Digital Technology and its use in Scenography for Children's Theater Performances

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Abstract

The twentieth century witnessed the storming of technology and technical development with all the outlets of life, especially the theater, which brought about sophistication in the design of the theatrical scene, that is, the era of the image, which is one of the most important parts of the theatrical show today, like audio and visual techniques are called the scenography that is formed through lighting, music, decoration, costume, and makeup, where it adheres These theatrical techniques with each other to provide theatrical performance more beautiful, beautiful and dazzling. And the goal of the scenography is to create an expressive assortment picture that translates the text into a tangible reality on the stage, that is, melting of all its elements into the image.

Hence the need to shed light on the digital technology for cinematography in contemporary theater shows, and how to use them in children's theater shows, as the emergence of digital technology is one of the effective and interactive achievements with the child's theatrical presentation, which pushes its components forward in terms of employment and beauty, and this interaction creates The element of surprise, anticipation, and excitement of the receiving child by broadcasting beautiful visual images.

The second chapter included three topics, where the researcher in the first topic touched on digital technology in terms of its philosophical concept and its use in scenography. As for the second topic, it dealt with the emergence of history historically. The student came out with the indicators of the theoretical framework, which he informed him in designing her procedures and her research instrument, and she concluded the second semester with close toresearcher her studies, which was reached by her predecessors in this field.

As for the third semester within the research methodology, the researcher reviewed the descriptive-

analytical approach, being the closest approach to investigating the research goal, and describing the research community that included(10) Iraqi and Arab presentations, presented in the period from 2012 to 2019, and the research sample was intentionally elected from one presentation: (And in each era Wawan) as the limits of research as it sheds light on digital technology and the possibility of its use in the scenography of children's theater shows. The research tool represented (the instrument of analyzing the presentations was built into three main axes which are (digital music, digital lighting, and digital decoration), and the research tool was subject to the conditions of honesty and consistency so that it can be used in analyzing the presentations and extracting the results, and the percentage was adopted as the ratios of statistical means to reach, Therefore.

The research ended with the fourth chapter, which included the results of the research, its conclusions, recommendations, and proposals.

Keywords: digital technology, scenography, children's theater.

Introduction

The twentieth century was marked by the intrusion of technology and technological development in all walks of life, particularly in theatre, which led to an evolution in the design of the theatrical landscape, the so-called image age, which is one of the most important parts of the theatre show today. Audio-visual techniques are called scenography, formed through lighting, music, decoration, costume, and makeup. These theatrical techniques have joined together to feed the theatrical presentation into a more casting, beautiful, and glamorous display. Digital technology or digital art is based on the conversion of all data into quantities, amounts, and accounts that transform it into data and translate into computer connotations and expressions. One of its characteristics is (Programmation) which contributes to delivery and implementation. The theatre has taken a serious interest in the child recipient so that, through its direct and lively communication, it can achieve its goals of entertainment, pleasure, fun, and benefit in communicating an idea that benefits the child present or in the future while evoking his or her intellectual and aesthetic aspects. The child's theatre is therefore an important socio-psychological need for educational and aesthetic purposes, as well as for the realization of emotional satisfaction in a dramatic manner that the child can realize. Since children in their early stages of development are well developed and shaped, this makes the child's theatre an effective means of development in building his personality and in shaping his national, scientific, cultural, and social consciousness to be a nucleus that understands his rights and duties

towards the nation and society. Within the framework of scientific discoveries and technological developments, the child's imagination is influenced by everything that opens up to him from other worlds, throwing him out in the future and taking him out of his traditional surroundings, to go by himself to a new world that he has chosen for himself, that is, to fulfill his desire for intellectual and psychological pleasure and give him the space to move between the image and distant events which technology is working on to collect it so that the theatrical show is shortened to multiple times, and the place is shortened to separate places, and it is one of the most important features of the current theatrical show. However, the work of the digital technology of scenographyaffected all its elements through an active, dazzling technique. The goal of scenographywas to create an expressionist image that would translate the text into reality onstage, i.e. melting all its elements into the image's accuracy.

Research questions

1. How is digital technology employed in children's theater scenography?

Research importance

- 1. Current research may highlight the importance of digital technology, its employment in the scenography of theatrical performances, and its effectiveness on the young recipient.
- **2.** It benefits workers in the field of educational theater and children's theater, including writers, directors, and technicians, by shedding light on contemporary scenography.

Research objective

(Knowing about digital technology and employing it in scenography for child theater performances)

Research limits

The objective limit: theatrical performances in which digital technology is used exclusively in children's theater scenography.

The spatial limit: one theatrical performance from Iraq, which is a play (in every age and time).

The temporal limit: Children's theater performances for the period (2012-2019) presented in Iraq and the Arab world.

Terminology identification

Digital technology

Technical

Linguistically: He mastered his work, it means the clever man, which is attributed to the technique. On the one hand, the technical is an attribute of every technical, scientific or industrial method that enables one to master the work and its provisions, by saying that it is technical education that enables a person to judge his work "(Saliba, 1982, p. 330).

Terminologically: "The method of transferring data by processing it, which allows creating a distinct level of performance to (computer) and converting it into digital binary codes (0,1) through a digital converter called (Digital Converter)" (Johanna, 2009, p113).

Operational definition of digital technology: It is a series of digital processors that are based on a database with the help of design software that has been employed in the scenography of children's theater performances to create a virtual reality that transmits audio-visual messages, which contributes to a communicative process between the child's imagination and the theatrical performance.

Employment:

Terminologically: Transforming an aesthetic function by using it differently to symbolize and denote others (Al-Saeedi, 2000, p. 4).

Operational definition of employment: Using digital technology and employing it in the elements formed in a child's theatre show to create a creative artistic aesthetic.

Scenography

Terminologically: "It is the innovation and embodiment of space and the imaginative journey that theater calls for by the spectator," Ann Surgier, 2006, p. 237).

Operational definition of Scenography: It is harmonious and flowing paintings that achieve the audio-visual language of the entire context of the presentation to develop the child's personality educationally, socially, culturally, and aesthetically in a fun and interesting way.

Child Theater

Terminologically: "It is the theater in which plays are written by authors and are presented by actors for an audience of children, and the actors can be adults or children, or both together, and in which the script is preserved, directs the work, and the scenes and costumes are used" (Harf, 2008, p. 45).

Operational definition of Child Theater: It is a dramatic style that aims to develop the child's educational, socio-cultural, and aesthetic personality by employing digital technology for theatrical screening scenography to carry it into aesthetic spaces to achieve the highest amount of dazzling and suspense for him.

Digital technology in scenography

The second half of the twentieth century witnessed important transformations and developments in information and communication systems, and their impact was reflected on human life in its various directions, and that theater was not isolated from these developments, as it included the fields of theater architecture and scenography represented by its elements (space, theater scenes, light, sound, and costumes). There is no doubt that this development has directly led to the creation of new horizons for directors, authors, and actors by exploring new ways, tools, and possibilities in creative embodiment and artistic creation. And when we go back to modern technology and technology in theater, it's not born today, but it's been accompanied since the time of the Greeks, to organize religious rituals, to invest spaces with simple possibilities to absorb the effectiveness of theater activity, and to move it to the prospect of an aesthetic message. that these developments in the twentieth century and the interference of technology in the design of theatrical scene, have developed methods, currents, doctrines, and theories in theater performance have greatly influenced the development of these methods, which helped in employing scenography to create a scene image that is compatible with the requirements of the modern era. Since theater forms collective awareness through the expression of its ideas, contents, and positions, it sought to use technology to be a tool of creative action as it opens up new thinking spaces, in drawing scenography to be more expressive, employable, and beautiful to create visual astonishment with what the recipient needs in the new theatrical presentation. Technology is the mode of performance that all modern science deals with because of its age-specific use and application. It was a field that reflected the factors of creativity and innovation, and represented the result of the evolution of the cognitive mind and abilities of the human being and the expansion of the circle of need, as well as of higher intellectual and literary

standards. Modern technologies with all their components in light, color, sound effects, theatrical scenes, and costumes have led to the formation of theatrical performance space with its artistic formations to compete with the components of scenography to unify the aesthetic image of the display, so the more these materials have an attractive and impact, the more expressive and embodiment of the theatrical act within the space of the aesthetic image, (The theatrical performances that modern technology helped to present, the presentation in its aesthetics was not the basis but the goal and that technology is only a means to achieve the goal, and it requires a degree of understanding and comprehension of the components of the performance itself, which has become more effective due to the developments of modern technology that supported the aesthetic aspects in Scenography of the Theatrical Show) (Al-Aboudi, 2009, p. 16). Therefore, the visual elements with high aesthetics provided by modern technology, contribute clearly to the aesthetic impression that the audience senses, so the theater does not separate the expressive side from the aesthetic side, because the basis on which the expressive aspect is based seeks to provide aesthetic images of the presentation text, whether written or not. The last is the director's text or the text of the innovative show, so the text is translated into sound, music, decor, costumes, lighting, and physical movement expressions, as all these technologically supported elements, possess their distinctive plastic and aesthetic dimensions. Technical beauty collaborates with the beauty of those elements to form an aesthetic unity that serves both the offer of the recipient.

Employing digital technology in scenography

Some theatrical productions are now based on modern computer technology, which is the only technical instrument capable of creating new and unfamiliar forms. It is based on a hypothesis rather than on a material that exists in reality, and the computer can undo the truth and instead create a new material that in essence becomes the truth, so it can be said that the simulation has a different conceptual model than it was.

The use of computers and software will make the exotic processors of the scenography more expressive, employed, and beautiful, and on this basis, we see that modern theatre is based on a virtual reality that some have defined as a manufactured reality that depicts the user in a three-dimensional space, which is a simulation (computer) of real forms of reality that can interact with the human) (Al Khafaji, 2016, p. 15- 16).

Digital lighting: The computer and software are among the most prominent manifestations of the

digital revolution that worked to expand the effectiveness of the perceptual discourse of theatrical presentation directed at the theater viewer by increasing the ability to address all his senses and influence his mental perceptions. The computer's technical architecture expanded the potential by adding additional power to the director, the lighting designer, the drama book, and how it affects the recipient. This is what drives them to form a theater scenography through this technology that is commensurate between the appearance of the blocks and their shapes and their concealment (which prompted the designer to use smart performance through the computer to make the effects an easy and possible thing through the use of digital technology and the aesthetic use of the Data Show Projector) through the use of digital technology and the aesthetic use of the Data Show Projector as an optical alternative to the traditional lighting device in the theatrical display by making use of digital systems, especially the RGB optical system. The designer worked on the scientific and technical mixing of the digital (RGB) color system, the Data Show Projector, and one of the programs stored in the computer to produce an alternative optical device (Al-Khafaji, 2016, pp. 171-172). One of the most notable treatments for this technique is the high design flexibility and speed of implementation procedures as well as the ability to modify to create photosynthesis, which created aesthetically expressive sensory styles.



Figure (1) (one of the theatrical performances embodies digital lighting through the use of a datashow)

Another modern technique in digital lighting is Laser, which means the process of amplifying light by inducing radiation emission. Through a device, multi-frequency electromagnetic rays can be converted to a single, more massive frequency that eventually forms a flat optical unit. There are many uses of lasers in the theater, especially in celebrations, festivals, operas, dance shows, children's plays, outdoor shows, and many other shows. Among the laser theater shows executed in the open air, it is considered one of the best types of theatrical laser shows because it is not defined by a framework, and the space in which we work with lighting is not defined, and computer programs are used to make two-dimensional models and scenes from the laser. The designer creates these drawings and allows the computer to record the path of the shapes and when the images are generated, the computer allows the designers to move the images in space, rotate them, flip them, change their size

and color, and the laser changes can also be recorded. There is an effect called the "erase" effect, in which the laser graphic is controlled by the computer through a design that gradually disappears point after another as if it is erased. The audience is more than three meters, according to American laws. In European countries such as Germany, sensors and scans are used to reduce the impact of lasers in the event of a risk to the public. (Abu Al-Majd, 2018, p.45).



Figure (2) (Various and unique shows using laser beams for children and adults together at the Liberel Theater in Dubai)

The hologram is one of the newest contemporary arts, and closely related to technological progress, it is the combination of science and art. "The hologram has its origin in Greekand the pronunciation is (holography), it is divided into two parts: Holos, meaning all, and grapho, "meaning writing, in the sense of full image record or graphic art. It's a bundle of light waves that collide with the object to be recorded, and the light waves plan with full information about the 3D layout of the object. Close to this concept, this technology can be described as a three-dimensional image that reenacts the original image by splitting the lasers and reflecting them on mirrors and lenses. This technique is based on converting light into a three-dimensional image with high efficiency, where it has a unique feature, and it looks like it's real in front of us, but it just images in the air, not real objects that we can touch. So hologram creates a virtual environment through the 3D image, that is, a virtual theater with a successor and virtual actors can be created away from reality. It enriches the children's theatrical performances, as it achieves a sketch and employs it in thescenography of the theatrical presentation, creating an atmosphere of suspense, excitement, and glamour through the transmission of visual images that help children to understand the content and ideas contained in the text and released by the director of the show.



Figure (3) (A circus show in Germany offers a complete show of huge animals with hologram technology)

Digital decoration: the computercontributes to the development of the image of scenography with its vast choices and creates the language of dialogue between the scenic designer and the theatre director because it has properties that human-defined tools do not have, and that the most important thing that characterizes this technology in design is that the hidden harmonies between the designer and the instrument and the method for the aesthetic value. Thus, through the computer and scenographer mindset, a range of ideas are presented that contribute to the development of the scenography show with its broad options and create a digital language of dialogue. Techniques appeared that were employed in the design of theatrical scenes, namely the idea of electronic screens on the stage, as it is one of the modern technologies in terms of integrating the screen with the theatrical presentation, and it is an idea that has attracted the attention of many artists, designers, and directors, "as Joseph Zvobda sought to employ cinema and establish a relationship between the screen and the live event on the stage, and also sought to employ it in theatrical decoration "(Abu Al-Majd, 2018, pp. 48-49). The idea of the screens on the stage is this technology is an important element in the scenography of the show, rather it is the architecture as a whole, as it provides from decorations and large threedimensional shapes that require high physical effort, so the theatrical designer sees that through the screen it is possible to achieve a theatrical background that serves the theatrical presentation that is presented. It is possible to experience the place and time in the presentation through the screen that is behind, and that the use of the screen will provide us with a theatrical space added to the real theatrical space in which the actors move, and the director from the beginning establishes a dialogue or a state of complementarity and a natural transition between the two spaces.



Figure (4) (a stage show showing the timing of the dynamic of the film and the movement of the actors)

Digital music: The use of digital sound at this time is a necessity to keep pace with the scientific and technological progress taking place in the world and its aesthetic functional ranges. The world has tended to use the digital system in computers, to obtain accuracy and speed in processing the work done and to achieve high-level artistic and aesthetic results. Many programs specialize in producing the aesthetics of digital audio, and these programs are called (audio editing programs) for their ability to add many improvements and effects to a single sound, and these programs also deal with many recording lines that control many recording tracks and then

open many windows that offer options for various (effects) according to the need and method of use in order to support more aesthetics of the sound. The ability of the child to understand the theatrical presentation appears to be in line with the elements of the scenography, and the child's interaction with these events, so the plot must be easy and clear, and all that is presented in the presentation is commensurate with it, corresponding to the song, music, and movement of interactive events between the actor and the recipient (child). The child's theatrical presentation is direct and highlights its importance in the excitement of the child's involvement in the theatrical presentation through the actor, who focuses on the visual image that attracts the child to follow and interact without boredom, as well as the availability of attractive elements such as singing and storytelling. Children enjoy songs and their stories with rhythms that make them live in fantasy and where there are magical solutions, talking animals, playing with voices, and body movement that is repeated with repetition of syllables and the continuation and escalation of songs.

Digital costume: through virtual reality and its future in fashion design and its entry into the theatrical production process as a creative gender is a digital addition represented by all the data of electronic computing and its new capabilities that increased the possibilities of diversity, discovery, and renewal in the language of theatrical performance, and as a result, it gave a different aesthetic flux than before. "The actor is considered the basic element in the formation of the scenography of the theatrical performance because he is the main center of what he carries within him a huge store of connotations, meanings, codes, and messages that are transmitted through body movement and other supplements - makeup, lighting, and decoration) and by those elements, the theatrical image of the theatre environment is formed."(Sobh, 2019, p. 163). Optical projection technology is among the modern technologies, it has a great impact on the stage, and this technique is done by projecting the drawings on the floor and the background, and on the bodies of the dancers. Projecting moving and cross light in line with the music and gestational movements of the actor's body gives a symbolic meaning and connotation to make a direct impact on the recipient.



Figure (5) (filtering the light projections on the floor and the dancers' clothes)

Digital make-up: Make-up has also taken its share of technological development, as a Japanese expert in the field of computer-generated images, known as CGI*, has developed a new technology that allows changing the features, color, and shape of the human face directly. This technology developed by Japanese Nobumichi Asai, which can be likened to electronic makeup, is based on using a custom material on the face and then projecting lighting from the projectors on the face to change its features instantly. Thus, makeup is an important complement to costumes in theatrical performances, and its digital rhythm has been increasing in the last 10 years. The use of this technique in the human face is a new thing that may open the way for the future to adopt this technique or other techniques in the makeup arts, in particular children's theatre shows, as they give objective artistic aesthetic dimensions and connotations.





Figure (6)

Figure (7)

Indicators of the theoretical framework

- Digital technology is one of the tools of creative action, as it opens up new thinking spaces in scenography, where it becomes more expressive and beautiful to create visual astonishment.
- Digital technology is an effective way to unleash the imagination of a theater designer and director to implement new ideas and visions.
- The digital technology in the scenography of the theatrical performance achieves the breaking of the barriers of time and space, meaning that the time, dimensions, or frameworks defined in a continuous linear fashion will not be (past, present,, and future), that is, it can multiply and open different times with many places.
- Modern technologies have entered the field of digital lighting, which are laser, projection, and a hologram that has a wide range in creating a virtual environment and enriching children's theatrical performances by broadcasting visual images that create an atmosphere of suspense, excitement, and dazzle.
- The acoustic technology possessed the influence of the aesthetic and artistic sense in child theater performances, and the audio hypotheses it provided by transforming the actor's voice from ordinary layers into many other layers commensurate with the personality that the actor wears.

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- Freeing the child's imagination from being closed and merging it in the display unit, activating interpretation, and answering already implicit questions and the visual image.

Research community: The research community was theatrical performances that worked with digital technology at the Arab and local level, and the research community reached (10) theatrical performances between the period (2012-2019).

Research sample: The research sample was selected intentionally, which is a single theatrical performance that suits the nature of the research topic. The selection was taken into account due to the diversity it possesses in digital technologies and because it achieves the goal of the research. The sample was chosen based on the opinions of the experts.

Research tool: To achieve the objective of the current research, an analysis form was prepared in its initial form, Appendix (1), based on the literature and the results of the theoretical framework.

Validation: To achieve the goal of the current research, the researcher relied on designing a form (content analysis) on the exploratory study by examining and searching for offers that worked with digital technology. Besides, taking the indicators of the theoretical framework and using them in formulating the paragraphs of the sample analysis tool and reviewing previous studies, literature, and sources that dealt with issues about digital technologies. The search tool was prepared in its initial form from two questionnaires that included (20) paragraphs, and the questionnaire was designed on three axes, the first represented by digital music, the second by digital lighting, and the third by digital decoration without addressing digital fashion and digital make-up since the presentation chosen by the researcher did not contain these two elements, and to measure the extent to which each paragraph of the vertical axis was achieved and its compatibility with the horizontal axis, the researcher adopted a (triple) scale (appears - appears to some extent - does not appear). To verify the validity, the researcher relied on apparent honesty by collecting the assessments of the specialists on the paragraphs of the analysis tool, as the tool was presented in its initial form to (7) arbitrators with the following specializations (artistic education, performing arts, teaching methods) to ensure the validity and suitability of the tool. They agreed on the validity of some paragraphs of the form, and the deletion and modification of others. After collecting data and information to show the results, the researcher deleted some paragraphs because they are duplicate and amended some formulations according to the percentage of agreement that appeared in the opinions of the arbitrators, and returned them to some of them in their final form to obtain their approval and thus the tool in its final form

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became ready for implementation.

Stability: After the tool achieved apparent validity by surveying the opinions of the arbitrators, it was necessary to achieve stability for it, as the researcher adopted the method of consistency in the analysis between the analysts and the researcher to achieve the objective conditions and move away

from bias, to obtain stability, the researcher explained the analysis mechanism to analysts with the

introduction and how to use the content analysis form by providing each analyst with forms to use the

presentation with a (CD) in which the theatrical presentation chosen by the researcher as an

intentional sample. After performing the tabulation and data collection, the researcher adopted the

Cooper equation to find the coefficient of stability among the results of the researcher, the first

analyst, the researcher, the second analyst, and the first and second analyzer, and the reliability

coefficient of the research tool appeared between (81% - 84%) and the general rate of the degree of

stability of the analysis tool was (82%), as this percentage is sufficient to provide confidence in the

consistency of the research, and thus the research tool obtains the validity of the application to

measure what it was designed for.

Statistical means: To complete the research procedures, the researcher used the percentage to extract the results of the research and based on calculating the occurrences of the appearance of the feature or its non-appearance in each work that was analyzed separately and with the help of five specialized

analysts by providing them with the theatrical presentation (sample) in the CD to obtain better

results. The percentage is difficult to extract due to the lack of samples.

Research methodology: I adopted descriptive and analytical methods as a method for analyzing the

research sample.

Sample Analysis: Theatrical Performance (In Every Age and Time) from Iraq

Written and directed by: Najed Jabbari

Display Place: Tunisia 2019



Work description: The work events embodied intellectual, educational, social, and aesthetic starting points by broadcasting images that tell about the conflict between good and evil on the one hand, and the issue of relationships and friendship between individuals, on the other hand, so the director embodied hostility and intrigue in two cartoon characters (Tom and Jerry) known and loved by children, and how they dealt with each other with hatredby introducing the devil's personality on them to exert charging the spirit of hatred between them and inciting one to the other to ignite the hostility between them. The Devil made a second attempt on other characters in the show, such as separating between friends and killing bees, but his attempts became unsuccessful. The theme of the work includes the rejection of hatred, conspiracy, and dealing honestly and lovingly so that the homelands can live. So good finally triumphed over evil.

Scenography axes:

The first axis: digital music

The conceptual allegorical system extended to the music to suggest rhetorical meanings that contribute to cognitive perception, and it leads the young recipient to think and contemplate. The digital music that came was growing with the show. As the music designer deliberately showed the general idea and its role in breaking the monotony and creating joy through popular songs, and he employed them to serve the show and mixed it with the actor's movement. Besides, dancing movements in the two scenes waiting for the cat to eat the mouse, and another scene of the cat and mouse triumph over the devil, the music designer added to the suggestion of the victory of good over evil. Digital music also intended to find a balance between the acoustic side and the technical aspect, which was employed in the general rhythm of the performance. Also, give variety to the performances of actors and puppets through the digital effect, digital music produced signs that attracted children and accompanied the entire theatrical performance.



Picture No. (1) (It represents a dance scene and the harmony of the music with the scene)

The second axis: digital lighting: digital lighting intended to illuminate reality and create the general atmosphere by creating multiple images on stage only, and was used once for shadow imagination in the depth of the theater when a scene between good and evil, where the light spot used to play several

roles in the presentation in addition to the detection and demonstration process, it gave an added atmosphere to the scenography, and it was she who led the actor in the movement with color spots intended by the lighting designer according to the contents of the idea during the scene as in the picture (1). That's what made digital lighting compatible with the event and its expression. So the effectiveness of alternative lighting drives the child's attention, sharpens his imagination, and makes him vulnerable to the event.



Picture No. (2) (The role of alternative lighting in creating harmonywith the actors)

The third axis: digital decoration: In the theatrical performance (in every age and time), the director did not use the virtual environment technology and exploit the depth of the theater through the electronic screen to create a virtual environment that keeps pace with the event. Rather, he was satisfied with digital lighting and simple and uncomplicated geometric shapes, and he did not embody any realistic image to experience the event, but rather the use of shadow imagination in the depth of the theater only to keep pace with the events, which scenography lacked parts of the theater space without using it.



Photo No. (3) (A scene between the good, the wise man, and the bad, the devil)

Results:

The results of the analysis of theatrical work (in each age and time) show the following:

- 1. Digital music: The paragraphs of digital music varied in terms of their clearappearance, so paragraphs (2 and 5) represented 60%, paragraphs (3 and 6) by 80%, and paragraph (1) got 40%, and paragraphs (4 and 7) only, got 100% clear appearance. It turns out that digital music has not achieved a high degree of compatibility with the paragraphs of the tool.
- 2. Digital lighting: The ratios of the digital lighting paragraphs vary in their clear appearance, so paragraphs (1, 3, 5) got 60%, while paragraphs (2 and 6) got 20%, paragraph (4) had a 100% clear appearance. This discrepancy underscores the fact that there has been a significant lack

- of compatibility with the paragraphs of a tool.
- **3.** Digital decoration: This technique has not been used in a play (in every age and time), so the paragraphs of the axis digital decoration did not achieve any clear appearance.

Conclusions:

Based on the findings of the researcher, we find a set of conclusions:

- **1.** Modern technology grants scenographyin children's theatrical performances with an aesthetically visual luster.
- **2.** With the development of modern digital technologies, much of the traditional tradition of forming contemporary scenography has been discarded.
- 3. The acoustic technology has the power of aesthetic and artistic sensation through musical connections and harmonic singing of the show to enrich the idea of the show and its positive educational effects on the child's psyche, as it achieves an element of surprise in the show, or an element traced to a particular scene or situation.

References

- **1.** Ann Souger, Scenography of Western Theater, Tel: Nadia Kamel. Cairo International Festival for Experimental Theater, Cairo, 2006.
- **2.** Abu Al-Majd, Ahmed Shehata, Hamed Abdel-Rahman, Mona Omar Abdel Aziz Hassan, the modern techniques used in designing contemporary performance scenes, Journal of Architecture and Arts, Issue 12, Part One, 2018.
- **3.** Al-Khafaji, Imad Hadi Abbas, Digital Theater and the Light Alternative in Theatrical Performance, Unpublished Ph.D. thesis, University of Baghdad, College of Fine Arts, 2016.
- **4.** Al-Saeedi, Mona Salman Muhammad, The Employment of Al-Baghdadi House Architectural Formations in Designing the Theatrical Scene, Master Thesis (unpublished), College of Fine Arts, University of Baghdad, 2000.
- 5. Subuh, Latif Idan, The Use of Digital Technology in the Scenography Industry The Theatrical Show The Tarzan Play Show (as a model), Lark Journal of Philosophy, Linguistics, and Social Sciences, Issue 34, 2019.
- **6.** Salbiaa, Jamil, Philosophical Dictionary, (The Lebanese Book House), Part 1, Lebanon, 1982.
- 7. Taher, Shaima Hussein, The Aesthetic Space of Modern Technologies in the Iraqi Theatrical

- Show, published master's thesis, Babylon University Journal of Human Sciences, Volume 23, Issue 1, 2015.
- **8.** Al-Aboudi, Jabbar Judi Jabbar, The Aesthetics of Scenography in Theatrical Performance, Unpublished MA Thesis, University of Baghdad, College of Fine Arts, 2009.
- **9.** Harf, Hussein Ali, Educational Theater, Studies and Texts, House of General Cultural Affairs, 1st Edition, Baghdad, 2008.

Website

10. https://www.skynewsarabia.com/technology/

Foreign reference

11. Johanna, Drucker and Emily McVarish, Graphic Design History, New Jersey, Published by: Pearson Prentice Hall, 2009. P 113.