to complement and add value to the performance, not become a member of the band"⁽³⁾.

Neither of these points of view are right or wrong. The role of the *LD* in a concert is what we may call the role of the stage designer in theatre. They use lights to create the set and delimit the areas in which the artist will perform. They design the looks in a space and create immaterial forms with the beams of lights, which gives three-dimensionality to the stage. They contrast and manipulates virtual spaces in a way to create the best atmosphere for each song and hide cables and sound equipment that are necessary for the show and are not so aesthetic. And basically they give the audience something to look at during the perfor-

(1) A Method of Lighting the Stage; Stanley McCandless, Theatre Arts Books, New York, 1958, p. 96

(2) - (3) A New Way of Light: Lighting What We Cherish; Max Mednik, Paper, Stanford University, California.



are very good elements to make light beams visible. They are very used to create special effects with lasers and even with projections. With these elements and the technical tools; strobe lights, fading colors, display images and patterns, programming lights, lasers, etc., it is possible to control different parameters, *Color, Pattern and Position*, LDs can actually "*design*" in the stage.

All these effects are very useful to create the needed environment but to use them effectively they need to recognize the "when"

and "what" of the moment. "When" is a theatrical moment which needs the focus of attention in the artist and "when" is a non-theatrical moment which requires an effects which supports the intention or the climax of the music. The "what" depends of the atmosphere that the designer wants to create. By the manipulation of colors, textures and shadows, the LD is able to create different type of atmospheres depending on the sensation he is trying to transmit to the audience. Which feeling does the music want's to express. Usually the choices are

very logical and can be seen in how light affects nature; red and orange tones are used for warm and happy moments, blue and lavender tones are used for cold and sadness. Evoking a feeling in the audience which complements the music is the LDs goal. He has to enhance the tension and excitement of the public by providing them with something visually stimulating. Kevan Shaw, scottish light designer how has worked in concerts, theatre, tv and architecture sais: "*Moving an audience with lighting gives me the greatest buzz, eliciting a spontaneous*



"OOOH" from three or four thousand punters is a truly empowering experience" ⁽⁵⁾. The mixture between light and music must emotionally excite the audience, "cue them to dance and sing, creating anxiety and rising tension" ⁽⁶⁾ as Francis Reid author of The Stage Lighting Handbook says. The lights in a concert have to create an astonishing effect in the audience for them to be amazed by the concert and consequently be amazed by the artist. LaFortune says: "if the lighting is aweinspiring, then too is the singer" ⁽⁷⁾. To increase this sensation the LD

has to introduce the audience into the show and for fulfill this task he has to worry not only in the light of the stage, but also in the light that hits the spectator. So if he is using one effect on stage, he has to replicate it to the audience as well. This will encourage the singing and the dancing and the excitement of the moment, the concert is for them.

Concerts have a variety of venues: theatres, bars, clubs, concert rooms, town halls, gymnasiums, sports arenas, stadiums, country fields, etc. All of them requires a different kind

of lighting. Some places has their own kind of lighting according to their specific function which can be useful for the concert (theatres, concert rooms and sometimes clubs) and others don't or their light is used in another type of lighting. For these, the light designer should be able to adapt to any situation in which he is required. Every time is a different place so is a different show, the LD must be prepare for last moment changes. ■

⁽⁵⁾ Rock & Roll: Lighting as a Performance; Kevan Shaw, KSLD technical articles, 1996

⁽⁶⁾ - ⁽⁷⁾ A New Way of Light: Lighting What We Cher-Ish; Max Mednik, Paper, Stanford University, California.

The New Experience

NINE INCH "LIGHTS IN THE SKY" TOUR 2008

NAILS

With the revolution of LED technology scenography have found a new and more economical and flexible tool for the creation of set design. Lamps began to be RGB LED made which gave the possibility to change their color without filters, LED screens became a recurrent element in all sets, sometimes replacing giant projectors. The size of the LED bulb gives an enormous flexibility in the design of luminaires and screens.

One of the bands that has remained at the forefront in the design of LED screens for their shows and by this revolutionized stage

design in their live performance is *Nine Inch Nails*. Since their "*Fragility Tour*" in 1999, they improve their audiovisual experience and started using gigantic screens that complements their industrial sound. In that opportunity they cooperated with video artist *Bill Viola* who created a video screen triptych made out of 3 LCD panels that would lower behind the performers to display light and video media. In the "*Live: With Teeth*" tour, art directed by *Rob Sheridan* and run by show designer *Martin Phillips* and set & system designer *Roy Bennett* the stage was a combination of LED panels, rear projec-



tion and video media. In their last tour "*Lights in the Sky*" in 2008 they used a giant three-layered LED screens around the band. One of the screens acted like a curtain made out of LED bulbs which was situated in front of the band. Its translucent property allowed the crowd to see the band behind the LEDs when they were illuminated. Other factor were the interactive real-time visuals that were displayed in the LED curtain. In a certain part of the show, as the front man Trent Reznor moved towards the screen, the animation spreads revealing the band that was behind. In other moment, one

of the musicians practically created sounds by touching the screen. This created an interactive light show which astonished the audience. *Trent Reznor* talks in a recent interview with music magazin *Rolling Stone* about the stage set-up for *NIN*'s upcoming live dates - "*I've always enjoyed the idea of presenting the band in an interesting way and paying attention to the production and stage design,*" *Reznor* said. "*It frames the music. And if you're paying to come see a show, I think you should be taken to a different place. It should be an experience not just for your ears, but it envelopes you.*" ⁽¹⁾

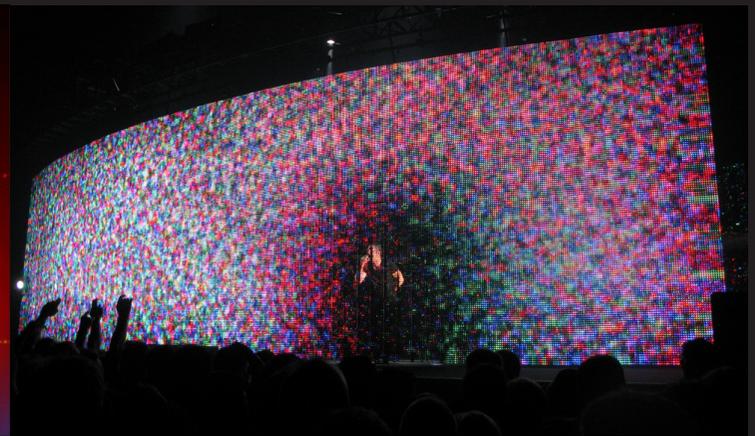
On 1992, *U2* came up with the *ZooTV* concept tour their first elaborately staged multimedia event. In a way to criticized media overdose they came up with a concept of a continuing *TV zapping*. The stage featured 36 video screens that showed visual effects, video clips from pop culture, and flashing text phrases. In addition to that they had seven *Trabants* (compact cars built in East Germany) suspended in the air which they used as spotlights and effects. With the set designer *Willie Williams*, *U2* has transform their concert shows into a mega tour multimedia experience which they take to

U2 | 360 World Tour 2008





NINE INCH NAILS | Live: With Teeth" Tour 2006



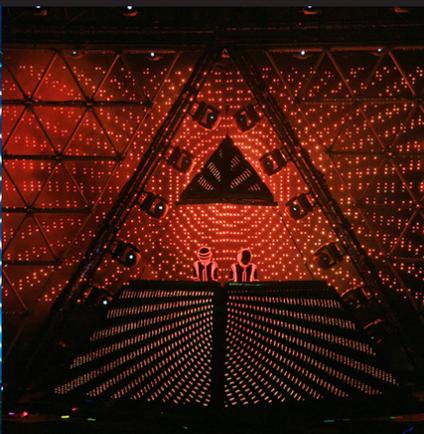
NINE INCH NAILS | "Lights in the Sky" Tour 2008



U2 | "ZOO TV" Tour 1992



U2 | "360" Tour 2008



DAFT PUNK



every place in the world.

In their *PopMart Tour* in 1997, they introduced a gigantic LED screen. *Mark Fisher*, the same designer behind *Pink Floyd's "The Wall"* and *"In the Flesh"* tours, proposed to spread the LEDs to create a bigger screen that covered all the background of the set: *It seemed that it might now be possible to create video pixels which could be deployed independently of a traditional support structure. The pixels might be attached to fabric to make a huge video curtain draped around the stage, or perhaps the pixels could be spread apart exploding the screen* ⁽²⁾. Fisher and Williams created the largest video screen in existence at that time. In their last *360 Tour* in 2009, U2 was looking for something unprecedented, a giant screen that could change its size and shape. *Hoberman*, along with U2's creative team, *Williams*, *Fisher*, and *Frederic Opsomer* of *Innovative Designs*, collaborated to conceptualize this fusion of architecture, stage scenery and extreme technology. They came up with a design for an elliptical video display, approximately the size of a tennis court that could morph into a 7-story high cone-shaped structure, enveloping the band as it extends.

As in theatre, projections and videos took an important part in concerts in both

senses, as a helpful method for the people that was far away to see the band and as an element of the stage. With the technique of projection mapping now the musicians are able to create their own set elements based on simple geometrical forms as squares or triangles. This discipline is particularly seen in electronic music scene. Often DJs and VJs work together creating new dimensions in their performances. Is the case of *Daft Punk*, *Kraftwerk*, *Murcof* and *Simon Geilfus*, *Rinôçérôse* and *Electronic Shadow*.

As this, there are hundreds of other band which have introduce LED screens to their concert tour as well as the traditional pyrotechnics, custom set designs and the new projection mapping technique. All these to immerse the crowd into an astonishing voyage of light, sound and images.

(1) "Trent Reznor Looks Ahead to New Nine Inch Nails LP" By Jon Blistein, www.rollingstone.com, June 25, 2013

(2) U2 Show; Diana Scrimgeour; *Riverhead Hardcover*; 1st Ed.; Oct, 2004; p.126

Conclusion

With the revolution of internet, music industry had to develop itself to the creation of "the concert" as an experience. Musicians had regain their status as artists that have to perform in front of an audience. For them and for their crowd they have to develop a visual language in order to give an audiovisual experience. An experience that has to fill the audience with energy and emotions. Break the boundaries of the set and immerse them into the experience of the concert.

Throughout history, different artists from the scenic arts tried to expand the scenario

in a way to give the audience an immersive experience. We've seen that light can be manipulated to create spaces and environment and change the perception that the spectator has of the set. In a concert, light constructs the image that follows the musical experience. The senses have to be stimulated in order to involve the crowd into the show. The sight should be as important as the hearing to achieve this goal. As the spectators are sentimentally connected to the music, the stimulation of the sight closes the triangle of sensations that they need for having an unforgettable, collective experience: feeling, hearing, seeing. By this they will

not forget the concert and they will never forget the artist.

The musician need to construct a visual imaginary to transmit his message. By this he will be able to gather Fans around him, which will help him to construct his career. Sometimes, this image is created to achieve commercial success. The music and style become an image, a look that gives status to the teenagers in their own micro society. This creates a new target which develops a commercial market around the artist. In other cases the artist try to provoke changes in society and they use

their music to spread their ideas. Ideas which will represent the discontent of a whole generation that is living under the world of their predecessors. This makes people identify themselves with their message and create revolutionary movements according to their ideas of a better world. In some cases these subcultures have gained enough strength, which made them being able to make changes in our society. Other artists try to give experiences to the people. Make them use their senses to travel to different worlds and different emotions. The teenagers take these elements and create their own version of the message that the artist transmits, in order to develop their personalities. They create the "Fan" that will follow the ideology, the emotion and the style behind the music. By identifying himself with others teenagers, he is able to share collectively this fanaticism in a concert. Instances which they acclaim the artist elevating him to a status of an idol.

This collective experience is what differs a concert from other manifestations of scenic arts. Unlike theatre, opera, dance and cinema, the ritual of the concert enables people to hear music together and express their feelings by dancing and singing along with the artist. This

immediate feedback, encourages the artist to perform and transmit his energy in the stage, to create a unique experience for their "fans". Because without them, without the people that follow him and listen to his songs, they wouldn't be able to rise as an artist. The "fan" deserves the best experience in their concerts. This is why light for concerts has developed differently than in the other scenic arts. It has to intensify the scenic presence of the artist in stage, but also, it has to involve the audience into the sonic and visual environment. The uses and purpose of light in a concert, now differs from theatre and opera; it has used the technological development of other fields to enhance the visual sensation, such as projections, lasers, LEDs and screens. The concert now mixes the language of cinema, theatre and dance in order to captivate the audience. The goal is to expand the energy out of the set and into the spectators' domain in a way to immerse them into the interactive experience of a concert. To achieve this goal, light and all its uses (projections, lasers, etc.) are the best tools to achieve this. ■

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