



JOURNAL OF PHILOSOPHY AND CONTEMPORARY ISSUES

Volume 2, Number 3 (July 2026)

ISSN: 1595-9457 (online); 3093-060X (print)

Website: <https://jppssuniuyo.com/jpci> Email: jppssuniuyo@gmail.com

Received: June 15, 2026 Accepted: July 22, 2026 Published: July 31, 2026

Citation: Umanah, Sunday P. & Nesfield, Uwem T. (2026). "The Technicalities and Prospects of Designing Light for Found Space Performances in an Educational Theatre Environment." *Journal of Philosophy and Contemporary Issues*, 2 (3): 55-63.

Article

Open Access

THE TECHNICALITIES AND PROSPECTS OF DESIGNING LIGHT FOR FOUND SPACE PERFORMANCES IN AN EDUCATIONAL THEATRE ENVIRONMENT

Sunday Peter Umanah¹ & Uwem Tim Nesfield²

Department of Theatre and Film Studies University of Uyo, Uyo^{1&2}

Corresponding Email: sundaypumanah@uniuyo.edu.ng¹

Abstract

Lighting design plays a significant role in theatrical production because it contributes to visibility, mood creation, symbolic interpretation, audience focus, and the overall visual composition of performance. In contemporary theatre practice, found space performances have increasingly emerged as alternatives to conventional theatre staging. Found spaces refer to non-traditional environments adapted for dramatic presentation, including classrooms, courtyards, streets, warehouses, school halls, and open public spaces. Within educational theatre environments, the growing use of found spaces has introduced both technical challenges and creative opportunities for lighting designers and theatre practitioners. This study examines the technicalities involved in designing lighting for found space performances and explores the prospects associated with its application in educational theatre environments, using Richard Schechner's Environmental Theatre Theory of 1968. The study adopts a qualitative descriptive research design based on content analysis and theoretical evaluation. Data were gathered from textbooks, scholarly journals, theatre production manuals, and academic studies related to technical theatre, environmental performance, and stage lighting practices. The study reveals that found space lighting design requires flexibility, technical adaptation, improvisation, and creative problem-solving due to irregular spatial structures and infrastructural limitations. Despite these challenges, found space performances encourage innovation, collaborative learning, and practical technical training among theatre students. The study concludes that lighting design for found space performances remains an important aspect of educational theatre practice capable of enhancing theatrical communication and contemporary performance aesthetics. The study recommends increased technical training, institutional support, and the integration of modern lighting technologies into theatre education.

Copyright © 2026 By JPCI. Publishers: Omega Books

This is an open access article which permits unrestricted use provided the work is properly cited.

Keywords: Lighting Design, Found Space Performance, Educational Theatre, Technical Theatre, Stage Lighting, Environmental Theatre.

Introduction

Theatre is a collaborative art form that combines acting, movement, sound, costume, stage design, and technical coordination to communicate meaning to an audience. Among the technical elements that contribute to theatrical production, lighting occupies a central position because it shapes visibility, atmosphere, emotional tone, and audience interpretation. Lighting does not merely illuminate performers and stage objects; it also contributes to dramatic expression, symbolic communication, mood creation, and visual storytelling (McCandless, 1958). Traditionally, theatrical performances were staged within conventional theatre buildings specifically designed for dramatic presentations. Such theatres often contain standard lighting grids, rigging systems, dimmer controls, electrical installations, and audience seating arrangements suitable for technical theatre operations. However, in the assertion of Umanah and Udofia, “contemporary theatre practice has gone beyond these conventional environments into alternative venues usually referred to as found spaces” (169). Found spaces are non-traditional environments adapted for theatrical performance purposes. These spaces may include classrooms, lecture halls, school compounds, streets, courtyards, abandoned buildings, parks, galleries, warehouses, and open public spaces. The rise of found space performances has transformed contemporary theatre practice by encouraging spatial flexibility, audience interaction, creative experimentation, and environmental adaptation (Brook, 1990).

In educational theatre environments, found space performances have become increasingly relevant due to factors such as inadequate theatre infrastructure, financial limitations, and the desire for practical experimentation. Many educational institutions lack fully equipped theatre facilities, thereby compelling theatre departments and students to transform available spaces into performance venues. This situation has increased the importance of technical adaptability, especially within the area of lighting design. Designing lighting for found space performances presents unique technical challenges because unconventional spaces often lack standard theatre lighting systems and structural support. Lighting designers working within such environments must therefore demonstrate creativity, flexibility, and technical competence in adapting lighting instruments and techniques to suit the specific characteristics of each location. Apart from technical challenges, found space lighting design also presents several educational and artistic opportunities. It encourages innovation, improvisation, practical problem-solving, and collaborative learning among theatre students and practitioners. Through experimental performance practices, students acquire practical technical skills relevant to contemporary theatre production. This study therefore examines the technicalities and prospects of designing lighting for found space performances within educational theatre environments. The study also explores the creative possibilities and educational significance associated with found space lighting practices.

Objectives of The Study

The main objective of this study is to examine the technicalities and prospects of designing light for found space performances within educational theatre environments. The specific objectives are to:

- i. Examine the technical challenges associated with lighting design in found space performances.
- ii. Investigate the role of improvisation and adaptability in educational theatre lighting.

- iii. Explore the prospects of found space lighting design within theatre education.
- iv. Analyze the contribution of lighting to audience engagement and theatrical communication within unconventional performance spaces.

Theoretical Framework

This study is anchored on Richard Schechner's Environmental Theatre Theory. Environmental theatre emphasizes the use of unconventional performance spaces where audiences and performers interact within flexible theatrical environments, a shared space with nullification of traditional boundaries, thereby allowing for audience to actively participate (Schechner, 1994). According to Schechner, performance should not be restricted to conventional proscenium theatres because any environment can become theatrical when organized for dramatic communication. The theory is relevant to this study because found space performances operate within non-traditional environments that require technical adaptation and creative experimentation. Environmental theatre encourages audience immersion, spatial flexibility, and environmental transformation, all of which are essential characteristics of found space performance. The theory also explains how technical elements such as lighting contribute to environmental transformation and audience perception. Through strategic illumination, ordinary spaces can be transformed into believable dramatic environments capable of sustaining theatrical illusion and emotional engagement.

Conceptual Clarification

Concept of Lighting Design: Lighting design refers to the artistic and technical process of organizing and controlling illumination in order to achieve specific dramatic and visual effects within theatrical performance. It involves the deliberate use of light to enhance visibility, establish mood, reveal form, direct audience attention, and support dramatic interpretation. Lighting serves both functional and aesthetic purposes in theatre. Functionally, it enables audiences to see performers, costumes, props, and scenic compositions clearly. Artistically, lighting contributes to emotional atmosphere, symbolic communication, and visual storytelling (Appia, 1962). The primary functions of theatrical lighting include visibility, selective focus, mood creation, composition, and time indication. Visibility ensures that performers and stage activities remain clearly observable. Selective focus directs audience attention toward significant dramatic actions. Mood creation establishes emotional atmosphere through the manipulation of colour, brightness, and shadows. With the background of multimedia technology, stage lighting design has become a magician on the stage, creating countless visual miracles. Through the exquisite lighting arrangement, the stage can present a bright morning light from the deep dark night, or jump from the soft dusk to the fiery dawn in an instant (Liu, 2024). Modern lighting technology now includes LED systems, programmable consoles, intelligent fixtures, wireless controllers, and digital projection systems. Despite these technological developments, many educational theatre environments continue to rely on simplified or improvised lighting systems due to financial and infrastructural limitations.

Concept of Found Space Performance

Found space performance refers to theatrical productions staged within locations not originally designed for dramatic presentations. Such spaces are adapted temporarily or permanently to accommodate performance activities. Examples include classrooms, warehouses, parks, streets, abandoned structures, lecture halls, and open public spaces. Found space performances became prominent through experimental theatre movements that sought alternatives to conventional proscenium theatre structures. Practitioners such as

Jerzy Grotowski, Peter Brook and Richard Schechner encouraged the use of unconventional spaces that allowed closer interaction between performers and audiences (Brook, 1990). Stage space is a fundamental element of theatrical production, encompassing both the physical area of performance and its symbolic meanings. Traditionally, stage space has been categorized into configurations such as proscenium, thrust, and arena stages, each influencing audience perception and actor-audience relationships. Beyond its physical dimension, stage space operates as a semiotic system where meaning is constructed through spatial arrangement, movement, and visual composition. Spatial semiotics examines how elements such as set design, lighting, and actor positioning communicate narrative and emotional content. In this sense, space is not merely a backdrop but an active participant in performance (Mayorh, J. Diamond W. et al 2026). One major characteristic of found space performance is flexibility. Since these environments were not initially designed for theatre, directors and technical designers must creatively adapt audience arrangement, sound systems, entrances, exits, and lighting installations according to the nature of the environment.

Educational Theatre Environment

Educational theatre environments refer to academic institutions and training centres where theatre arts are taught, researched, rehearsed, and performed for educational purposes. These include universities, colleges, theatre workshops, and performing arts academies. Educational theatre combines artistic practice with pedagogical objectives aimed at developing students' creative, technical, intellectual, and collaborative abilities. Theatre education involves disciplines such as acting, directing, stage management, filmmaking, costume design, sound production, scenic design, and lighting design. Educational theatre has long been considered an attractive learning and entertainment tool. Integrating robotics into educational theatre can enhance its aesthetic appeal and creative process. However, implementing high-quality Educational Robotic Theatre Plays (ERTP) in educational contexts brings several challenges, including limited robot programming skills of teachers and students, lack of programming interfaces to create robotic plays, high costs associated with robots, and absence of platforms capable of conceiving expressive robot actors (Lopez-Ordosogoitia, R., Bravo-Sanchez, F. et al. 2025). Many educational theatre environments, especially within developing societies, experience challenges such as inadequate funding, limited technical equipment, poor infrastructure, and insufficient maintenance culture. Consequently, found spaces are frequently utilized for rehearsals and performances.

Relationship Between Lighting Design and Found Space Performance

Lighting design and found space performance share a strong interdependent relationship because lighting significantly influences how unconventional spaces are transformed into effective performance environments. Found spaces often lack standard lighting grids, control booths, and rigging systems. Designers must therefore improvise mounting positions and utilize portable equipment to achieve desired visual effects. Lighting design in found space performances interacts dynamically with the existing architecture, natural light, and spatial irregularities of non-conventional venues. In educational theatre environments, lighting must adapt to the unique characteristics of the space to enhance visibility, mood, and audience immersion while negotiating ambient light and structural limitations. Oni explains that Lighting design in found spaces requires the designer to enter into a creative dialogue with the environment itself, allowing the architecture and natural elements to co-author the visual narrative of the performance (Oni, 2004). Lighting also contributes to spatial

transformation. Through strategic illumination, ordinary locations can be converted into believable dramatic environments capable of sustaining audience imagination and emotional immersion.

Literature Review

Historical Development of Stage Lighting: The history of stage lighting dates back to ancient theatrical performances where natural sunlight served as the primary source of illumination. Greek and Roman theatres were constructed in open spaces to maximize daylight visibility during dramatic performances. The development of indoor theatre architecture later increased the need for artificial lighting systems. Candles, oil lamps, torches, and gas lighting gradually became important sources of stage illumination during the Renaissance period. The nineteenth century witnessed significant advancement through the introduction of electric lighting systems. Electric lighting improved safety, brightness, and lighting control within theatrical productions. Innovations such as dimmers, spotlights, and color filters transformed lighting into an important artistic and technical discipline (McCandless, 1958). The historical development of stage lighting in Nigeria reflects a transition from natural light and rudimentary oil lamps in traditional performances to modern electric systems introduced through colonial and post-independence theatre training. Contemporary practices in educational theatres blend these traditions with innovative responses to limited resources in found spaces. For Edem, the evolution of stage lighting in Nigeria mirrors the nation's broader technological and artistic journey, moving from dependence on daylight and basic instruments to more sophisticated, though often constrained, electric and digital applications (Edem, 2025). Modern lighting practice now incorporates LED technology, digital programming systems, intelligent fixtures, and computerized control networks. These technologies have expanded the possibilities of theatrical storytelling and environmental transformation.

Theoretical Perspectives on Lighting Design

Adolphe Appia argued that lighting should function as an expressive artistic instrument rather than merely serving visibility purposes (Appia, 1962). According to Appia, light possesses the ability to shape space, create emotional atmosphere, and establish dramatic rhythm. Edward Gordon Craig also emphasized the symbolic and expressive functions of lighting in theatre. Craig believed that lighting contributes significantly to visual composition and audience interpretation within performance. Stanley McCandless introduced systematic approaches to stage lighting through theories on lighting angles, intensity distribution, and colour balancing. The McCandless Method remains influential in contemporary theatre lighting education. Ododo argues that Lighting design theory in the Nigerian context transcends mere illumination; it functions as a critical semiotic system that mediates between performer, space, and audience in both conventional and unconventional performance environments (Ododo, 2006). Contemporary lighting theorists further describe lighting as a semiotic system capable of communicating symbolic and psychological meanings within theatrical performance.

Found Space Theatre and Environmental Performance

Found space theatre emerged prominently during the twentieth century through experimental and environmental theatre movements. Practitioners sought alternatives to conventional proscenium theatre structures that rigidly separated performers from audiences. According to Nwadiigwe, found space and environmental performance in Nigeria transform ordinary locations into extraordinary theatrical arenas, compelling lighting

designers to work with rather than against the natural and architectural features of the site (Nwadigwe, 2022). Jerzy Grotowski's Poor Theatre theory emphasized minimalism, actor-audience intimacy, and reduced technical dependence (Grotowski, 2002). Peter Brook similarly promoted the idea that any environment could function as a theatrical space once an actor performs before an audience (Brook, 1990). Richard Schechner's environmental theatre theory further expanded found space performance through emphasis on audience immersion, spatial flexibility, and interactive theatrical communication.

Technical Challenges in Found Space Lighting Design

Enendu states that the technical challenges of lighting found spaces in Nigeria are enormous because such spaces were never designed for theatrical performances, thereby placing greater demand on the ingenuity of the lighting designer (Enendu, 2023). Lighting design within found spaces presents several technical challenges. One major challenge involves the absence of permanent lighting infrastructure such as lighting grids, rigging systems, and dimmer rooms. Electrical limitations also constitute significant challenges because many found spaces lack adequate electrical supply systems for theatrical lighting equipment. Spatial irregularities such as low ceilings, pillars, uneven surfaces, and architectural obstacles further complicate lighting placement and beam control. Audience arrangement also affects found space lighting design because unconventional environments often involve flexible or mobile audience positioning. Financial limitations within educational theatre environments frequently force theatre practitioners to rely on improvised or locally fabricated lighting solutions.

Prospects of Lighting Design in Educational Theatre

Fanyam asserts, there are bright prospects for lighting design in Nigerian educational theatres if institutions invest in modern technology and practical training, enabling students to compete favourably in the creative industry (Fanyam, 2021). Despite existing challenges, lighting design for found space performances presents several educational and artistic opportunities. One major prospect involves the promotion of creativity and innovation among theatre students. The need to adapt unconventional spaces encourages technical experimentation and problem-solving abilities. Found space lighting design also enhances practical learning experiences. Students gain exposure to real-world technical challenges that prepare them for professional theatre practice beyond classroom environments. Another important prospect lies in audience engagement. Found space performances often create closer relationships between performers and audiences due to spatial intimacy and environmental immersion. Technological advancement further provides new opportunities for educational theatre lighting design. Portable LED systems, rechargeable lighting units, wireless controllers, and digital programming technologies have increased flexibility and affordability in lighting operations. Such technologies make it easier for educational institutions to experiment with found space performances without requiring large permanent infrastructures. Additionally, found space lighting design contributes to the expansion of contemporary theatre aesthetics by encouraging experimentation with alternative visual styles and unconventional staging techniques.

Methodology

Research Design: This study adopts a qualitative descriptive research design based on content analysis and theoretical evaluation. The qualitative approach is suitable because it allows detailed interpretation of the technical and artistic processes involved in lighting design for found space performances.

Sources of Data Collection

The study relies primarily on secondary sources of data collection. Information was gathered from textbooks, scholarly journals, theatre production manuals, dissertations, conference papers, and online academic materials related to technical theatre and environmental performance. Observational insights from educational theatre productions were also incorporated to strengthen the analysis.

Method of Data Analysis

Data collected for this study were analyzed using content analysis and interpretative descriptive methods. Relevant materials were critically examined to identify themes associated with technical theatre practice, spatial adaptation, improvisation, and lighting design.

Discussion and Analysis

Technicalities of Designing Light for Found Space Performances: Designing lighting for found space performances involves several technical processes different from conventional theatre lighting practice. Lighting designers must first conduct detailed environmental analysis before planning illumination strategies. Sheria believes that designing light for found space performances requires meticulous technical negotiation with the peculiarities of each location, making adaptability the core competence of the educational theatre lighting designer (Sheria, 2021). Spatial analysis involves studying ceiling height, wall surfaces, entrances, exits, audience arrangement, and environmental obstacles. Such analysis helps determine suitable lighting positions and beam angles. Electrical planning also remains important because many unconventional spaces lack sufficient electrical infrastructure for theatrical lighting operations. Equipment selection forms another important technical consideration. Found space performances often require portable and adaptable lighting systems. LED fixtures are particularly useful because they consume less power and provide flexible colour variation. Safety considerations are equally important in found space lighting design. Improvised installations may expose performers and audiences to electrical hazards, unstable rigging systems, and obstructed movement paths.

Adaptation and Improvisation in Educational Theatre Lighting

Uphopho states that adaptation and improvisation define lighting practice in Nigerian educational theatres, turning apparent constraints of found spaces into opportunities for original artistic expression (Uphopho, 2019). Adaptation and improvisation remain essential survival strategies within educational theatre environments where technical resources are often inadequate. Improvisation may involve the use of locally fabricated lighting stands, domestic lighting fixtures, handheld lamps, and reflective materials to manipulate illumination. This process encourages creative thinking, technical problem-solving, and innovation among theatre students and practitioners.

Audience Relationship in Found Space Lighting Design

For Zaure, lighting in found space theatre redefines the audience-performer relationship by using light to draw viewers into the environmental narrative and emotional landscape of the performance (Zaure, 2025). Lighting significantly influences audience perception and engagement within found space performances. Since audiences are positioned closer to performers in unconventional environments, lighting must be carefully balanced to maintain visibility without causing psychological discomfort resulting from direct glare and physical eye strain. Found space performances frequently eliminate rigid separation between stage

and audience areas. Lighting designers must therefore consider multiple viewing angles and audience mobility during performances. Lighting also contributes to emotional immersion through the manipulation of shadows, colour temperatures, brightness levels, and directional focus.

Technological Prospects of Found Space Lighting Design

From Iwuh's perspective, the future of lighting design for found spaces in Nigerian educational theatres is promising with the advent of portable, energy-efficient technologies that can liberate designers from traditional infrastructural limitations (Iwuh, 2022). Technological advancement has created significant prospects for lighting design within educational theatre environments. LED technology represents one of the most important developments in contemporary lighting practice because LED fixtures are energy-efficient, lightweight, durable, and portable. Wireless lighting systems equally provide new opportunities by reducing cable management challenges within unconventional spaces. Digital programming technologies now allow designers to pre-program lighting cues and transitions with greater accuracy. These technological developments indicate that found space lighting design possesses considerable potential for future development within educational theatre environments.

Conclusion

Lighting design remains an essential component of theatrical production because of its contribution to visibility, atmosphere, emotional interpretation, and audience engagement. This study examined the technicalities and prospects of designing light for found space performances within educational theatre environments. The study established that found space lighting design requires creativity, flexibility, technical competence, and improvisational ability. Despite numerous technical and financial challenges, found space performances provide valuable opportunities for innovation, practical learning, technical experimentation, and collaborative theatre practice. The study further revealed that technological advancements such as LED systems, wireless controllers, and digital programming technologies have improved flexibility and accessibility within educational theatre lighting practice. The study therefore concludes that lighting design for found space performances is not merely a response to infrastructural limitations but also an important creative and educational practice capable of enriching contemporary theatre expression.

Recommendations

- i. Educational institutions should provide increased financial support for technical theatre training and lighting equipment.
- ii. Theatre departments should strengthen practical technical training programmes in lighting design and environmental performance.
- iii. Educational theatre practitioners should encourage experimental found space productions as part of practical theatre education.
- iv. Modern lighting technologies such as LED systems and wireless controllers should be integrated into theatre education.
- v. Proper safety measures should accompany all found space lighting installations.
- vi. More scholarly research should be encouraged within the area of technical theatre and environmental performance studies.

References

Adebayo, T. (2021). "Contemporary Technical Theatre Practices in Nigerian Universities". *Journal of Performing Arts and Culture*, 8(2), 44–59.

- Adegbite, Adesina. (2009). *Stage Design and Technical Theatre Facilities in Nigeria*. Ilorin, Nigeria: Sina Digital & Multimedia Gallery, p. 41.
- Appia, A. (1962). *Music and the Art of the Theatre*. University of Miami Press.
- Brook, P. (1990). *The Empty Space*. Penguin Books.
- Craig, E. G. (2009). *On the Art of the Theatre*. Routledge.
- Edem, Ekaette Brian. (2025). *Theatre Organisation and Facility Management in Nigeria*. Uyo, Nigeria: Akwa Ibom Academic Press, p. 78.
- Enendu, Molinta. (2023). *Challenges of Stage Lighting in Found Spaces*. Ibadan, Nigeria: Kraft Books, p. 152.
- Fanyam, Joel Avaungwa. (2021). *Design Media and Technical Challenges on the Modern Nigerian Stage*. Makurdi, Nigeria: Relevant Academic Press, p. 95.
- Gillette, J. M. (2013). *Theatrical Design and Production*. McGraw-Hill Education.
- Grotowski, J. (2002). *Towards a Poor Theatre*. Routledge.
- Iwuh, John. (2022). *Overcoming Challenges of Poor Architectural Planning in Nigerian Performance Spaces*. Lagos, Nigeria: SONTA Publications, p. 178.
- Liu, H. (2024). Contemporary Stage Lighting Art: The Multi-Element Composition of Post-Drama Stage Space. *American Journal of Arts and Human Science*, Vol. 3, E-Palli.
- Lopez-Ordosogoitia, R., Bravo-Sanchez, F. et al. (2025). Creation, Staging, and Performance of Educational Theatre Plays Using Robot Actors. *magis, Revista Internacional de Investigación en Educación*, 18(2).
- Mayorh, J. Diamond W. et al. (2026). Augmented Reality and the Reconfiguration of Stage Space in Contemporary Nigerian Theatre. ResearchGate. Available from: https://www.researchgate.net/publication/404321371_Augmented_Reality_and_the_Reconfiguration_of_Stage_Space_in_Contemporary_Nigerian_Theatre
- McCandless, S. (1958). *A Method of Lighting the Stage*. Theatre Arts Books.
- Nwadiigwe, Francisca A. (2022). *Mise-en-scène and the Stage Space: Theatrical Dynamics in Nigerian Performance*. Awka, Nigeria: Relevant University Press, p. 112.
- Ododo, Sunday E. (2006). *Technical Theatre Practice in Nigeria: Trends and Issues*. Lagos, Nigeria: Centre for Black and African Arts and Civilization (CBAAC), p. 29.
- Okeke, J. C. (2022). Improvisation and Spatial Adaptation in African Theatre Performance. *African Theatre Review*, 11(1), 70–84.
- Oni, Duro. (2004). *Stage Lighting Design: The Nigerian Perspective*. Lagos, Nigeria: Society of Nigerian Theatre Artists / Concept Publications, p. 67.
- Parker, W. O., Wolf, R. C., & Block, D. (2012). *Scene Design and Stage Lighting*. Wadsworth Publishing.
- Schechner, R. (1994). *Environmental Theater*. Applause Books.
- Shelley, S. L. (2013). *A Practical Guide to Stage Lighting*. Focal Press.
- Sheria, Julius Jack. (2021). *Challenges of Stage Lighting Management in Tertiary Institutions in Nigeria*. Keffi, Nigeria: Nasarawa State University Press, p. 87.
- Smith, R. (2023). Digital Lighting Technologies and Contemporary Performance Design. *Theatre Technology Journal*, 15(3), 101–118.
- Umanah, Sunday (2019), "The 2019 UNIUYO Season of Productions: Contents, Audience and Promotional Activities". *The Parnassus*, vol.15, 165-177
- Uphopho, Kenneth and Afolabi, Samuel Oluwaseun. (2019). *Modern Stage Lighting in Nigerian Theatre*. Benin City, Nigeria: University of Benin Press, p. 134.
- Williams, D. (2014). *Contemporary Theatre Lighting Design*. Routledge.
- Williams, K. (2024). Environmental Theatre and Audience Immersion in Modern Performance Spaces. *International Journal of Theatre Arts*, 19(4), 55–73.
- Zaure, F. P. (2025). *Nigerian Scenography and Ecological Transformation*. 2025, p. 203.