



THE IMPACT OF ARCHITECTURE AND DIGITAL TECHNOLOGY ON GEORGE TSYPIN'S THEATRICAL WORKS

“An Analysis of the West Side Story and Spider-Man Turn Off the Dark”

أثر العمارة والتكنولوجيا الرقمية على أعمال جورج تسبين المسرحية

دراسة تحليلية لعرض West side Story وعرض Spider-Man Turn Off the Dark

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ABSTRACT

The research aims to emphasize the integrated relationship between theater and architecture and to study the concept of deconstruction at Jacques Derrida and deconstructive architecture and its impact on the plastic vision of the designer (George Tsylin). Also knowing the materials and modern techniques he used to express his vision, the mechanical transformation of theater and the importance of digital technology in theatrical performances and its spread in postmodern shows. The research method relies on a descriptive analytical approach for the most important performances of (Tsylin) affected by postmodern architecture. And it appears in his designs that he was influenced by the pioneers of deconstructive architecture (Frank Ghery) (Daniel Lepskind), He created a form of sculpture based on theoretical foundations, concepts and models that can exist independently as works of art itself and the ease of mechanical transformation of the theater and its use of technology and multimedia.

KEYWORDS

George Tsylin; deconstructive architecture; stage sculpture; Digital technology.

المخلص

يهدف البحث التأكيد على العلاقة المتكاملة بين المسرح والعمارة ودراسة مفهوم التفكيك عند جاك دريدا والعمارة التفكيكية وتأثيرها على الرؤية التشكيلية للمصمم (George Tsylin). أيضا معرفة الخامات والتقنيات الحديثة التي استخدمها للتعبير عن رؤيته، والتحول الميكانيكي للمسرح وأهمية التكنولوجيا الرقمية في العروض المسرحية وانتشارها في عروض ما بعد الحداثة ويعتمد منهج البحث على منهج وصفي تحليلي لأهم عروض (George Tsylin) المتأثرة بعمارة ما بعد الحداثة.. ويظهر في تصميماته تأثره برواد العمارة التفكيكية (Frank Ghery) (Daniel Lepskind), لقد خلق (Tsylin) شكل من أشكال النحت مبنية على أسس ومفاهيم ونماذج نظرية التي يمكن ان توجد بشكل مستقل كأعمال فنية مؤثرة في حد ذاتها وفي تصميماته سهولة التحول الميكانيكي للمسرح واستخدامه للتكنولوجيا والوسائط المتعددة.

الكلمات المفتاحية

جورج تسبين؛ عمارة تفكيكية؛ النحت على خشبة المسرح؛ التكنولوجيا الرقمية في المسرح؛



INTRODUCTION

Postmodernism came and rejected the traditional perception of knowledge and its artistic revolution against traditions and classic methods in art and architecture, breaking all restrictions and opening new horizons in a bold way in thought and design.

Technology also provided many solutions and alternatives and helped enrich the artistic creativity of artists and designers. Postmodernism and digital technology have affected architecture, and since architectural styles throughout the ages have affected theater designers, they have had a significant impact on the development of theater decoration.

The digital equipment and devices that theater-pioneers used in the performances made it possible to present many designs and to develop alternatives and innovative solutions, whether by deletion,

RESEARCH PROBLEM

Architecture, arts and technology have given a wide scope for many innovations and creativity in theatrical design, especially in the post-modern stage, where the entry of digital technology in all fields and in turn affected theater designers.

The work of the sculptor, architect and theater designer George Tsypin is a fertile model for studying the diverse and distinctive styles of theatrical performances that combined sculpture and architecture with technology on stage.

RESEARCH AIMS

Emphasis on the integrated relationship between theater and architecture

- A study of the intellectual and visual features of the postmodern period and the concept of deconstruction at Jacques Derrida
- Deconstruction architecture, its most important pioneers and its influence on the plastic vision of designer George Tsypin, his artistic career and visual background
- Knowledge of the materials, modern techniques and digital technology he used to express his vision, and the mechanical transformation of the theatre X

RECOMMENDATIONS

Understand the need to rely on academic scholars to produce contemporary theatrical performances.

- Inspiration from plastic arts and architecture as a reference in theatrical designs.
- Relying on digital technology in contemporary theatrical performances.

RESULTS

- Employment of the designer George Tsypin in sculpture and architecture on the stage.
- The use of digital technology in theatrical performances and its spread in postmodern performances, especially the performances of designer George Tsypin.

RESEARCH METHODOLOGY

The research method is based on a descriptive and analytical approach to the most important presentations of George Tsylin influenced by postmodern architecture.

1- DECONSTRUCTIVE PHILOSOPHY AS AN INTELLECTUAL MOVEMENT IN THE POSTMODERN PERIOD

In the twentieth century, deconstructive philosophy appeared at the hands of the French philosopher Jacques Derrida, and it is one of the intellectual movements of the post-modern period to read literary texts. This theory on all aspects of intellectual life and in the field of literary and plastic arts sought to dismantle the elements of artistic work.

Deconstruction philosophy

It is an advanced stage of the constructivist school. The deconstructive school appeared as a natural reaction to the development of the constructivist method. This trend is called dismantling, as this trend represents the methods of crushing, asymmetry and imbalance and depends on dismantling the blocks into parts and re-installing them in an unconventional artistic way. It may be more evident in architecture and buildings such as the Jüdisches Museum Berlin by Daniel Libeskind. That is raised on a base with a zigzag refracted line, and the horizontal projection has a refracted shape with six acute angles in relation to the six-pointed star of David (figure1)



Figure 1 The Jüdisches Museum Berlin, by Daniel Libeskind.
<https://www.berlin.de/museum/3108776-2926344-juedisches-museum-berlin.html>

Also, the Museo Guggenheim Bilbao by Frank Ghery (figure2) The curves on the building appear irregular, as Frank Ghery said, "They were designed to reflect light." When it was opened to the public in 1997, it is one of the deconstruction buildings.



Figure 2 the Museo Guggenheim Bilbao by Frank Ghery.

https://de.wikipedia.org/w/index.php?title=Datei%3AGuggenheim_museum_Bilbao_HDR-image.jpg&filetimestamp=20091128195908

2- FEATURES OF DECONSTRUCTION

Breaking down the differences between painting and sculpture and re-mixing them in an architectural crucible, and the functional direction can be felt in it, but it is limited to the expressive value of the creation.

Rejection of cases of decoration and confining the aesthetic value of the building to what is shown by the formal relationships of volumes, blocks and spaces, as shown by the construction data.

- Using new materials such as metal, glass and plastics

Deconstructive philosophy affected architecture, from which it moved to the theater, not only as literary texts, but also on the theatrical scene and all the elements of scenography. One of the most important features of postmodern architecture is that it devoted its efforts to making the most of technological development. As the architectural styles draw from the theater designers in the design treatments of the theater, we find the sculptor and architect and theatrical design engineer George Tsylin among the American designers most influenced by the deconstructive philosophy and deconstructive architecture. His designs are influenced by the pioneers of deconstructive architecture, Frank Ghery and Daniel Libeskind.

George Tsylin graduated from the Moscow Architectural Institute in 1977 and in the same year became the winner of the competition "New ideas and spontaneity for the theater of a new generation" in Paris. Since 1979 he has lived and worked in America. After working for a year at the architecture firm HLW in New York, he became a graduate student in design at New York University.

In 1984 he was invited to design four shows at the newly formed American National Theater at the Kennedy Center in Washington. After designing several theater productions in nearly all US theaters in the early 1990s, he launched an international career in opera. Tsylin has also expanded his career to include concerts, film, and television productions, as well as exhibitions, interior design, and installations.

He had an exhibition of his sculptures in New York and won many awards. He has worked for many years with director Peter Sellars, as well as famous directors Julie Taymor, Robert Falls, Jurgen Flimm and Andrey Konchalovsky. He has a special creative relationship. With conductor Valery Gergiev.

We see that one of the most important features of postmodern architecture that Tsebin was influenced by is that it devoted its efforts to making maximum use of technological development that affected all aspects of life. Technological developments have affected the scenography of theater and emphasized the relationship between art, theater and architecture

As we enter the era of digital technology, artists are facing new cultural and artistic trends, and many modern technologies have been used in the theater, which helped rehabilitate the theatrical language, in terms of establishing the artistic aesthetics of theater and its artistic taste.

We can now find many special effects on the stage, in addition to special effects and video shows, computer technology, light technology, laser technology, hologram technology, and projection mapping).

Theatrical designer, architect and sculptor George Tsylin has redefined the standards of contemporary theater design in his work where avant-garde ideas return to their natural environment.

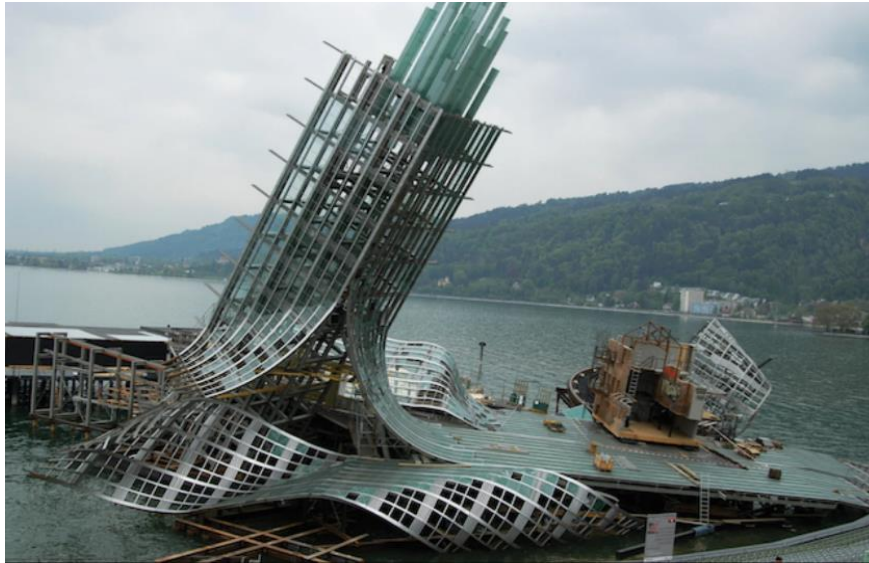
Among the most important shows that we will address:

1- West Side Story - Bregenz Festival 2003-2004 (musical show):

"West Side Story", which brings Romeo and Juliet to the West Side of New York and the atmosphere of the 1950s the play explores the rivalry between the Gates and the Sharks, two teenage street gangs of different ethnic backgrounds, the musical by Jerome Robbins and Arthur Lauren with Music by Leonard Bernstein, to the grand open air of the Seebühne stage of the Bregenz Festival, produced by Francesca Zambello and costumes by Marie Jeanne Lecca.

The design is dominated by a glass-steel skyscraper lattice of twisted metal strings, towers above the stage, and illuminated glass; It can be explained that the World Trade Center will collapse.

He is influenced by the architect (Daniel Lepskind) where the sharp lines and angles in the design, as well as the architect (Frank Ghery) where the use of corrugated metal, which gives the Appearance of incompleteness and incompleteness. The design of the Tsylin Theater echoes modern and deconstructive architecture (fig- 3)



(Figure 3) A glass-steel skyscraper lattice of twisted metal strings.

George Tsylin Opera Factory: Invisible City was published by Princeton Architectural Press on October 18, 2016.

As we can see in (figure 4) and (figure 5), George Tsylin's detailed realistic collections include Doc's Art Deco Dinner, a three-story brick restaurant that slides and turns to reveal the interior of the bridal shop and Maria's apartment.



(Figure 4)



(Figure5)

<http://www.francescazambello.com/gallery/shows/westsidestory/index.html>

In this show, designer George Tsylin used various lighting techniques as well as lasers.

Stage Lighting: Stage lighting involves manipulating the qualities of light to influence the spectators and integrate them into the work. This is done by carefully controlling the intensity, color, direction, and movement of the light.



(Figure 6)



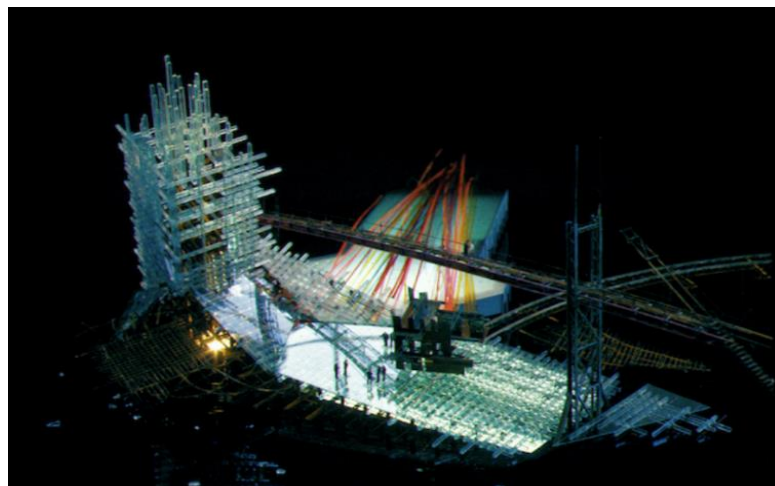
(Figure 7).

<http://www.francescazambello.com/gallery/shows/westsidestory/index.html>

In figures 6 and 7 the two worlds are separated by color and lighting design by (James F)

The coherent nature of laser light allows it to produce a narrow beam of light, allowing scanning to be used to draw patterns or images on walls, ceilings, or other surfaces including theatrical smoke and fog, as is common in video projections. This more focused ray by nature is highly visible and is often used as an effect on its own. Sometimes the beams are "bounced" into different positions using mirrors to create some stunning geometric shapes or laser carving designs. Most of the time, lasers are used in conjunction with other sources of light such as LEDs. LED lights allow more control over power and temperature.

The LED light can be arranged in different ways to create different effects. LED lighting lasts longer than conventional bulbs, offers more color options and makes it easy to switch between colors and flashing effects. LED and laser lighting effects can also be combined together into something called LED laser strips - a regular laser strip with an added LED blur effect.



(Figure 8). In this show, designer George Tsypin used various lighting techniques as well as lasers

<http://georgetsylin.com/musicals/musicals/wss.html>



(Figure 9) 12pcs AO 1200W Architectural Lighting Systems Installed With 240m Light Pipe.
<http://georgetsy-pin.com/musicals/musicals/wss.html>

2-Spider-Man Turn Off the Dark 2014 (musical show):

Spider-Man Turn Off the Dark has been described as the most technically complex show ever on Broadway with 27 atmospheric series of characters meeting and participating in aerial combat.

The production also includes a large set of animated pieces that put the audience in the middle of the action, and enough projections on giant screens.

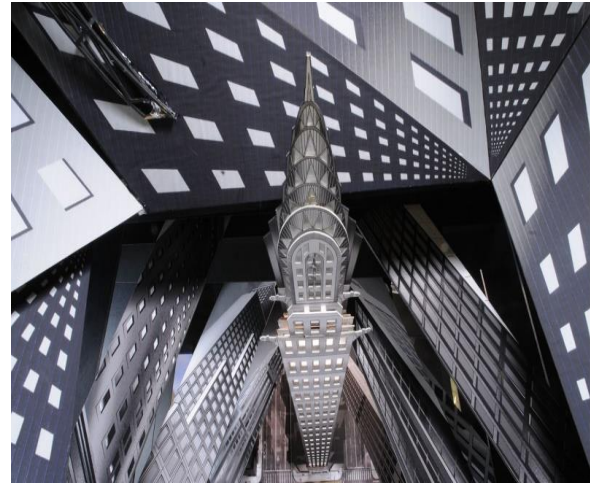
Spider-Man Turn Off the Dark had no out-of-town artistic experiences due to the artistic requirements of the production and was designed for the Foxwoods Theater. Drawing on more than 40 years of Marvel comic books for inspiration, Spider-Man revolves around the legendary story of a young man who is pushed from a humble home in Queens into the blazing spire of the Chrysler Building in the sky.

Daily Bugle, through the stunning valleys of Manhattan, to new heights like never before. The musical follows the story of teenager Peter Parker, whose extraordinary life is turned upside down when he is bitten by a genetically modified spider and wakes up the next morning clinging to his bedroom ceiling. Where the wicked test not only his physical strength, but also the strength of his character.

Georg Tsypin's design for this collection is influenced by his architectural background, with huge panels depicting the houses along the road opening and closing as if a comic book was being read. It's all drawn in a bold pop art style that overemphasizes angles and perspectives. Mechanical movement in the theater and changing scenes George Tsypin took inspiration from pop-up books (figure 10), (figure 11) and (figure 13).

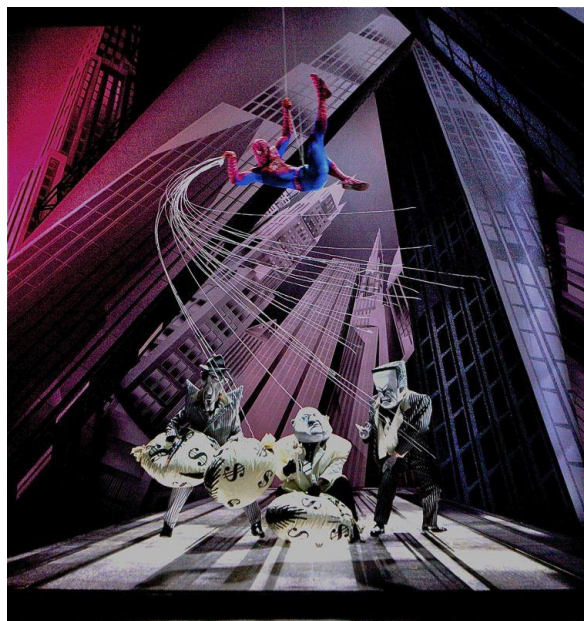


(Figure 10) Pop-Up car crash mechanism.
<https://www.nathanheverin.com/new-gallery-1/2018/10/11/1ukrh9ft91dfgdf2qjk5pcwof9eocs>

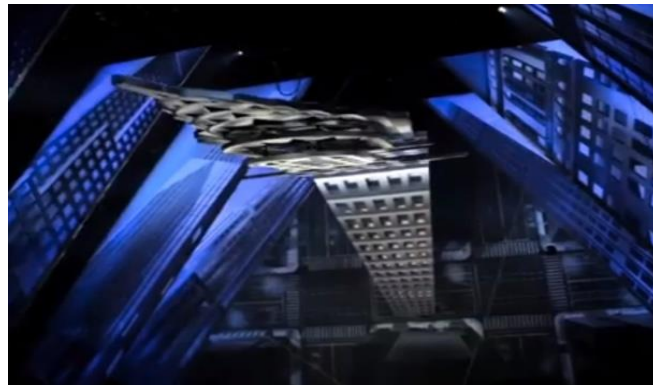


(Figure 11) pop-up chrysler building.
[https://www.nathanheverin.com/popup-chrysler-building-12-scale-model](https://www.nathanheverin.com/popup-chrysler-building/2018/10/2/pop-up-chrysler-building-12-scale-model)

The show's innovations - blending computer technology and Asian puppet theatre (figure 10), 2D animation sets with huge rubbery fantasy creatures in visual and physical impact, with massive urban landscape sets that take a page from Marvel comics (by George Tsypin), and mega-villains in Pop art, fantasy fashion (by Oscar-winning designer Eiko Ishioka), and turbulent rock music can easily overshadow human characters. But not in Izralov's imagination (figure 12).



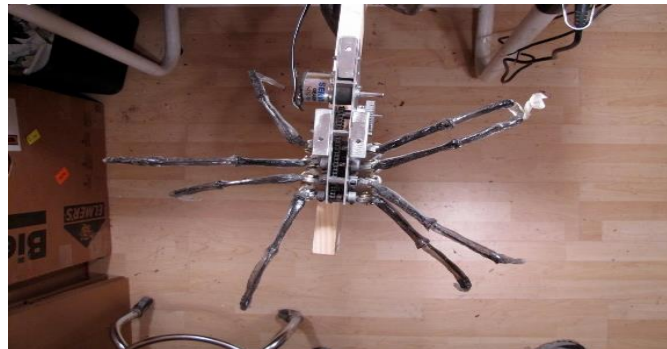
(Figure 12)
<https://newyorktheater.me/2016/06/14/spider-man-turn-off-the-dark-five-years-later/>



(Figure 13) Un floating Chrysler rebuilding, mechanism design.

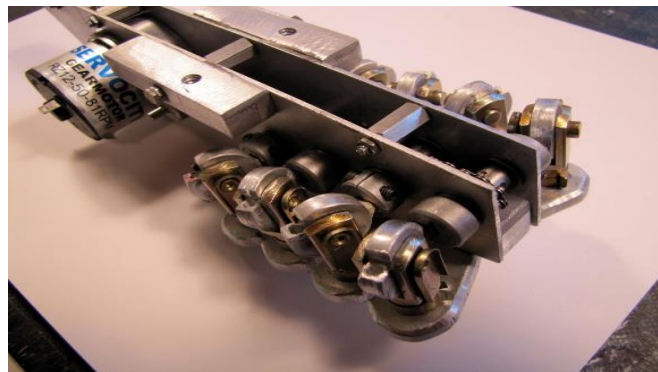
<https://www.nathanheverin.com/popup-chrysler-building/2018/10/11/r4zpoko6w377utybwc4gob0dgrox2x>

the spider bite scene the spider puppet by Nathan Heverin (designer, craftsman, artistic engineer). (figures14,15,16).



(Figure 14) Spider mechanism detail

<https://www.nathanheverin.com/spider-bite-puppet/>



(Figure 15) Spider mechanism detail.

<https://www.nathanheverin.com/spider-bite-puppet/>



(Figure 16) *Radioactive spider final version by NathanN Heverine.*
<https://www.nathanheverin.com/spider-bite-puppet/>

In this performance, George Tsypin used light and laser techniques, as well as light projection and screen technology, which are among the famous and common techniques, where the theater designer sees that through the screen it is possible to achieve a theater background that serves the theatrical performance that is presented. It is possible to experience the place and time in the theatrical performance where here in spider-man turn off the dark we find huge LED screens that seem to push you inside a video game (fig 17).



(Figure 17) *huge LED screens that seem to push you inside a video game.*
<https://www.youtube.com/watch?v=hnVPqWNNN8U>

A multimedia system for video playback and content authoring was created for the emerging projection design, and software was developed to track video images on moving LED panels using software that identifies the on-stage location of projection screens at any given moment. Large format that is used intermittently throughout the show.

Thus, we see the use of digital technology in theatrical performances and its spread in postmodern performances, especially the performances of designer George Tsypin, and how he employed sculpture and architecture on the stage.



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