

## Autism-Friendly Theatrical Performances

How should the technical elements of a theatrical performance be implemented in order to make it autism-friendly?

Theatre

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## **I. Introduction**

My ideas behind this exploration into the question: **How should the technical elements of a theatrical performance be implemented in order to make it autism-friendly?** came about from walking past an autism-friendly screening of a movie at the movie theater, and I wondered if autism-friendly Broadway plays existed as well. Being part of a family with a member who has autism, I had a basic background of knowledge on autism in general, and I had an understanding of what would possibly need to be different in an autism-friendly screening of a movie as opposed to a typical screening. However, I had decided that if an autism-friendly theatrical performance did exist, the modifications made to the technical elements would likely be much more complex than a movie screening. After some research into this new curiosity I had, I was pleasantly surprised to find out that there are indeed companies such as the Autism Theatre Initiative who are dedicated to creating Broadway performances that are suitable for the environmental sensitivities that may be experienced by a theatregoer with autism. In order to delve deeper into what makes a play autism-friendly, it is necessary to understand the sensitivities that are experienced due to specific technical elements within a theatrical performance. Once the factors that cause the most discomfort are identified, it is then essential to determine how and why these elements could possibly be an obstacle for those who are not able to see a performance due to sensory overload or other harmful reactions. After noting that light and sound are the two main technical elements within a play that may hinder someone with autism from being able to enjoy the performance, I set out to discover the extent to which these elements had to be changed. I also had intentions to address the ethics behind these adjustments, by examining the technical elements of versions of plays that have been deemed autism-friendly.

## II. What is Autism?

By definition, autism is a developmental disorder that presents itself in varying degrees among those who have it. It is considered to be on a spectrum due to the variability in symptoms and severity, but it is often characterized by developmental delays or impairments in communication skills, as well as rigidity and repetition in cognition and behavior.<sup>1</sup> Autistic individuals also present with symptoms of sensitivities to light and sound. The structure of their central nervous system, along with their neurological capacity for environmental stimuli, impacts their reactions to light and sound by either heightening it or abating it. The cause for such light sensitivity is that autistic individuals have been found to have abnormal pupillary light reflexes and photosensitive retinal ganglion cells, making certain types of lighting, along with the intensity of the light, uncomfortable and even painful at times.<sup>2</sup> With regards to auditory hypersensitivity, much of it is attributed to an overload of sensory stimuli, rather than the volume of the sound alone. An autistic individual's limbic system, which is the part of the brain that controls one's emotions and stimulation, reacts to sounds differently than a neurotypical individual, and it triggers a negative emotional and behavioral response when a stimulatory sound is perceived. Therefore, the source of this atypical auditory sensitivity is not due to the functions of the auditory system itself, but instead it is caused by signals in the brain.<sup>3</sup> As a visual and auditory experience, theatrical performances are not always suitable for an autistic

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<sup>1</sup> "What Is Autism?" Autism Society, accessed 17 July 2019 <https://www.autism-society.org/what-is/>.

<sup>2</sup> "Light Sensitivity and Autism Spectrum Disorder." TheraSpecs, accessed 29 May 2019 <https://www.theraspecs.com/blog/light-sensitivity-autism/>.

<sup>3</sup> Lucker, et al. "Neural Mechanisms Involved in Hypersensitive Hearing: Helping Children with ASD Who Are Overly Sensitive to Sounds." *Autism Research and Treatment*, Hindawi, 28 Dec. 2015, accessed 17 July 2019 <https://www.hindawi.com/journals/aurt/2015/369035/>.

audience as a result of these sensitivities, so it is important to bear this in mind when attempting to create a show that is meant to be autism-friendly.

### **III. Light**

Autistic individuals may experience a range of symptoms of under-sensitivities, as well as over-sensitivities to lights, so finding lighting that is able to combat both possible ends of the spectrum of sensitivities becomes important for creating a show that is more inclusive for those with autism.<sup>4</sup> For instance, fluorescent lights have been found to be the most uncomfortable for individuals with autism due to the flicker effect created by the ionized gas within the lightbulb.<sup>5</sup> Therefore, limiting or completely omitting the use of fluorescent lights and instead, utilizing as much natural light as possible, or using incandescent light would be the most conducive for the audience.<sup>6</sup> Similarly, making small changes such as toning down sudden blackouts, as well as notifying parents and caregivers of any potentially surprising lighting elements ahead of time allows the audience to have a more comfortable experience. Extreme lighting may be especially shocking to an audience with autistic individuals due to the potential for increased sensitivity to light, so any notification ahead of time allows the audience members with autism and their families to develop a plan for coping with the intensity of the light based on their sensitivities. In the same fashion, dimming the house lights rather than turning them off not only allows for the audience to be less startled by the dark auditorium, but it also helps to dull all other light effects

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<sup>4</sup> “Sensory Differences.” Autism Support - Leading UK Charity - National Autistic Society, accessed 29 May 2019 <https://www.autism.org.uk/about/behaviour/sensory-world.aspx>.

<sup>5</sup> m0casa02. “Visual Sensitivity and Autism.” Cortical Chauvinism, 26 Sept. 2017, accessed 15 July 2019 <https://corticalchauvinism.com/2017/09/25/visual-sensitivity-and-autism/>.

<sup>6</sup> “Light Sensitivity and Autism Spectrum Disorder.” TheraSpecs, 29 May 2019 <https://www.theraspecs.com/blog/light-sensitivity-autism/>.

so that they are softened, instead of being omitted from the show. While changes are often made to autism-friendly performances in order to provide a show that is suitable to the audience, it is important that the show still maintains its integrity. With that being said, it is more likely for elements to be toned down and foreshadowed for the audience rather than taken out altogether.<sup>7</sup> On the same note, even if an element of the performance is foreshadowed, it does not necessarily mean that an audience member will not experience discomfort. As a disorder that is classified by a spectrum, autism is accompanied by symptoms that can be experienced on a spectrum of severity, making it difficult to prepare for any given reaction to the lighting. Therefore, any lighting adjustments that can be made while retaining as much of the original show as possible is essential.

#### **IV. Sound**

Much like the potential of having symptoms of under-sensitivities and over-sensitivities to lights, it is necessary to find a balance for the sound as well, so the audience is able to perceive the performance in the most favorable way possible.<sup>8</sup> Once again, similar to the lighting, any auditory elements that could potentially be surprising for the audience are often foreshadowed in autism-friendly performances so that the performance can remain relatively the same, except more subdued with regards to the severity of the volume. For example, many times, the show will not contain sounds louder than 90 decibels, as that is usually the maximum level for the

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<sup>7</sup> Viswanathan, Vidya. "Making Theater Autism-Friendly." The Atlantic, Atlantic Media Company, 7 Apr. 2015, accessed 25 Mar. 2019 <https://www.theatlantic.com/health/archive/2015/04/making-theater-autism-friendly/388348/>.

<sup>8</sup> "Sensory Differences." Autism Support - Leading UK Charity - National Autistic Society, accessed 29 May 2019 <https://www.autism.org.uk/about/behaviour/sensory-world.aspx>.

volume before it begins to be uncomfortably loud and potentially harmful to one's eardrums.<sup>9</sup> In order to better prepare for such occasions when the sound could be potentially very surprising to the audience, the John F. Kennedy Center for the Performing Arts makes a point to “develop a means to notify the audience of these sounds during the performance, such as using a visual indicator like a glow stick, so patrons can use their own sensory behavior strategies”<sup>10</sup> when they are presenting a show suitable for those with sensory sensitivities. It is possible for staff members or volunteers at the venue of the performance to follow along with the script for the play and hold up a glow stick while standing off to the sides of the stage shortly before a potentially jarring sound occurs. Additionally, instead of having sound come from all different directions in the auditorium, autism-friendly performances may have sound only coming from the speakers behind the stage, projecting out into the audience in order to create a less overwhelming sound, as can be demonstrated by Figures 1 and 2 on page 6.<sup>11</sup> Figure 1 shows that speakers for a performance that was created without the intention of it being suitable for an autistic audience may be placed along the sides of the auditorium, close to where the audience sits. Not only does this cause the volume to be louder since it is closer to the audience, but it also creates a potentially overwhelming and sensory overload inducing atmosphere where the sound surrounds those in attendance at the play. On the other hand, the speaker placement in Figure 2 is less invasive. It is not surrounding the audience, and it is more likely to allow for quieter sounds

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<sup>9</sup> Viswanathan, Vidya. “Making Theater Autism-Friendly.” *The Atlantic*, Atlantic Media Company, 7 Apr. 2015, accessed 25 Mar. 2019 <https://www.theatlantic.com/health/archive/2015/04/making-theater-autism-friendly/388348/>.

<sup>10</sup> “Sensory Friendly Programming for People with Social & Cognitive Disabilities.” *A Guide for Performing Arts Settings*, The Kennedy Center, 2013, accessed 20 July 2019 <https://education.kennedy-center.org/education/accessibility/lead/SensoryGuidebook.pdf>.

<sup>11</sup> TDF. “Autism-Friendly Mary Poppins on Broadway.” *YouTube*, uploaded by TDF, 15 May 2012, accessed 25 Mar. 2019 <https://www.youtube.com/watch?v=vrb-opIcMWw>.

being projected to the audience, since it comes from behind the stage rather than out in the auditorium.

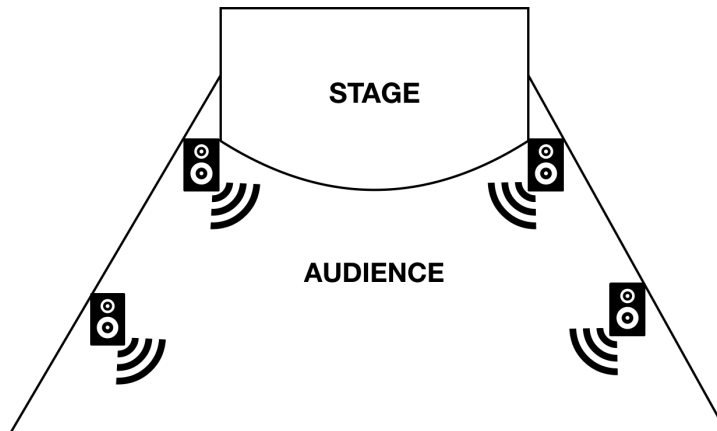


Figure 1.  
Depiction of the speaker placement for a performance that is not autism friendly. Source: student generated.

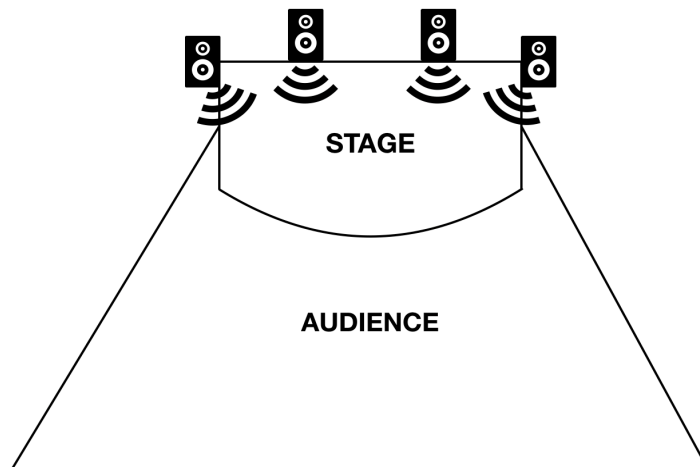


Figure 2.  
Depiction of the speaker placement for a performance that is autism friendly. Source: student generated



## V. Modified Broadway Performances

There have been numerous attempts at creating professional autism-friendly theatrical performances, and each attempt is unique in that the technical elements that are altered are specific to certain shows. The generic requirements for altering a show are taken into consideration no matter the extent to which the performance needs to be changed, but the approach to maintaining the integrity of any show is entirely individual. To further examine potential alterations to a show, this exploration will call attention to the attempts at creating an autism-friendly version of *Aladdin*, *Phantom of the Opera*, *The Curious Incident of the Dog in the Night-Time*, and *The Lion King*.

### a. *Aladdin*

The autism-friendly version of *Aladdin* attempts to maintain as much of the original performance as possible, because very few actual changes are made. In fact, most of the “adjustments” made are simply just warning the audience of shocking features throughout the performance. For instance, the audience is warned of the high volume of the voice of the Cave of Wonders, as well as the loud rumbling and thunder crack sounds associated with the Cave of Wonders. Also, the audience is warned that the pyro sparks from the genie’s magic is kept in the performance, but the sound is turned down slightly, and that in Act 2, streamers are shot out towards the audience. Apart from warnings, the only technical element that is actually altered is the houselights, because they are kept on in order to minimize the appearances of any other lighting. Though the house lights remain on during the performance, the magic carpet still moves above the audience. With this lack of drastic changes in mind, it is important to determine whether or not the audience responds well to the element that could possibly cause

overstimulation. According to Vidya Viswanathan, writer for “The Atlantic”, with the warnings for potentially surprising elements given ahead of time for the autism-friendly version of *Aladdin* and “with the house lights on, the magic carpet still swooshed magically above the children, who clapped, jumped, and waved.”<sup>12</sup> This is a positive reaction to minimal modifications, exemplifying that seemingly minor changes make a difference. However, if the performance is proven to be uncomfortable for a majority of its viewers, the need for some changes might outweigh the opportunity to keep the show essentially the same as its non-autism-friendly counterpart. There comes a point when directors must make the decision between having a truly autism-friendly performance, or having a performance that has maintained its integrity, but could still be altered to be more suitable for an audience with autistic individuals.<sup>13</sup>

#### **b. *Phantom of the Opera***

*Phantom of the Opera* is arguably one of the most difficult Broadway shows to turn into an autism-friendly performance while still maintaining its integrity, due to the various technical elements included in the show that have the potential to be overly stimulatory. The audience is warned of many of the surprising elements, but not all of the elements are omitted. Much like the attempt at an autism-friendly version of *Aladdin*, these elements are toned down slightly. For example, strobe lights and other effects like smoke and gunshots are not used because it is very difficult to mitigate effects with such intensity. However, loud and jarring sounds are still included, just softened to lower than 90 decibels so there is less of a chance for the sound to be

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<sup>12</sup> Viswanathan, Vidya. “Making Theater Autism-Friendly.” The Atlantic, Atlantic Media Company, 7 Apr. 2015, accessed 25 Mar. 2019 <https://www.theatlantic.com/health/archive/2015/04/making-theater-autism-friendly/388348/>.

<sup>13</sup> “Aladdin.” Theatre Development Fund, accessed 20 July 2019 <https://www.tdf.org/nyc/151/Aladdin>.

harmful to the audience's ears.<sup>14</sup> One of the most indisputably iconic features in *Phantom of the Opera*, the chandelier crash, poses as a potential problem when creating an autism-friendly version of the show. It is an essential aspect of the performance and would be hard to omit, but it is purposefully executed in a way that is meant to be shocking to any audience. Instead of replacing the chandelier crash, it is kept in, but the audience is warned of it ahead of time and the lights do not black out completely; they are dimmed to half.

### ***c. The Curious Incident of the Dog in the Night-Time***

This play depicts what goes on in the mind of an autistic individual, including sensory overloads, through its technical elements such as the lighting and sound. Audience members on the spectrum may be bothered by these elements, so modifications would need to be made in order for it to be an inclusive show. To accomplish this, all strobe lights were eliminated and the houselights were brought up to 30 percent of normal, attempting to minimize any discomfort that may occur with large amounts of contrast in lighting. By the same token, in the opening scene of the play, the dimmed houselights help to diminish the shocking effect of the dead dog on the stage, and instead of slashes of light, the lighting is increased more gradually in order to avert the audience's attention to the dog in a way that is less surprising. Furthermore, depending on the effect, the sound was reduced by 10 to 65 percent to avoid instigating a sensory overload or harming the audience's ears.<sup>15</sup>

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<sup>14</sup> Onderko, Patty. "Autism-Friendly Broadway Shows." *What Should We Do™*, 31 Oct. 2017, accessed 30 May 2019 <https://www.whatshouldwedo.com/blog/autism-friendly-broadway-shows/>.

<sup>15</sup> Carey, Benedict. "Tailoring a Play for the Acutely Attuned." *The New York Times*, The New York Times, 5 Dec. 2014, accessed 30 May 2019 <https://www.nytimes.com/2014/12/06/arts/an-autistic-friendly-version-of-the-curious-incident.html>.

#### **d. *The Lion King***

When contemplating the ways that the Broadway production of *The Lion King* could be made into a show that is inclusive for members of the audience with autism, the Theatre Development fund took approaches similar to those of other productions they had done. Lisa Carling, Director of the Theatre Development Fund’s Accessibility Programs, explained that “a sensory friendly performance on Broadway is different from a typical performance in that intense sound levels are capped at 90 decibels, strobe lights are eliminated where possible, and any lights that pan out into the audience, we ask that they can be cut.”<sup>16</sup> These are standard measures taken by companies for the purpose of achieving autism-friendly performances, but one aspect that makes *The Lion King* unlike other shows and a possible challenge when creating a show suitable for those on the spectrum is the actors walking through the aisles in the area where the audience is seated. In the modified show, rather than having the actors enter on the stage instead of through the audience, the actors still enter through the aisles, but the house lights are kept at 30 percent of their maximum, so the dimmed lights help to reduce any shock or fear that may occur when having the actors interact with the audience in the dark.<sup>17</sup>

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<sup>16</sup> “Sensory Friendly Performance - Disney's The Lion King.” *YouTube*, uploaded by The Smith Center for the Performing Arts, 21 Jan. 2019, accessed 20 July 2019 <https://youtu.be/EYGJ8flh82E>

<sup>17</sup> “SpecialNeeds.com.” Autism-Friendly Shows Planned for Broadway | SpecialNeeds.com, accessed 20 July 2019 <https://www.specialneeds.com/children-and-parents/autism/autism-friendly-shows-planned-broadway>.



Figure 3.  
*The Lion King* house with lights at 30%.<sup>18</sup>



Figure 4.  
*The Lion King* house without house lights on.<sup>19</sup>

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<sup>18</sup> “Planning Guide for Theatres.” Autism Friendly Performances, Theatre Development Fund, accessed 20 July 2019 <https://www.tdf.org/emailimages/TAP/ATI/AFPPanningGuide2018.pdf>.

<sup>19</sup> “Booking Period of The Lion King Extended.: Lion King Broadway, Lion King Musical, Disney Lion King.” accessed 5 December, 2019 Pinterest, <https://www.pinterest.com/pin/338121884502844592/?lp=true>.

## IX. Conclusion

It is not a question of whether or not autism-friendly performances can be done, because many companies such as the Autism Theatre Initiative have proven that they can be done, but it is merely a question of whether or not they can be done effectively and what steps should be taken to reach that point. The approach taken by most production teams when creating a show suitable for those on the spectrum is to either tone down severe lighting and sounds or give a warning for those elements ahead of time, or even do both. One aspect that is held in common, though, is that effects will very rarely be omitted for the sake of maintaining the integrity of the show, which therefore creates a more fair and equal experience for the audience of the modified show in relation to the original show. It can be argued that removing essential parts of a show because they are shocking, such as the falling of the chandelier in *Phantom of the Opera*, takes away from the experience of seeing a theatrical performance just as any other person would be able to see it and it is denying individuals their rights to access art. On the other hand, many of these theatrical performances would not be accessible to those with high sensitivities toward environmental stimuli anyway because they would not be able to comfortably view the performance without modifications being made. With these opposing arguments in mind, companies dedicated to creating autism-friendly performances must contemplate the extent to which it is ethical to make changes to the performance. It is unfair to the audience to change too much of the show, but not changing enough technical elements may still be unfair in the sense that the efforts do not succeed in creating a show that is suitable for all viewers. This is especially difficult to execute when considering the fact that audience members with autism may fall in many different places on the spectrum, so adjusting the lighting one way may be helpful to some, and harmful to others. These companies are then obligated to find a balance between

maintaining the integrity of the show as well as achieving the autism-friendly show that they intended to create, and they must keep in mind whether it is more helpful or harmful to the audience to make certain changes to the performances.

Some of the challenges that these companies attempting to create autism-friendly theatrical performances may face regarding the fact that people with autism may be placed on many different ends of the spectrum is that the audience members likely will not all have the same symptoms and reactions that come with under- and over-sensitivities to light and sound. Where one person might find a technical element of a show to be overstimulating, another person might not be able to sense anything at all because of certain under-sensitivities. The limitations that stem from these varying reactions only allow for very basic fixes to the lighting and sound to be made since it is gearing toward a very generalized depiction of an audience containing members with autism and their hypothetical reactions to the environmental stimuli. It is seemingly impossible to cater to every audience member's needs because of the considerably wide range of potential reactions from the audience, so the people from the Theatre Development Fund's Accessibility Program for autism-friendly performances must make it known to patrons that "[they] can make no assurances that these performances will be suitable for everyone with autism. Parents and guardians are solely responsible for their child's viewing and engagement with these performances."<sup>20</sup> However, a possible standard that could be used among all companies dedicated to creating accessible theatre would be to tone down all lighting and sound by at least 30% of the original brightness or volume. In doing so, an attempt would be made at catering to those who are toward the middle of the autism spectrum, which has the potential to

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<sup>20</sup> "TDF Autism Friendly Performances." Theatre Development Fund, accessed 20 July 2019 <https://www.tdf.org/nyc/40/Autism-Friendly-Performances>.

then be suitable for close to a majority of audience members with autism. Despite the inherent limitations, the efforts that these companies are making to understand the challenges and means by which a show must be modified to give a number of people the opportunity that so many others have much easier access to is shown through the abundance of shows that are now available to be viewed by a particularly perceptive audience.



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