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Teaching Practicality in Theatrical Design: Feasibility into Sustainability

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Abstract

The theatrical design classroom equips students in developing and expressing creativity, largely through the facilitation of what is called "unrealized" projects. While developing unrealized scenographic projects is integral in nurturing the student as an artist, it proves to be problematic when students are placed in the position of designing for a realized stage production. Students are suddenly confronted with boundaries of reality: budgets, timelines, labor, safety, and the laws of physics. Translating and transferring the creative imagination into the world of feasibility is one of the greatest struggles for burgeoning and junior designers. Thus, it is important to bridge the gap between unrealized projects and realized production by integrating practical and logistic parameters in the training of design students. We ask how we might incorporate concerns for feasibility into the design curricula without compromising the exploration and expression of creativity. Environmental considerations for theatrical design in higher education are also discussed.

Teaching Practicality: Feasibility into Sustainability

Experienced designers are aware that the given set of circumstances for each design extends far beyond those of the script: Every realized production is faced with the limitations of budgets, tight timelines, the skill and experience levels of labor, and the idiosyncrasies of the stage space. As the safety of the cast and crew is of utmost importance, the laws of physics must also be considered. With the growing concerns over climate change and our ecological crisis, the theatre's responsibility in adapting more environmentally friendly and sustainable practices becomes increasingly crucial, as well. When approaching a design project, all these logistic parameters are equally as relevant as artistic considerations.

There is an ingrained system of teaching theatrical design, wherein the classroom is dedicated to analyzing and honoring the script while discovering the student's unique vision and creative potential. Realistic parameters, including considerations for budget, workforce, and space limitations, and, as of recently, sustainability, are left solely for realized production work. We, design instructors, nurture students' creativity through imagining extravagant designs for unrealized productions in class, but in ignoring realistic parameters, we do our students a disservice in not preparing them for what awaits in the real world. Introducing design projects where creativity must be bent to meet the limitations of theatre institutions, including those of time, space, and budgetary obligations, is a method for bridging the gap between theory and reality while still in an educational setting.

New Course Objectives

With the goal of building in the obligations of reality, we propose the addition of design projects where fostering students' creativity happens in accordance with the demands of the professional industry. First, students must gain a greater understanding of how the size, scale, and proportion of elements on stage translate from two-dimensional plans to three-dimensional forms. This is one of the foundational principles of design and frequently the most difficult to grasp. Envisioning the size of a drawn element in reality and how it will relate proportionally to other elements on stage is a challenge for even the most experienced designers, as "plans, elevations, sections, and construction details that we create in two dimensions don't always transition well into three dimensions" (Nitte Meenakshi Institute of Technology, n.d.).

Secondly, we aim to introduce students to variations in skill and experience in labor. Designing for the shop of a small, independent or community theatre where the designer may be in charge of building their own scenery or costumes with the help of a handful of volunteers is far different than designing for a shop of elite professionals, fully staffed with a production manager, technical director, shop manager, scenic artist, master electrician,

costume cutter/draper, and props artisan. The theoretical dream team of artisans creating a student's conceptual design is rarely a reality; designers must be capable of playing to the strengths of the shop they have available to them, rather than the shop of a perfect world.

Another condition of the imperfect world is money and time, which leads to our next objective. Although the designer may have an incredibly talented shop at their disposal, a short build timeline will restrict the ability of those artisans to realize an elaborate design embellished with fine details. Similarly, a shoestring budget requires an additional layer of creative thinking on the part of the designer. Students are often in the dark as to the cost of materials, how much of those materials are required for the build, and how much time it takes to build with them. Not all students have the opportunity to experience these parameters first-hand by working in shops, and even then, the monetary and material specifications of the builds are rarely discussed and shared with them.

Next, we challenge students to design for the unique features tied to a specific theatre space. Beyond merely requiring a thrust or in-the-round arrangement over that of a proscenium setting, students must search for anomalies in architectural features and safety requisites that might otherwise go overlooked, such as a backstage column that limits a scenic maneuver, for instance. Even the most seasoned designers still encounter these types of mishaps. For instance, Morgan (2022) admitted to "overlook[ing] important lines on drawings that indicate a height restriction offstage," resulting in chopping scenery down and inciting "changes [that] are costly and embarrassing" (p. 110). While we must learn to accept and embrace mistakes, training the design student's eye to proactively scan for such abnormalities is the key to both immediate and long-term success.

Finally, we bring concerns for sustainable and ethical practices into the conversation. With growing awareness of climate change, theatre institutions have started to adopt more environmentally friendly practices. For instance, Kansas City Repertory Theatre has formed alliances with other local theatres and performance artists in the greater Kansas City area where upon strikes, scenic pieces are shared with others with the goal of reducing waste. In this case, designers need to be prepared to amend their designs to accommodate a circular use of material. Introducing students to ecoscenography in the safe environment of educational theatre can help them welcome and embrace such practices with more open-mindedness.

Adding these considerations to the theatre design curriculum acts as an introduction to logistic parameters and eccentricities that will benefit students with a sharp eye and inquisitive mindset for their real-world endeavors. We introduce these parameters into theoretical classwork through two categories of projects: design-first and parameter-first.

Designing First and Adding Parameters Second

In the "design-first" model, students are tasked to design under the traditional classroom's widely accepted definition for the given set of circumstances: script requirements and production concepts. Students study the script, analyze its meanings and implications, and produce an artistic vision as a reflection of their interpretation. We then add the parameters of reality, such as real-world scaling, budgetary limitations, stock availability, and shop capacity as an addendum to the process. Upon such addition, students must adapt their designs to meet the new obligations presented to them through research, collaboration, and creative problem-solving.

The "Taping-Out" Evaluation

In the "Taping-Out" method, students are tasked with taping their scaled draftings on the floors and walls of a space, such as a blackbox theatre or classroom, much like a stage manager would do at the start of the rehearsal process. First, students observe: They walk through their own ground plans, note how their scenery occupies space and depth, and observe the height, width, and scale of elements in relation to the stature of their peers as they navigate the proposed design, as well.

The next phase is to analyze their taped-out designs. Students are asked to consider how the translation of the size, scale, and proportion of their design into a 3-dimensional world compares with their intentions and expectations. Students may discover that their spatial awareness has left them unsatisfied, therefore called to consider alterations to their design or alternative ways of approaching their concepts. They re-tape elements and take note of the effectiveness of altering dimensions in better realizing their vision. At this point, a revision project may be assigned wherein the student redesigns according to their new insights.

As the Institute for Educational Advancement (2022) argued, hands-on learning engages the senses and leads to greater understanding and retention. By visualizing and tinkering with their theoretical designs through hands-on activity, students gain a solid comprehension and lasting impression of how two-dimensional works translate into three-dimensional mass and space. Students engage in active learning through the exploration of and reflection on their use of space. Additionally, they learn implicitly, observing the triumphs or impracticalities of their work without being explicitly told through formal critique. We strongly believe that such hands-on engagement with spatial investigation will have a lasting effect, one that can inform the student's future design works and artistic endeavors.

Case-Study Method

The previous method introduces students to an *internal* boundary of reality, i.e. the limitation

of their own experience and skill in translating size, scale, and proportion from two-dimensional plans to a three-dimensional world. Now, we introduce boundaries of reality posed by *external* forces outside of the designer's control, such as time, budget, labor, and space. Upon completion, initial feedback, and personal reflection of a project, students are then tasked with redesigning the assignment - this time, however, appended by a boundary of reality:

- As an introduction to budget and cost management, students may be posited with a tight budget or inflation in material cost. In this instance, the student is asked to research the amount of materials required for their design, the cost of those materials, and the economic value of potential alternatives.
- To encourage the student to consider the variable of time, we may assign a restriction on timeline resulting from a quick turnaround between shows or from the prioritization of another show in repertory at the same theatre. The student must consider the quantity and complexity of their design in relation to build time.
- Attention for experience, skill, and amount of available labor may be introduced with a hypothetical illness passing around the shop - an experience all-too-familiar in the pandemic era - or with a workforce of casual volunteers rather than hired professionals. As a result, students must factor in time and complexity.
- A final parameter to introduce is that of an overlooked eccentricity in the theatre space itself, such as a lack of fly rail restricting the options for scenery design and transitions, a lack of space in the wings affecting quick costume changes, a permanent border controlling the height of scenic items and angles of light, or an unlevel concrete floor limiting wheeling and locking scenic wagons.

To increase student engagement and trust in the learning experience, we encourage instructors to use real scenarios encountered in their own careers as evidence that these circumstances are not merely outlandish pedagogical tools but familiar obstacles that can catch any designer, regardless of level of experience, off guard. For example, in the summer of 2023, Hope Repertory Theatre, a summer theatre committed to providing professional opportunities to undergraduate students, was faced with the illness scenario posed above. A medical situation left a scene shop staffed only by student interns, entirely unsure as to how to move forward in the build. What ensued was an all-hands-on-deck scenario: Existing and emergency employees jumped in to pick up the puzzle pieces and complete the design in time for opening night. Scenic designer Stephen Hudson-Mairet and assistant designer Lindsay Webster redesigned and redrafted scenic elements and paint treatments to accommodate the sudden shift in time, skill, and available labor. While compromises were made to the original vision for the design, the final product still accomplished the original intention. To further connect to the real world, the instructor may create an alliance with local theatres so students may tour and experience firsthand what it means to work and design in a professional setting with

specific space parameters.

Students may initially feel overwhelmed or find that their mind is drawing blank, especially if they have never experienced or even considered such scenarios before. Facilitating classroom discussion of potential solutions eases students into a problem-solving mindset. The instructor may devise different strategies to foster such discourse, ranging from independent to group work. Enlisting all students to apply the same problem to their individual work creates a mutual understanding between students that encourages them to help each other, while also nurturing their personal creative and critical thinking skills. Alternatively, the instructor may choose to assign different problems spread throughout the classroom, to diversify and create a more vibrant environment. To foster collaboration and collective problem-solving, the instructor may opt for a group-based approach, wherein students form teams to tackle a proposed scenario. Each strategy provides students with discussion and critical thinking alongside their peers, ultimately serving as creative fuel. As an added bonus, classroom discussion mimics the experience of group problem solving with the creative team and department heads during a real production experience. In many of the scenarios posited, the team would collaborate to find a solution that best suits the production as a whole.

Guiding students in thinking outside of the box when devising solutions is key. Although reducing the bulk and mass of scenery may be the most obvious and direct method for cutting costs, perhaps replacing a specialty material in favor of a more affordable but similarly behaving alternative or a well-researched scenic painting technique is more effective and more artistically satisfying. Affordable and environmental options may be found by shopping second-hand, as well. For example, when designing a production of Caridad Svich's *The Labyrinth of Desire*, the creative team at the University of Kansas wanted to create the script's written setting of "a world of mirrors and transformation" (Svich, 2006/2022, p. 2). A geometric, moving mirrored labyrinth was designed as a result. The cost, safety, and intense glaring effect of moving mirrors, however, posed a substantial conundrum to the creative vision. Along with the scene shop manager David Wanner, designer Lindsay Webster tested alternative materials and techniques to achieve the appearance of desilvered mirror with greater cost efficiency and safety. They landed on a combination of lightweight mylar film stretched over luan, painted to age the silver and dull the glare.

After generating inspiration with the aid of group discussion, students are tasked with redesigning their initial projects with these new parameters in mind. We ask for at least two different approaches to solving the problem, one as the ideal and the other as a more conservative back-up plan. Then, a third approach may be formulated by blending the first two, replicating the kind of compromised solution perhaps more likely in a real-world situation. The degree to which they redesign is variable to the level of the course and its

students, ranging from a few brief sketches and written exposition to full color renderings/models and redrafted paperwork.

Not to be forgone is the reflection phase, where students present and assess their own solutions. We ask: How were you able to keep the essence and vision of your design, despite the boundaries presented to you? How did you make decisions on what was absolutely essential, what was nice to have, and what could be sacrificed? Did you double-up any elements? Did you discover a stronger design in the process? If you had known these parameters from the outset, would the final design be entirely re-envisioned? Class presentations provide students with the opportunity to verbally justify their choices, as they would with real creative teams.

Through the case-study method, the student learns in practice, reflection, and debate. With direct practice, they experience the all-too-familiar crisis of needing to pivot and rework with swiftness and creativity. The strongest learning may come from reflection, not only by evaluating their own solutions, but by noting the inventiveness of their classmates. Students observe their peers and discern how problems may be tackled in a myriad of ways and solutions applied to a variety of designs. This serves as a reminder that there is no one "right" way. The ability to recall those potential solutions functions as a resource when students are inevitably faced with such a scenario in their professional careers. Finally, students learn by arguing, as they debate solutions with their instructor and peers. As alternative points of view are explored, students either consider new possibilities or sharpen their own ideas.

Benefits and Results of the Design-First Model

In the design-first method, students retain the experience of designing to their full creativity without the burdens of reality. They *gain* experience in pivoting, adapting, and redesigning when logistic parameters are gradually layered on. We propose this order of events because introducing real-world parameters at the beginning of the project would impede students' creativity and excitement in forming grand ideas by starting them off with a restricted mindset, especially in the case of first- or second-year student designers. Furthermore, this scenario mimics the familiar real-world situation of needing to redesign due to unforeseen circumstances after a design has long been finalized, presented, and approved. Formal revisions of projects serve as exact practice for dealing with such events.

The Alternative: Adding Logistic Parameters from The Onset

There are circumstances, however, when we may wish to expose students to the boundaries of reality through the "parameter-first" model, particularly for more experienced student designers who are nearing graduation and entering the job market. Students are presented with

the boundaries of reality from the beginning, alongside the typical project requirements for script analysis and interpretative design concepts. As such, student design work is generated from a consideration of all parameters simultaneously.

The parameter-first method requires particular attention and creative approach on behalf of the instructor. As stated in the design-first models, presenting students with too many parameters may constrict creativity and cause a narrow mindset, impeding free exploration and expression of the dramatic imagination. The redeeming benefit, however, is fostering an approach to design by which the designer is proactively imagining and even integrating potential alternatives into their work from the start, thereby making any adversity later in the process much more manageable for all involved.

Taking and Modifying Stock

With this consideration in mind, we propose an exercise in which students are tasked to design by taking and modifying only stock scenery, costumes, and lighting equipment. Kizer (2015) suggested a method of designing where a director and designer meet at the venue, survey the resources freely available to them, and allow inspiration to strike. The result is a what-if-this and what-if-that collaborative design process. To translate Kizer's idea to theoretical projects, students will be presented with a record of stock resources: large scenic elements like flats and doors, small adornments and moldings, leftover paints, stored furniture and hand props, period or fantasy clothing in costume storage, and lighting inventories. They are asked to design purely from what is in stock.

A healthy storage of doors but minimal stock of flats may lead the scenic design student to explore joining, hanging, and overlapping doors as a visual metaphor. The costume design student may find that painting on costumes becomes their new favorite motif. A lighting design student may discover a new way to engineer a flickering flame with tinfoil and some clever programming, without the help of commercial flicker bulbs. The challenge may be in arranging and permuting with minimal alterations, or it may be found in the creativity of re-coloring, sizing, patterning, and texturing. Regardless of the level of modifications granted to students, the assignment requires a final product that fulfills script requirements and supports design concepts.

There are a number of ways in which this assignment may be structured to encourage creativity and excitement, regardless of the restrictions in place. To encourage students' spatial conception of rearranging stock scenery, the instructor may provide model pieces for a tactile experience. They may also consider modeling the items digitally; technologically savvy students will appreciate the ability to easily stack, position, and modify stock elements within their devices. Lighting design students may be particularly excited by pre-visualization tools

such as Vectorworks Vision or Augment3d. Finally, if the documentation provided to students is derived from the department's own stock, class time may be devoted to pulling and rearranging the actual pieces. The whole class or groups of theoretical design teams gain the added experience of collaboration and communal inspiration as a result. We ought to consider the institution employing this method, however; the resources available at a robust R1 University versus those at an under-funded liberal arts college may be vastly disparate, and thus vary in creative potential. The instructor must gauge whether the resources available at their institution call for a realized or theoretical approach.

Benefits and Results of the Parameter-First Model

In this parameter-first model, students learn through exploration and creative problem-solving. They analyze and then debate the potential future of their available resources, then prepare to bring their devised solutions into fruition. While only designing from stock may not become a standard in realized scenarios, it serves as a creative experiment by which students learn the value in referencing the stock available to them at the beginning of their process and allowing themselves to find inspiration there. Rather than believing restrictions to be solely a hindrance, students recognize them as a catalyst for ingenuity and creativity. They proactively save the shops time, money, and headache by considering and incorporating stock resources from the outset of the production.

The Conversation of Environmentalism

This brings us to our next consideration for a boundary of reality yet to be fully discussed: our ethical duty to address environmental change and its resulting socio-economic injustices. The theatre landscape must shift to consider a method of production that is socially and environmentally conscious, and we rely on the next generation of artists to pursue and cultivate the movement. As such, bringing concerns for environmentalism and ethical and sustainable practices into the classroom acts as our next set of logistic parameters.

While the dazzling images of Broadway productions overwhelm the imagination of designers and scholars, the ethical questions regarding the cost/benefits of these productions in relation to their carbon footprint is daunting. Among rising concerns, there have been multiple efforts to introduce and encourage the necessity for scenography to adopt more environmentally conscious practices. For instance, terminology such as *ecoscenography* and techniques such as *upcycling* have become part of the scenographic rhetoric mostly due to the tireless effort of numerous artists and scholars within the past decade or so. However, these practices are still sporadic and not as commonplace as they should be. Being at odds with the demands of the job market, especially the highly competitive environment of the professional theatre industry which constantly seeks the next big idea, has considerably muted the importance of building a

scenographic world out of sustainable and repurposed objects.

In response to these challenges, we propose to expand the scope of our eco-discussion beyond theatre's carbon footprint and its small contribution to the growing ecological crisis created mostly by major industries such as food, oil, transportation, and fashion. We have witnessed how theatre, both as a medium and a platform, can play a pivotal role in changing the societal, cultural, and political dynamics towards creating more diverse, equitable, and inclusive living and working environments. We argue that such a powerful pedagogical dimension can be used to address the current ecological crisis in relation to its subsequent humanitarian crisis in both first and developing countries. As educators and practitioners, in what follows we propose and examine strategic ways of rethinking university theatre programs in three key areas: (a) curriculum design, (b) audiences' outreach, and (c) season selection focusing on providing a space for new plays examining the bilateral relationship between environmental crisis and class/race inequality. Our proposed intersectional approach is aligned with Woynarski's (2020) assertion that

> intersectional ecological thinking is both a way of looking and praxis. It is based on the idea that, on a global scale, ecological effects are unevenly disrupted and ties to social structures that disproportionately affect marginalised people such as women, people of colour, Indigenous peoples and the poor. (p. 19)

Woynarski then continues:

> Cultural works, such as theatre and performance, can reproduce these problems by creating an image of ecological work as "green and pleasant," middle class, white, singular and reductive. In order to address this, an intersectional understanding of ecology is needed to expose the complexity and interlinked issues of oppressions and injustices. (p. 34)

The State of Universities and Theatre Departments

University theatre departments are not among the most problematic sectors when it comes down to their carbon footprint. Most of the theatre departments, due to their limited budget, are consciously or unconsciously participating in upcycling and circular practices, including redirecting and salvaging as much lumber, fabrics, and lighting gels as possible for their upcoming productions. However, at the same time, the limited budget has imposed certain problematic behavioral patterns onto the scenic, costume, and lighting shops; for instance, buying cheap from fast fashion corporations or ordering online has become a common practice to meet the budget limitation. Similarly, (re)dyeing fabrics, which is a staple practice of costume shops in higher education, poses its own sets of problems, including the releasing of chemical pigments into water resources which would reduce the refinability of water for future use. While restructuring theatre departments at this point is not a feasible solution, these institutions, due to their wide and immediate access to a large number of educators,

students, and audiences, can take significant steps in cultivating new and more sustainable consuming cultures in the context of their pedagogical and artistic outputs.

Curriculum Design

While mitigating the consequences of climate change is out of the purview of theatre departments, shedding light on the ongoing ecological crisis and the necessity of adopting more climate conscious practices can be an attainable pedagogical goal within higher education. Without a need to overhaul their pedagogical models based on a green and eco-friendly agenda, theatre departments can add courses where students are offered a chance to become familiar with topics such as potentiality, integrity, and production processes of staple material used in scenic, costume, lighting, and prop designs. Such an approach can promote the idea of ecological consciousness while thinking creatively towards producing ephemeral productions. As Beer (2021) argued, "Being 'ecological' means integrating an awareness that no decision stands on its own: every design choice is intertwined with social, environmental, economic and political consequences that are far reaching and capable of having long-term effects and, ultimately, benefits" (p. 18).

The promotion of practices such as upcycling and circular systems can readily be achieved while students are asked to design a scenographic world for a play or musical. For instance, upon completing the design, students can be put in charge of understanding the production process and the afterlife of their ephemeral design by consulting with the scenic, costume, and lighting shop managers as well as the artistic director or production manager within the department. Additionally, students can be encouraged to reach out to the local theatres in their area and investigate the production processes used by small or repertory theatres. Upon reporting back and reflecting on the afterlife associated with their individual designs, students, then, can be presented with the design-first model described previously. In this instance, they are challenged with reconfiguring their original design based on more sustainable techniques including reusing material salvaged by the local theatres or small industries. This way, students are encouraged to think of sustainability not as a limiting force impeding their creativity but as a mechanism through which a greater sense of community and allyship can be formed with local theatres and small businesses. As Beer (2021) eloquently argued, "truly sustainable design should work towards regenerating more-than-human places by intersecting with and acknowledging a diversity of communities and perspectives, a step well beyond focusing only on resource mitigation" (p. 67).

Another solution for promoting cross collaboration and reducing waste would be offering courses in conjunction with departments such as visual art where sub-programs such as textile design, textile dying, and natural dyeing techniques are taught and practiced. For instance, at the University of Kansas, the Department of Visual Art offers multiple courses where natural

dyeing techniques are practiced both theoretically and through hand-on projects. A cross collaboration between theatre design and textile departments can invite, challenge, and teach students how to use natural techniques to dye the fabric used for building costumes. Since such practices are coupled with teaching historical significations of such practices, students not only learn about new techniques and possibilities but also would consider such practices as part and parcel of human life with their roots found among South American tribes. Furthermore, with the KU Textile Department's ongoing exploration of conceiving and showcasing sculptural works, the projects coming out of the course can be used for stage purposes as well as an exhibition exploration where fabrics are used in more abstract ways to create three dimensional sculptures.

Audiences' Outreach

Climate change is not a crisis that can be solved through an overnight solution; it takes time, effort, and energy. Programs and initiatives need to be carefully formulated for raising awareness around the human made eco-crisis that our planet has left to wrestle. However, the responsibility should not be put on an individual's shoulder to save the planet. Without a doubt, the huge portion of the responsibility of the current crisis is on the shoulders of the big corporations who are profiting from promoting destructive habits among their consumers, such as a normalization of waste caused by frequently disposing of products and buying cheap replacements. While hoping for governmental intervention and regulation of big corporations sounds like a vain cry for help, forming grassroots movements where consumers, through their purchasing habits, demand their manufacturers to change their unsustainable profit-based agendas to a more eco-ethical business model, looks more practical. Creating such a culture among masses is a painstaking task, but theatre companies can play a pivotal role in reaching out to thousands of audiences in a single night of a production.

For instance, while including diversity, equity, and inclusion (DEI) notes in their program, theatre departments can include websites such as footprintcalculator.org, a highly interactive, user friendly, efficient calculator for providing an estimation related to carbon footprint produced by an individual. Powered by Global Footprint Network, such rough estimations can redirect people's attention toward the significant role that they can play in pushing their legislators and manufacturers to abide by more eco-friendly agendas. As Eric Miller, the Director of *Ecological Footprint Initiative* at York University in Toronto, stated in an interview with Shaffer (2020):

> The Ecological Footprint accounting methodology is based on the premise that the planet's regeneration is the materially most limiting factor for the human economy. Consequently, Ecological Footprint data provide simple, robust, and easily understandable metrics for the minimum threshold condition for sustainability: the need to live within the means of our planet. (para. 7)

In agreement with him, David Lin, the Chief Scientific Officer of *Global Footprint Network*, added:

> For context, it is worth reminding that humanity's demand on our nature will eventually decrease to sustainable levels one way or another. With the COVID-19 pandemic, we've witnessed a global disaster that led to a decrease in global resource demand. We believe in a future created by design and not disaster, and Ecological Footprint data helps identify risks and opportunities. (Shaffer, 2020, para. 8)

Following such initiatives, theatre departments, by acknowledging their endeavor in reducing their footprints and raising eco-consciousness through producing meaningful program notes, can encourage audiences to interact with such websites to calculate their footprint and take responsibility for their decisions endemic in promulgating the current eco-crisis.

Season Selection

While carrying the torch of DEI, theatre departments can add environmental justice language to their season selection policy where the disproportionate effects of climate crisis on marginalized communities and immigrants are foregrounded. Following the Black Lives Matters movement, productions can be composed and staged where the focus is shifted on the frequency and impacts of natural disasters caused by climate change and their effects on predominantly communities of colors even in the United States. Looking at the outcomes of Hurricane Katrina, as an instance, makes it obvious that the worst damages were found in "predominantly Black neighborhoods, yet the relief was far slower and inadequate compared with that provided in predominantly white and higher-income neighborhoods, despite those being less impacted" (Bostean, as cited by Thomas, 2020, para. 7).

Based on the latest OXFAM report, the poorest 3.1 billion people in the world are victims of the richest one percent of the world population and their carbon pollution (Oxfam International, 2020). According to the report, "During 2020, and with around 1C of global heating, climate change has fueled deadly cyclones in India and Bangladesh, huge locust swarms that have devastated crops across Africa and unprecedented heatwaves and wildfires across Australia and the US" (para. 9). No one is immune but it is the poorest and most marginalized people who are hit the hardest with climate change. Such an intersectional approach to eco-discussion is a must as it can work as "a tool for a multilevel analysis of how oppressive structures work in relation to each other" (Woynarski, 2020, p. 37). Woynarski then continued by asking:

> Who is being represented and who is being erased in the narrative? What ideology, knowledge or subject position is represented as the 'norm' or dominant? What places and people are bearing the brunt of ecological consequences? How is the more-than-human being represented? How is the slow violence of climate change, and other ecological violence, producing inequality and fatal, asymmetrical effects? Unraveling

these questions and naming these practices are what I call intersectional ecological thinking. (p. 37)

By commissioning playwrights and organizing digital or in-person play reading sessions, coupled with in-depth dramaturgical analysis and post reading discussions, theatre departments can contribute to the formation of accountability culture among their audiences.

Conclusion

Unrealized design projects are vital in nurturing the creative instincts of theatre design students; here is where they unabashedly explore their curiosities and their artistic visions. If theatre is to survive, we must encourage innovation of the wildest imagination among the next generation of artists. However, it is crucial for students' innovative approaches to be *feasible* and *sustainable*. Thus, it is equally essential for theatre educators to nurture their students' practical knowledge alongside their creativity by incorporating alternative techniques within the design classroom. By contextualizing unrealized design projects with the boundaries of reality, including those of budget limitations, short timelines, variable skill and available labor, oddities of the stage space, and considerations for sustainability in the light of climate change, students are driven to consider alternate methods for creation, ones more equipped to meet the challenges of working professionally. Instructors may incorporate design-first or parameter-first assignments to bring these topics into consideration, as best suits the needs of their unique student body.

Incorporating realistic and worldly boundaries into traditional design classroom procedures transitions students from the safety of an educational environment into the more demanding professional sector. In doing so, we seek not only to set students up for success in their future professional endeavors, but to incite a mode of theatre-making that best serves our communities and environment for years to come.

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Lindsay Webster is a professional scenic, projection, and costume designer and assistant professor of scenic design at Baldwin Wallace University. Lindsay is interested in utilizing her background in mathematics and computer science in the arts by researching and practicing ways to apply advanced technology towards scenography. Her research has been presented with USITT at the 2023 Conference and published in IJEA. Lindsay's design work has been seen around the country, including the Wisconsin Shakespeare Festival, Hope Repertory Theatre, Theatre in The Park, and Tibbits Opera House. Lindsay holds a BA in Theatre and BS in Mathematics from Marquette University and an MFA in Scenography from the University of Kansas. To see more of her work, visit www.lindsaywebsterdesign.com

Rana Esfandiary is an assistant professor of design and technology at the University of Kansas. Beside designing for KU, Rana is an active scenographer in a greater Kansas City area where she has designed multiple scenery, costume and lighting for Kansas City Rep Theatre, KC MetlingPot, and Living Room theatre. Beside designing, Rana is a Middle Eastern Theatre and Performance scholar; her book, *At the Threshold: Contemporary Theatre, Art, and Music of Iran*, was published by Routledge in 2023. Rana completed her PhD and her

MFA in scenography from the University of Kansas. She also holds a BA in playwriting from Art University of Tehran, Iran. To see Rana's design practice please visit: www.ranaesfandiary.com