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It Takes a Moment

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It Takes a Moment
An Honors College Thesis
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ABSTRACT

The world we live in today has caused many people to lose their faith in humanity. We are encouraged to discount each other's differences instead of embracing them; we are either "blue or red", "pro this or pro that", "for us or against us." In such a world, how can we remind ourselves that we are all part of the human family? That there is more that unites us than divides us? I wanted to find a path towards finding these answers, and I propose that path is theatre.

After all, researchers in London found that watching live theatre has the ability to synchronize heartbeats of perfect strangers, and helped an autistic boy to speak for the first time. Through research of the scientific effects of theatre on the human brain, body, and psyche, combined with anecdotal evidence to support that research, this thesis attempts to prove the importance and need for theatre in today's society. It is more important than ever for people to be active audience members at live theatrical performances, because theatre reminds us at our core we are all humans. The research and anecdotes then became the source material for the creation of my devised twenty minute piece called, It Takes a Moment.

INTRODUCTION

A crippling side effect of capitalism is the creation of inequality and promotion of polarization among people. It is easy to see the effects of this in today's society. People are struggling to communicate among their peers and between generations due to technology, which continues to isolate people from each other and grows political divisiveness in an "us against them" mentality. People can now choose to ignore political opinions that oppose their own, simply by changing the channel. Politicians can pay to get more TV coverage and those who can't afford this won't be heard by the masses. Children born into this "new age" are not required to learn communication skills with real humans since it is becoming increasingly easier to sit them in front of the television. Studies have shown that between 2014 and 2019, 68% of children have scored below average on communication tests (Baran 252). This decline has been linked to the fact that the average age children receive their first phone is 10.3 years of age.

The world is spiraling more and more into the dystopian type of civilization depicted in novels such as 1984: the question is: can we stop it? Perhaps the answer to that question has been around for thousands of years, something that has existed long before technology, or guns, or a two party system. As human beings, our brains are wired to think about complex topics like the purpose of our existence (McConachie 10-11). The need to understand the human condition is something that has separated us from any other animal and it has allowed us to expand into the advanced society we live in today. What better way to reflect on the human condition than theatre? Live theatre has existed for thousands of years, dating all the way back to Ancient Greece. The Greeks relied on theatre to remind their society about what being human can mean.

How many times a day do we sit next to someone, we do not know, and cry with them, share in their laughter, or share in their joy? This power of the theatre reminds us at our core, we

are all human. It just takes a moment to leave the polarized world behind, step into a room with strangers and live together.

SECTION 1: RESERACH

In order to appreciate and understand the benefits of theatre's role in society today, one must first see how it has the ability to change the human brain. In recent years there have been many advancements in neuroscience that have allowed scientists to study the brain's chemical makeup and behaviors in order to understand how it continues to change and adapt. Prior to the 1990's the widely accepted belief was that after adolescence the human brain no longer had the ability to change or reshape itself (Restak 5-6). However, according to American neurologist and neuropsychiatrist Richard Restak, within the last thirty years modern neurologists have discovered through advanced imaging technology and psychological analysis that, in fact, our brain's plasticity, this ability to change, is constantly occurring. In his book, *The New Brain:*How the Modern World is Rewiring our Brains, Restak claims that the human brain is able to reshape itself to grasp new information and that one can change their opinions or thoughts because the mind is willing and able to adapt quickly (Restak 12).

As the brain's plasticity is present, we know that even in an age of growing polarization we still have the ability to reshape our minds and opinions to see each other as similar rather than different. This can be achieved by enacting a change in a simple, yet effective way: recalling that we are all at our core human beings. All human beings share a humanity and drive for human connection. This paper will examine why attending live theatre is a starting point in finding that humanity again. The scientific reason why our brains will respond and re-form through theatre can be explained by two factors found through neurological studies: conceptual blending and mirror neurons.

Restak begins his book by exploring how the brain's plasticity is extremely dependent on the development of the frontal lobe and how evolution has shaped that development. He believes that as children and adolescents, the brain's communication areas are developing and evolving at an almost constant rate. This constant state of development is why the brain can reshape itself with less resistance during these stages of brain development. As he states above, the human brain is capable of this change even after these early stages, only if we bring in the right stimulant (Restak 36). Professor Bruce McConachie, author of *Theatre & Mind*, agrees with Restak and believes the right stimulant has been "storytelling and theatre since beginning of the human race" (McConachie 9).

Children in early brain developmental stages rely on play acting and storytelling in order to understand the world around them. In fact, McConachie points out that all early civilizations used some type of storytelling or primitive form of theatre in order to educate not only their youth, but also society as a whole. "Hominids acquired the ability to pass down their learning to the next generation and those children could build on that. This mental ability was first learned through "play" that developed into storytelling, separating early humans from animals" (McConachie 10-11). The use of storytelling as a way of educating and promoting understanding among peers did not die with ancient civilizations. In Iqaluit, a small town just below the Arctic Circle in Canada, the Inuit people have lived for thousands of years without anger. Their number one rule is never to yell at a child. They discipline their children through storytelling. This use of storytelling as a way to discipline helps the members of this community to remain cool-headed. The Inuit elders believe that our brains are wired to learn and "tie things together into a narrative arc in a way that, you know, just bare statements don't" ("Storytelling Instead of Scolding").

Much like Restak and McConachie's research shows, the Inuit community uses the brain's plasticity to shape a community without anger. Whether or not they are aware, the Inuit community has been using storytelling in the way McConachie refers to as "play" in his book. This "play" is essential in understanding human connection and in developing one's identity through the theory of cognition called Conceptual Blending. (McConachie).

When audience members attend a live performance and watch actors onstage, the brain begins to work through a complex process called conceptual blending. Conceptual Blending, is a relatively new theory in the study of cognition that was discovered beginning in 1993 by Gilles Fauconnier and Mark Turner; however, Fauconnier and Turner's discovery was not fully accepted by the science community until 2002 (Shrader). "Conceptual Blending is a basic mental operation that leads to new meaning, global insight, and conceptual compressions useful for memory and manipulation of otherwise diffuse ranges of meaning. It plays a fundamental role in the construction of meaning in everyday life, in the arts and sciences, and especially in the social and behavioral sciences" (Fauconnier). In other words, this operation allows the human brain to look at something that seems obtuse, or unbelievable, and change it into something it can connect to and understand. This all happens on a subconscious level, and when it does, the human brain releases chemicals that allow it to believe something that is not real as reality. This concept is more commonly known as "suspended disbelief" (McConachie). Even though we have no control over when the brain is going through this process, a recent study shows it occurs more frequently and for a longer period of time when watching a piece of live theatre.

McConachie mentions how the phrase, "suspended disbelief' is a false interpretation of the conceptual blending concept. Samuel Taylor Coleridge first coined the phrase and applied it to the idea that when one fully believes the actor becomes the character. Coleridge's claim was that this stage of "suspended disbelief" only occurs and you are so engaged in the performance of the actor that the character seems real. With the help of new brain mapping technology, McConachie has discovered that our brains go through the process of conceptual blending anytime we watch actors on stage. The idea of an actor being themselves and another person is a complex notion for the brain to understand, therefore, it begins to rationalize it by releasing chemicals into the neo-cortex that induces the conceptual blending.

Peter Eversmann, carried out a study in which he and his students monitored participants while reading *Hamlet*, and then while watching the live performance. Eversmann and his students interviewed participants after attending the performance of *Hamlet*. Although the overall responses to the performance varied, most of the participants agreed that they had imagined what the characters would look and sound like, but after seeing, the actors perform, they could not remember those images, which is a direct result of conceptual blending. "Once inside the playhouse the former reader becomes an active spectator and the conceptual blending of the flesh-and- blood actor with the author's character always takes the place of the imagined figure in the reader's mind" (McConachie 55).

Eversmann and his students compared the results from the live performance discussion and the reading discussion and found that the chemicals linked to conceptual blending were only released from the neo-cortex areas of the brain during the live performance. This is because of what McConachie, Fauconnier, and Turner had discovered about the theory of conceptual blending. Conceptual blending only occurs in the brain when the idea is too obtuse to understand and the brain has to redefine it to make it seem real. When reading *Hamlet*, one can set the book down and pick up exactly where they left off. The information the brain is getting from the page is information that can be reread and visualized. However, when those words are spoken by a

person in front of the spectator, by an actor playing the character, the brain begins to blend them as one, allowing the brain to empathize and see the character as a real person. Eversmann was able to prove this in his experiment, and went on to conclude, "The process of conceptual blending trains and develops an empathetic mind. It would seem evolution has primed us to be spectators and learn in this way in order to survive" (McConachie 55-56).

Restak and McConachie were focusing on psychological responses and effects of the live performing arts. Eversmann's *Hamlet Experiment*, began to look at how theatre enacts an emotional response that is seemingly greater than when reading a book. He began to see what participants were describing as an increased empathetic response to the live performance, was due to a set of tiny neurons in the motor cortex, known as mirror neurons. These mirror neurons were only discovered in the early 80s, and they began to uncover a new method of studying empathy as well as increasing scientists' fascination with the brain's ability to understand the complex concept of empathy.

In Marco Iacoboni's book *Mirroring People: The Science of Empathy and How We Connect with Others*, he explains not only the history of mirror neurons, but also how researchers began to relate them to humans understanding of empathy, and how to use theatrical scenarios to discover more about these special neurons.

In the 1980s, Italian neuroscientist, Dr. Giacomo Rizzolatti accidentally discovered Mirror neurons. He and his team were studying macaque monkeys' neurons called F5, which fired if the monkeys reached for or bit into a something. The researchers discovered when they went to pick up a peanut in front of the monkeys and ate it themselves, the same neurons fired as if the monkeys ate peanuts. Rizzolatti's team found a set of neurons that were devoted to this "mirroring" response that only responded to very specific actions. For example, a mirror neuron

would fire when the monkey grasped a peanut, and only that same neuron would fire if the researcher grasped a peanut ("The Mind's Mirror").

Rizzolatti and his team published their findings and named them "Mirror Neurons". Their findings in monkeys ignited a desire within the scientific community to find out if humans had the same capability. Many studies followed and discovered a similar response in the motor cortex, but researchers wanted to know if these neurons went beyond basic motor skills.

Research had already proven mirror neurons responded to people's actions, but would they be the key in unlocking one of the more complex functions of human's ability to empathize? Christian Keysers wanted to answer this very question. He set up an experiment in which participants were brushed on the leg with a feather duster and then watched someone else being brushed with a feather duster ("The Mind's Mirror"). The reaction of the mirror neurons were the same, however, Marco Icaoboni, believed the reaction came from a stored short-term memory of the feeling of being touched by the feather duster. Icaoboni wanted to know not only whether the neurons respond to people's actions or emotions, but if the neurons could predict the intentions behind those actions based on the context in which they were happening.

Icaoboni created an experiment in which he created a theatrical scene of a tea party that was about to begin and one that had just ended. He then compared if participants watching the two performed scenes had the same firing of neurons when simply watching a video of a teacup being lifted off a blank table (*Mirroring People*). The results showed that the mirror neurons reacted more strongly when the teacup was in a real life moment, rather than simply sitting on a blank table. Iacoboni concluded that mirror neurons had the ability to interpret intentions of actions even before they occur. This led him to believe that watching other humans experience

hardships, pain, and even joy teaches us how to connect with other people's emotions and experience it ourselves (*Mirroring People*).

In his book, Iacoboni mentions that seeing others experience life, as in watching a play, is important in maintaining our need for real human connection. He says that in a modern society it is becoming increasingly difficult to exercise these mirror neurons because of screens and technology. Exposing children to violent movies and games is believed to be the cause of violence in this population. Iacoboni carried out a study in which some children were exposed to violent films versus simulated violence, in which he hired two actors to perform a staged fight in front of the children (Mirroring People). He discovered that those who viewed the filmed violence had less activity in the mirror neuron areas than those watching the staged violence. However, after the viewings when asked, the kids exposed to the film version showed more willingness to imitate that violence. The conclusion was that the mirror neurons were less active, because the film interpreted the violence for the children. When watching the filmed violence the children's brains were seemingly undisturbed by the violence. It was as if their brains were disassociating with the people experiencing the violence. However, when watching the staged violence the brain reacted as if the child watching was experiencing the pain of those involved in the fight. (Mirroring People).

The discovery of mirror neurons, and the theories behind conceptual blending all play into the reason that theatre has the ability to reach people and affect the human brain. The studies and first accounts mentioned in this next section aim to prove how theatre is effective in bringing people together psychologically, physiologically, and emotionally; in some cases, comparing these effects to other mediums such as film.

One of the most compelling and insightful pieces of proof of theatre's ability to connect people, comes from the results of a study carried out by neuroscientists from the University College London. Dr. Joe Devlin, Dr. Daniel C. Richardson, Dr. Helen Nuttall, and John Hogan from the Department of Experimental Psychology monitored the heart rates and skin responses of audience members as they watched a live performance of *Dreamgirls* (UCL Psychology and Language Sciences). The researchers monitored selected audience members from the time they entered the theatre until the conclusion of the evening. "Usually a group of individuals will each have their own heart rates and rhythms, with little relationship to each other." said Dr. Devlin, who led the experiment (UCL Psychology and Language Sciences). He also mentioned in some cases romantic couples or highly effective sports teammates have known to synchronize their heart rates for brief periods of time. What the team discovered was perfectly synchronized heartbeats of total strangers.

The study found that during the performance the audience members, who were being monitored, had heartbeats that were in complete unison. Their heart rates were so in sync that their pulses sped up and slowed down at the exact same rate. This observation was astonishing in itself, because it proved that the environment of attending a live performance bonds people, however, what the researchers didn't expect to discover was that during their post-show discussion the heartbeats were still in sync.

The participants from this study came from a wide range of socioeconomic groups and monitored continuously even through what the researchers called the interval (intermission).

During the interval, the synchronicity of the participants' heart rates who did not attend the theatre together decreased slightly, but stayed in sync with the people who accompanied them to the theatre that night. Although the synchronization of the all the participants didn't completely

drop, it was weaker than the synchronicity of those in the same social group. When the interval ended and the show resumed, the heartbeats of all the participants were in unison again. Dr. Delvin concluded that, "this clearly demonstrates that the physiological synchrony observed during the performance was strong enough to overcome social group differences and engage the audience as a whole" (UCL Psychology and Language Sciences).

One of the key findings to come out of the "heart beat study" is the idea that the environment of the experience of live theatre drives the ability to 'unite' in this way. The apparent "liveness" of theatre is what sets it apart from other mediums such as film or television, and as Matthew Reason points out in his study, this "liveness" brings attention to the other audience members and creates a shared memory among them ("Young Audiences & Live Theatre").

Matthew Reason conducted a study in which he hoped to answer the question of if there was a way "to identify a distinct character to the audience's experience of theatre that is determined by the live nature of the performance" ("Young Audiences & Live Theatre").

Reason's target audience for his research was a group of teenage students who had been on a school visit to see a production of *Othello*. Following the performance, the teens experienced a series of research workshops that examined the young audience members' experience of the live event, their memory of the show, and their recollection of the environment around them during the performance. The results were very widespread, as Reason points out, "there is no single answer to what attending a live theatre performance means to a young person" ("Young Audiences & Live Theatre"), however, there were three strong centralized themes that came from this study.

The first idea that the young audience members discussed was the idea of theatre being a public experience. Many pointed out that going to a movie in a theater is a public event, but the difference was, "going to the cinema you are surrounded by your peers" ("Young Audiences & Live Theatre"). Typically, people of the same age range will see a movie and their opinions or interests will be similar to each other. However, many of the young audience members pointed out that theatre is much different because there are many generations of people in one space. The presence of different generations creates a space full of varying experiences and yet everyone in that space is attending the same event.

Since there were so many different types of people in the theatre, the second general theme to come from Reason's study was the sense of the audience being responsible to one another. The younger audience members believed they were "a part of a team" and were charged to be quiet and attentive audience members so that the actors could give the best performance and so that everyone around them could experience that without distraction. They compared this idea to film. "If you talk in a movie you can always go back and rewatch it, and the screen doesn't hear you. But if you distract an actor you are letting them down and everyone around you down" ("Young Audiences & Live Theatre"). This sense of responsibility, allowed these young audience members to think about everyone else in the theatre and not focus on their own experience, something Reason points out is sorely lacking in our society today.

The third theme that came out of this study was the need for alertness to the "liveness" of theatre. Participants of the study overwhelmingly agreed there was a need to stay engaged throughout the entire performance. If they let their minds wander, there was no going back. This made them more aware of the fact that this event was happening "right now" in front of them.

One of the participants named Rebecca states, "I know that the play isn't real, but when your

there and it's happening in front of you and there's real people doing it, you forget" ("Young Audiences & Live Theatre"). Rebecca and many others also mention the idea of live theatre being "dangerous." There are all these possibilities of mistakes. An actor could forget a line, or someone could forget a prop, or worse is that as an audience member you could be the cause of one of these errors by being disruptive. The participants agreed "realness" and the "danger" makes the experience exciting, and more engaging than cinema. "We had a part to play from the moment that we entered the theatre, and audience and actors alike knew there was this unity" ("Young Audiences & Live Theatre").

Reason points out that many young audience members compared their experience at the theatre with their experience at the cinema. Participants mentioned that in a film there was a sense that it is "perfect," a prerecorded event can't be changed or have errors. Theatre, however, is never the same, so there is no perfection. The young audience members pointed out that because of this there was a deeper sense of connection with the actors. "Movies can show much more realistic violence and locations, but theatre has real people in front of you and more real connections" ("Young Audiences & Live Theatre").

Matthew Reason's study found that many participants understood there to be significant social differences between attending a live theatrical event versus seeing a film. Although Reason did not directly compare the two events, the differences were mentioned in the results. Reason's final comments concluded that theatre is a learned activity, and one that could be used as a way to shrink the growing divide between generations in our society.

Christine Aucoin from the *Boston Globe*, agrees and takes things a step further by blaming the growing "YouTube age" to be the culprit in the increasing divide between generations. In his article "Why Teens Need Live Theater in the Age of YouTube," Aucoin

sought to answer the question: "How do we stay connected to other generations when our youth is brought up in a technology driven world?" In 2019 85% of teenagers say they are constantly on the internet, a 24% increase since 2014 ("Why Teens Need Live Theater in the Age of YouTube"). When asked, most teenagers reported they spend their time on YouTube. YouTube is designed to keep kids in their "comfort zones." The algorithm built into the website ensures the recommended content is similar to what you have already watched. "In the YouTube age kids need their parents to unplug them and take them to live theatre" ("Why Teens Need Live Theater in the Age of YouTube").

Aucoin talks about his own experience of how his father forced him to attend theatre once a month. Although he was not always in the mood to attend the theatre, the more he did the more he realized the benefits of these events. His father knew the value of watching a live performance in which a character dealt with love and pain. Aucoin recounted, "Making eye contact with a character giving his dying soliloquy, or professing her love, I was forced into more unguarded emotions than usually provoked by the screen-based mediums that helped me maintain my oh-so-cool brooding façade" ("Why Teens Need Live Theater in the Age of YouTube"). After the show, his father would discuss these more mature topics with him, and he felt could trust his father much more than his friends trusted their parents who were just 'antitechnology freaks'. Aucoin talks about how in a theatre you cannot mute or skip the parts that you don't approve of, you have to take in many different world views which are easy to avoid in front of a screen.

The question that Aucoin leaves his readers with is, "how do we encourage the attendance of live theatre in a technology driven world, and how do we show people the potential

it has to help reconnect generations?" This question and the research I've collected guided the creation of *It Takes a Moment*.

SECTION 2: Process

Once I accumulated all my research, the next step was to prepare to create the piece that I would devise with my ensemble. Devised theatre can be defined in many different ways. For the purpose of my process, devised theatre is a form of theatre where a group of people collaborate together to create a new work based on a theme without a pre-existing script. For my process I acted as the lead deviser and director, meaning I helped my actors to create these pieces and refine them into a final performance. This next section lays out how I took the information from my research, developed strategies on how to implement that research, and how I incorporated my ensemble's ideas and experiences to create the final piece.

I started this process long before we ever stepped into a rehearsal space. I knew that I needed to have a way to organize my research, and I knew I wanted to add anecdotal evidence to support that research throughout the process. This anecdotal evidence would come from my cast's own personal stories that had to do with profound experiences as audience members. I started by separating my research into three sections: Science, Narrative, and Manifesto. The Science section consisted of the parts of my research that had to do with how theatre's effect on people was supported by scientific studies. I took anything that had to do with brain science, mirror neuron studies, and the heart beat study and put it into this category. I also put the case study work in here, because even though it relied more on questionnaires, the content fit best in the science section.

My second section, the Narrative Section, consisted of personal accounts of when someone felt theatre had inspired them to make a change in their life, or witnessed a significant

change in someone else as an audience member. I put the narratives into a separate category because the science tells us *how* theatre changes people, and the stories tell us *when* theatre has changed people.

The third section, and arguably the most difficult section to create in this process, was initially called the Manifesto Section. This section started out as a combination of quotes and interviews by people in the theatre and scientific community regarding theatre's importance in today's society. This section was going to serve as a true manifesto by stating why I believe theatre is the thing that will reunite us in a polarized society, but instead it morphed into more of a call to action by the end of the process. My third section turned into what would be called the Wishes Section. The more I specified my research the more I realized my third section should be more about hope for the future. I wanted it to seem more like a call to action to encourage the audience to bring more people to live theatre.

These three distinct sections helped me decide how to assemble a cast according to how I envisioned those categories to be manifested in this piece. I wanted to cast seven actors: five for the science section, one for narratives, and one for manifesto. In the casting process, I would label actors either 1, 2, or 3 depending on where I thought they would work best in these distinct sections. For the Science Section I was looking for actors who were very expressive with their bodies. I was looking for my "vaudeville" type actors, those who could be huge in their movements and not worry about looking goofy. When looking for the actor to fill the Narrative Section, I was looking for an actor who could move me with a story. Someone who could take a monologue and make me feel that they had experienced every moment of that person's experience. Finally, for the Wishes Section I wanted to find one actor who could speak strongly

and passionately about this topic. The person who could stand on a soapbox and give a fiveminute speech to convince people of something.

At first, I did achieve the goal of having seven actors whom I divided as I had anticipated; however, I lost three actors prior to the start of the rehearsal process. In recasting those roles, I downsized to six actors and took away the constraints of who was working in which section. I realized that if I was to make a piece speaking to unity, then separating the cast might work against me.

Once casting was complete, I realized I would have to go through and highlight more specifically what research I wanted to include. I had accumulated many studies, interviews, and narratives, but because of the twenty-minute time constraint of the piece, I had to find what would best highlight the point of the topic. I narrowed it down to three studies and two narrative stories. I then decided to ask my cast for their own personal narratives regarding a time someone they know or themselves have been changed while watching a live performance. I knew that for my narrative section I wanted to have the cast input on what stories would best represent this topic. I hoped this combination of research and personal experience would help the piece be more accessible for the audience. Using the three established sections (Science, Narrative, and Wishes) helped me to organize the overall structure of the entire performance. We, as an ensemble, developed these three sections separately with text and movement. Once each section was developed independently, we used small transition pieces that enabled us to mold everything together in one complete performance piece.

Developing the Science Section

There were three main studies that we focused on for the science section; The Heartbeat Study, Mirror Neurons, and the Inuit Community. The reason for choosing these three was that they were clear representations of scientific experiments that dealt with facts that could be proven. This was not always easy to find my research, because most studies about theatre are based on surveys about how theatre made someone feel. The chosen studies, however, proved physiological and psychological data to express how theatre affects people. Each spoke to a different element of my research that helped to drive home the idea that theatre is a unifying force.

The unique and identifying element of the pieces that made up the science section was the quality they shared. Although each study was conducted differently, all of them lived at a very concrete and realistic level, in the sense that they were conducted by scientist to test theories regarding the power of theatre. The text of the studies incorporated scientific terminology, which is what distinguished it from the narrative section of the piece.

The Heartbeat Study

This study was the first one I sent to my cast prior to beginning rehearsals. After the cast read this research, we started exploring how to recreate the study using the idea of individual rhythms that fit together. After discussing with the cast what the essential theme was, we thought the best way to highlight this was by physically representing the heartbeats synchronizing. We worked a lot with learning how to create rhythms that were layered on top of each other. Each actor found their own "heartbeat" rhythm and then we modified it so that each individual would fit into one complex rhythm that would later easily move into a unified rhythm. Once the basic

heartbeat rhythm was developed, I paired down the text of study and gave it to my actors to read over. Actors was told to pick two lines of text that spoke to them, which was how we determined what needed to be spoken for this part of the piece. One of the actors was particularly drawn to this idea that synchronized heartbeats happen in life, but usually with people we know very well. We pulled out that fact to introduce the piece, accentuating the idea of why theatre is so powerful. The following text is what ended up in the performance script:

Usually we have our own specific heartbeat that is specific to us, but when we fall in love, or are with a group of teammates, our heartbeats can sync up and beat in time with one another. That, in itself, is astounding. But how do we care for a perfect stranger?

This beginning allowed us to establish each individual actors' heartbeat. Since the study was done while people were in the audience of a performance, we wanted to reflect this in our staging. We set up a "fake" audience on stage using a staircase unit and two blocks. This structure gave the illusion of house seats that are raked, a common set up for theatrical houses. With each new piece of information about how the study was carried out, each actor took their seat in this constructed audience and their rhythms became in sync with the others already there. As the final actor joined this audience, all the individual rhythms disappeared and we were left with one unison sound of a heartbeat. This sound came from the actors beating their chest twice with a 'ba bum" rhythm.

As we continued to explore the overall piece, the idea of these individual heartbeats syncing up because of theatre became a through line for the entire piece. I knew this study was crucial in my research, but it quickly became the piece that seemed most illustrative of the overall thesis. It accomplished this by defining how theatre can physiologically manipulate us to a more unified state with those around us.

Mirror Neurons

The next piece that fell into the science section was the piece based on the mirror neurons. In order to stage this, I started by looking at all the research I had gathered surrounding mirror neurons. In order to make it different from The Heart Beat Study, I pulled out text that explained what mirror neurons are and how they relate to theatre:

The mirror neuron system in our brains activates whether we perform an action or watch someone else perform that same action. It's the reason why we cringe when someone stubs their toe, or we giggle when someone near us is laughing. Scientists have labeled these as the empathy neurons and, we as humans, are predisposed towards empathy. But like any skill, empathy can grow with practice or it can wither from lack of experience. Theatre inspires empathy, and scientist have found that watching live theatre causes our mirror neurons to fire more rapidly. We see things differently but empathize with the situations. It seems we are wired to see people as similar to us, rather than different

I got bits and pieces of this text from various sources in my research and then combined them together into one small paragraph about the mirror neuron system, and why it was important evidence to support my claim. Building this text inspired how the movement for this particular piece would be laid out. Since I mostly pulled a sentence from each source, I divided the text among my actors based on where each line came from, and then we began to play with the idea of mirroring. The concept of these neurons is all about how they fire because of watching someone perform an action. I wrestled with how to stage this text because it had the feeling of a lecture when reading it aloud. I wanted to make sure that the ensemble could find a way to deliver this information so it would stick in the audience's minds and not just be a dump of information.

The idea for the movement of this piece came from watching my actors play an energizing game in rehearsal where one would run up to the other, do a movement, that person

would have to copy the movement they were given, and both actors would run back to their respective sides. This game reminded me a bit, of how we think of the firing of neurons in our brains. Having the actors run out at each other, mirror each other's actions and then run away, was a physical expression of the synapses sending information to the mirror neurons. Using this game as the movement we then put the text on top of actors running around "being neurons" which enabled them to articulate, provide a visual representation, and entertain the audience with this important information.

Inuit Community Study

I did not originally plan on having this study in the performance because I wasn't sure if it fit more into the Narrative Section or the Science Section. I was also concerned that it wasn't a strong enough piece of evidence to help the progression of the performance. I found the need for this piece far along in the process when I realized I was missing a huge commentary on how theatre helps bridge the gap between generations.

The text for this piece was set up to help explain how theatre has existed for thousands of years:

All early civilizations used some type of storytelling in order to educate not only their youth but society as a whole. Humans acquired the ability to pass down their learning to the next generation. This mental ability was first learned through "play" that developed into storytelling, separating early humans from animals. However, the use of storytelling as a way of educating did not die with ancient civilizations.

This text inspired us to illustrate the idea that generations can find ways to communicate through oral storytelling, and how theatre is a form of this tradition

When creating the movement for this section, I wanted to make a point about the generations and how storytelling helps us take in information in way that our brains view as more educating and not diminishing. Two of my actors created a piece about storytelling, in which one was the father and the other the child. At the end of that piece, they switched positions: the child became the adult and began to tell the same story to their child. This smaller piece inspired me to expand upon it and use the text above to create a line of generations. This generational line would continue to grow throughout the piece. This meant "the child" would start as the "audience" of each line of text that was being given by the "elder". Then the "elder" would offer their hand and the child would become the next elder. The movement through the generations illustrated how, like the Inuit community, our brains are wired to learn through storytelling enabling us to speak through others in time and promote understanding.

Developing the Narrative Section

In the second section, I was working with a combination of stories I had found through my research and personal accounts from my cast. Developing this section took more time than the previous section. It was challenging to find a way to tell the narratives in a concise, yet powerful way. My goal for the pieces that fell into this section was to contrast the Science Section and make the movement and language much more heightened movement and poetic. I chose to approach it in this way because it would help make the sections contrast in tone as well as content. Since the narratives we used were experiential, there was a more emotional quality to them rather than cold hard facts.

After hearing all of the cast's narratives, I chose two stories from their experiences and added it to one of the stories I found through the course of my research. The one that came from my research I called Eli's Story and the two from my cast I came to call, The Glass Menagerie

Monologue and the Dads Piece. These were three very different experiences that audience members had that reflected the scientific research that was explained in the section above. They complimented the science and helped to bring in the element of human experience that is important to my thesis as a whole.

Eli

Eli's story was one of the first narratives I had found in my research. I found a stage manager's performance report that was published to a local newspaper in Minnesota. The report was from The Children's Theatre's production of *Harold and the Purple Crayon*. In this report, the stage manager reported about a disturbance in the audience during one of the school time performances of the show. The stage manager found out that the five-year-old who was the cause of the noises, was an autistic boy who had never spoken. ("Incredible Story from Seattle Children's Theatre & Children's Theatre Company"). Since this was written as a report and not in a narrative format, I had to rearrange the text into a monologue format. The report had comments made by the boy's teacher and I edited the monologue to reflect her perspective of the story, rather than retain the third person text of the report.

It was a typical kindergarten field trip. Bring the kids to a cute Children's Theatre play, sit in a dark theatre and let the performers take on the role of teacher for an hour and a half. Little did I know...We settled into our seats getting ready for Harold and the Purple Crayon and I had found myself seated next to Eli. The lights went down and the play began something truly incredible occurred. You see Eli was an autistic boy who had never spoken a word in his life, but the lights went out and the actors began, and he spoke. Full sentences calling out to the performers, and even to me. He turned to me using my name and said, "I bet the dragon is going to breathe fire" and then there was fire. I didn't even know he knew my name. But as the show ended and the lights came up, he returned to his world of silence. I don't know how, or why in that dark theatre Eli felt safe enough to speak and communicate, but I will never forget how that day changed my life and his.

Once the text was arranged into this monologue, I began to work on the piece with my cast. I started working with this piece in small groups of three, introducing the concept of tableau work. Tableaus are small stage pictures that are connected to each other through specific paths of movement, known as topography. At this point, I had already introduced my cast to Eli's story, so they were given the task to create tableaus based on the story. Both groups created tableaus, with no text, which gave us our starting points for the creation of the whole "Eli" Piece.

For Eli's story I wanted to play with an idea that is called a doppelganger scene. A doppelganger scene works with the concept that one person is delivering the monologue or, text, and the rest of the cast is behind them depicting the story, with a dream-like quality. Playing with this concept, and using the tableaus that the smaller groups had developed, I began to fit them together. We began by setting five tableaus, some coming from the original small groups, and some built by the large group. We found these tableaus by creating labels from the text that I had put together as the monologue. The labels were short phrases or moments that I felt needed to be highlighted from the text. Those labels guided us once we moved into working with the doppelganger aspect of this piece.

Once we set the tableaus I had each of them step out for a moment and read a portion of the monologue as the rest of the group moved into the next tableau. What I wanted to find was the actor that would make the text pop as the rest of the cast moved through the tableaus behind them. When one of my actors, LS, stepped out and began to read the text I noticed that the tableaus we had created made it seem like LS was describing her day to someone, while the rest of the cast inhabited her memory of watching Eli live through his experience of that moment.

Once I saw this I wanted to really highlight this effect, so I had LS stand downstage of the rest of the actors and had each them move through the tableaus in unison as one collective Eli. This was

very effective, because the daily language of the monologue combined with this dream like movement through tableaus captured the magic of this moment in Eli's life.

I thought I had found the whole piece with this simple movement and monologue, but what I was struggling with was how to end the piece. The suggestion was made to me by my advisor to draw out the ending moment of the monologue even more. The text ended with a question, "I don't know how, or why in that dark theatre Eli felt safe enough to speak and communicate." So we began to play with the idea that the Narrative Section needs to contain clear moments of human connection through theatre. I had LS ask the question again, but this time directed to the other actors playing Eli. Each actor then came up with their own reason as to why they thought Eli might have felt safe:

I felt connected to people on stage. I felt safe in the darkness. I wasn't the one being looked at. I saw people being unapologetically themselves. I didn't feel like an outsider.

As each of the "Elis" gave the answer, they created a simple action that went along with their statement. They began to repeat the actions and statements faster and faster in a canon as LS walked among them and took in each answer. She then ended in the place in which she began, and repeated the words that Eli spoke to her, which is the most important element of this narrative.

"He turned to me using my name and said, "I bet the dragon is going to breathe fire" and then there was fire."

The other two narrative pieces I used in this section came from the cast. I asked each of them bring in a story of a time in their life where they themselves, or someone they know had a profound experience as an audience member that significantly changed their perspectives of others. I split the cast into pairs and I had them each tell their personal narratives to the other person. The person listening was allowed to take notes and ask clarifying questions to the person retelling the story. Then once each of the actors had shared their story the person who had listened had to take the story and create a one-minute monologue telling the story from their perspective.

From this exercise, we explored each cast members' narrative fully, but because of time constraint and the difficult challenge of finding a balance between all three sections, there were two that ending up in the final piece.

Glass Menagerie Monologue

The first of the personal narratives from the cast was originally brought in by the actor MS, but the monologue text was written by actor ZT. The monologue talked about how this boy had only seen campy musicals and never felt the need to see theatre for anything other than entertainment. He was profoundly changed when he went to see his friends in a high school production of *The Glass Menagerie*, which inspired him to seek out more theatre, and advocate the need to make others feel inspired like he had been.

This monologue was probably the simplest moment in the whole show, because I wanted to use this piece as a way to highlight how easy it is to simply be an audience member and how it can cause you to desire change in the world. I worked with ZT to create a movement piece with the text that incorporated more of the actors, but as we worked through it, we realized it should stay simple. I chose to have ZT sit for the monologue because the significant element of the monologue comes from the ending portion of the text.

I remember seeing the lead actor-then something scraggly high schooler, but to me, a hero, and thinking "I want to take the chance to make others feel the way you make me feel sitting here in this seat."

The notion that sitting in the seat as an audience member is what caused this profound change for him was essential. I therefore had him sit on a stool for the whole monologue, as if he was delivering this text from the exact seat he sat in as he watched this high school production of *The Glass Menagerie*.

The Dads Piece

The next personal narrative from the cast came from the actor VR, and then FS wrote the monologue. The story was about a father who had never really been able to show any emotion towards his family, specifically to his daughter. She was an actor and he would sometimes come to her shows, but never really got anything out of it. He then attended a show of hers alone and came out completely changed by the message of the show:

The show had a simple message: tell the people you love what they mean to you before you lose the chance. Now this message must really have resonated, because he came out saying how much he appreciated me and my family, and for the first time I met my dad.

This story held a lot of emotional weight for VR and even though FS was speaking the monologue, I wanted to find a way to make sure VR had a part in creating the movement part of the piece. We decided to create a 'walking gallery' for this piece. Using tableau work again, we created four different relationship moments between the daughter and father. VR acted as the daughter and the other four actors each took on the role of dad but at different points of the transformation that he went through while watching the play. As FS delivered the monologue, DSL VR walked through each of the moments with the dads.

The first actor portrayed the dad that the daughter knew before seeing this play. This dad was emotionless and didn't even look as VR tried to connect with this dad. VR then walked to the second actor playing the next dad, which was the dad that first began to be affected by the play. This dad was watching the play, so I wanted to make it clear that the performance caused the shift in their relationship. To clarify this moment, I added a piece of poetry that VR performed in front of dad #2 as if she was performing in the play her dad was seeing. The poem read:

Weren't we made to talk to each other? Weren't we made to stay in the same room, to think about that which we have in common more than that which is different? What if we were made to laugh, and we were made to cry? But what if the key is we were made to do that together not alone.

As she performed this poem, she created a composition of actions that went with this text. As VR was doing this dad #2, who started facing upstage with back to VR, began to slowly turn to face and watch VR, without her seeing. At the end of the poem dad#2 repeated the very last action that VR performed and kept watching her. VR didn't see the acknowledgment from dad #2 because she was continuing on through the gallery of dads.

Dad #3 was the first dad to make contact with VR. She left dad #2 by walking backwards into the arms of dad #3 who hugged her from behind. This happened in the part of the monologue that talked about how her dad was different after watching the show, and how much he loved his daughter; which is why he was the first dad to make physical contact with VR. The end of the monologue talks about the daughter really seeing her dad for the first time, because he was so transformed by the show. The last dad started by facing away from the entire gallery of dads but as VR began to walk away from dad #3, dad #4 turned to her and it was the first time VR looked at one of the dads.

The movement through the gallery of dads lined up with the text of the monologue and helped to illustrate the transformation of the dad before watching the play and after. In the end, we made the lighting on FS much brighter, while VR and the dads were in a dusky shadow effect lighting, making seem even more like FS was telling this story and we were seeing into her memory.

Developing the Wishes Section

The third and final section of the performance was the "Wishes Section". This section presented the greatest challenges in developing structure, choosing text, and creating a movement score. I had complied a huge document of quotes from TedTalks and interviews that had to do with why we need theatre in today's society. It was a very long document and in order to figure out which text would be most effective, I enlisted the help of my cast.

I laid out all the quotes on a table and we took an entire day of rehearsal creating many different little movement pieces based on them. I had each actor pick one quote and create a solo piece. I then had them do the same in pairs, groups of three, and finally as a large group. Each new grouping had to pick a different quote that resonated with them in terms of the thesis. The quotes that they pulled provided the text that would make up the first part of this section. It was in arranging this text that we found the title for the performance, *It Takes a Moment*.

The staging of this section was difficult, because I knew I wanted it to feel like a call to action, but there is fine balance between being inviting to the audience, and scolding or berating them. Most of the structure and staging of this section happened after we created the entire skeleton of *It Takes a Moment*. I knew this would be the ending of performance, and I wanted to have a moment where the actors directly addressed the audience.

We began by creating a moment in which the actors were wondering what could be done with the evidence provided up to this point in the performance. This was accomplished by using the text as dialogue among the actors as if they were discussing all the ways that attending live performance is important to us today. We created a beginning to this section by pointing out ways that we are torn apart by society today and how theatre brings us back together.

Where do we go from here in a world where we are blind to the needs of others? In a world where there is a generational divide? In a world where we become desensitized by media? In a world where we refuse to admit we are wrong? In a world of ignorance? In a world where we let hate guide us?

Going to the theatre acts as a moral compass. It gives you questions to think about. Theatre is a transformative experience. It enables us to see through the eyes of other people. It changes people. It inspires, engages, and educates.

The next part of this section referenced the narratives in the earlier section, as a reminder of the proof that theatre has this power.

It takes a moment. A moment of real vulnerability. A moment of changing our story. A moment of a dragon breathing fire. A moment of meeting my dad. A moment where you are pulled into the same moment as everyone around you.

The last line of this text launched us into the call to action. Using the unifying heartbeat established in the Heartbeat study piece, all the actors walked into the center aisle of the audience. I wanted to drive home the importance of the audience connecting with each other, and the actors on stage. It was our chance to say that everyone in the theatre at that moment had a role to play in making the connective power of theatre possible.

I always had the vision of the cast going into the audience, but I wanted them to go out and to leave something tangible with them. I wasn't sure what that was going to be until we began to look at the overall structure of the performance itself. Once I figured out that the

heartbeat would be a central theme, I knew that it would tie into this section. I had them begin the unison heartbeat rhythm before going into the audience as an invitation of unity between actors and audience. Then they would continue this rhythm as they entered the audience.

The text for this section became the driving force of the movement for the end. I had originally staged the entire cast moving into the audience, say some lines, and then walk back on stage. However there was still this sense of divide between the actors onstage and the audience.

When I realized this I looked back and the text and added a line that read:

It is the moment of every story where the actors toss the ball to the audience and says catch. What are you going to do with this? Theatre with a live audience creates a bond which has existed for thousands of years. Where a human being meets another, tells a story, and they are both forever changed. We have work to do.

With this newly added text, I saw that there had to be at least one actor still on stage to be that bridge between the audience and the actors. I left VR on stage and she spoke this text to the audience as the other actors processed into the audience. This allowed the ending to have a passing of the torch moment between the actors and the audience, which solidified the call to action that defined this section.

Structuring It Takes a Moment

Once all three of my main section were created, I had to figure out how they would fit together and become a full performance piece. I realized that the Wishes Section had to be the end, because it didn't make sense to begin with a call to action. However, I also knew I didn't just want to go section by section, but that I wanted to intertwine the Science Section and Narrative Section. I wanted them to seem to reflect off each other; the science would explain why and the narrative would be the how. I had discovered early on that the Heartbeat Study was

becoming a central theme and I wanted to find a way to have that piece be towards the end of the performance and yet be present throughout each of the pieces.

Since each actor had an individual heartbeat rhythm, and all their rhythms fit into a larger in sync rhythmic pattern, I thought this was the best place to start trying to tie this study into all the other pieces. In order to help the audience associate, the final rhythmic pattern with the unity of the audience caused by a moment of live theatre, I found it necessary to have moments where the rhythmic pattern was in sync. This always occurred after one of the narratives, because those were the moments in the show where we talked about live theatre unifying audience members.

When I made the choice to work with the heartbeats throughout the performance I began to see the need for transition pieces between the larger sections. I also realized there was a huge hole in the beginning of the piece. I needed to establish the problem in our society. The problem that comes from our inability to acknowledge other people's ideas, because of the polarized society we live in. Since I was making the statement that theatre reconnects us and reminds us of our shared humanity, there had to be a moment of disconnection. This turned out to be an introductory piece that I called the Newsroom.

I assigned each actor a particular news station and gave them seven different topics to find news reports for. The topics were: Me Too, universal healthcare, climate change, gun control, immigration, abortion, and gay marriage. I assigned news stations that covered the full scope of the polarization spectrum. I chose two fact-based news stations, ABC and BBC, two moderate yet slightly politicized stations, CNN and Fox News, and then I picked an extremist station for each side of the political divide, Occupy Democrats and RedState. I crafted it so that, with each story the facts became more and more drowned out by political opinion. I wanted to highlight the fact that society easily shuts out differing opinions. I did this by having making the

polarized opinions overpower the facts. Once the polarization got too overwhelming, the actors all silenced each other and began to move about the space, spouting their own opinions in a kind of bubble. This piece set up the performance as a whole, because I was able to present the problem I was going to answer with my research.

Once this discord was established, I wanted to introduce the need to reconnect but the inability to do that without theatre. I began to use the heartbeat as a way of reconnecting. I starting with having one of my actors break the silence created by the Newsroom piece with her heartbeat. When one actor, CM, found herself alone, she sat on a stool onstage and performed her individual heartbeat. Then when another actor entered, ZT, CM stopped her individual heartbeat, for a moment. She then tried to use it as a form of communication. However, because the connection to theatre as a unifying force hadn't been made, the two actors were unable to connect, until ZT sat in the stool that became his seat in the theatre for the Glass Menagerie piece. From that, moment on each new narrative piece contained a moment where one actor would do their heartbeat rhythm, another actor would find their own, and both would synchronize for a moment.

These little moments of connection and synchronicity of the heartbeats set up the audience to recognize the rhythms of each actor and to understand what was happening when they all became one heartbeat at the end of that piece.

The addition of the Newsroom piece also gave me a great place to go back to in order to bring in the Wishes Section at the very end. I struggled with finding a way to connect the end of the Heartbeat Study piece into the beginning of the Wishes Section, because I didn't know how to make a need for the call to action. I knew that the rest of the performance needed to act as evidence and proof that we needed the Wishes Section at the end, and I wasn't sure how to

present that. Once we had developed the Newsroom piece, I saw that there was an opportunity to bring it back again after the Heartbeat study into the beginning of the third section. I was able to use text from some of the news reports to prompt the actors to think of one thing they all saw that seemed too polarizing to overcome. What I ended up creating for the text was:

Where do we go from here? In a world where we are blind to the needs of others? In a world where there is a generational divide? In a world where we become desensitized by media? In a world where we refuse to admit we are wrong? In a world of ignorance? In a world where we let hate guide us?

This worked perfectly because the beginning of the Wishes Section acted as the answers to these questions and brought in the element of needing the audiences help to achieve this goal of a better future.

The last thing to come into place was the final moment of the performance. Since It Takes a Moment, was the second show in a night of thesis we came up with the idea to incorporate something from the first show into my final moment. Without knowing it my colleague, Sammie Resnick, and I created two performance pieces whose topics tied in this idea that performance can connect us when nothing else can. I still was struggling with the final moment of the Wishes Section because I still felt there was not a complete connection between the actors and the audience in the final moment. Once I had seen Sammie's piece we had the idea to tie them together in the last moment of my show. The moment my cast was out in the audience, her cast would join them. Then when VR called my actors back to the stage, Sammie's cast remained in the house with the audience joining in the heartbeat. This gave a clear image of the actors and audience being in sync even in the final passing of the torch. It was a surprise ending that I wasn't planning on having, but it was a powerful way to say it simply takes a moment of sitting in a theatre and experience the same moment as everyone around you.

SECTION 3: Reflection and Next Steps

When I first started to think about this piece, I originally thought it would become an experiment. I had intended to find a way to monitor the audience throughout a performance, and then use those results as part of the final moment to show them how they were indeed "changed" by theatre. My performance instead developed into a theatrical expression of the research that ended with a call to action. I had expected to create a piece that would allow me to ask a series of questions prior to the performance and then post performance and track how much the audience had been changed and affected by the theatre they had just attended. As I developed the piece with the cast, it shifted the project into an expression of my thesis rather than an experiment. I believe this shift was due to the nature of it being a devised piece of theatre. There were around twenty other pieces that we created in the rehearsal room that never made it into the final performance that may have helped with making it more of an experiment than this piece was.

The response I received from some of the audience members made me believe that my thesis statement had merit. The audience every show was diverse in age, race, and the experience they brought with them to the theatre that night. A student, not in the theatre department, sent me a message one evening after the show. He wanted me to know how much he now appreciates theatre and after seeing this performance, he believes theatre has a very important part to play in our society. He himself was only there to support a friend and was not much into theatre, but he wanted to make more time in his life to go after what he learned from my thesis. With even just this one response, it feels like I have been successful in driving home the impact of live theatre.

I know this is a piece I would like to continue to work on in my future. There were many more narratives and studies I could have used if it was not limited to a twenty-minutes and I

would like to attempt to add some of those into the already existing structure of this performance. I also feel this is a message that is important for people to hear when it comes to support arts funding in schools and community theatre. I would like to find a way to travel this piece to schools or communities so that the importance of being audience members can reach younger people. The goal of this piece was to create generations of theatregoers so that we can begin to rebuild our polarized society and I believe this performance can help begin that conversation.

Creating a devised piece in three weeks was a huge challenge and at times seemed quite daunting. The topic I was attempting to cover seemed too broad at first, but by refining my research and using my cast as a sounding board we were able to create a piece that initiated the conversation that many people in our world need to be having right now, which is how do we find a more hopeful future? How, in this ever quickening world, do we stop our lives long enough to remember the humans around us? Anthropologist Margaret Mead once said, "Never doubt that a small group of thoughtful, committed citizens can change the world, it's the only thing that ever has." From the beginning of this process, my cast and I used this simple quote to guide us in the creation of this piece. It inspired hope in my cast because even if this piece could encourage one person to want to see more live theatre, that's a start. If this piece can encourage more people to become active audience members at live theatre, then it will have been a success. After all it takes a moment of being pulled into the same moment as everyone around you, to remember we all have a heart that beats and we are all human.

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A Thesis by Anna Gwaltney

SCENE 1: NEWSROOM

Generic breaking news jingle plays as lights come up on actors in two lines of three. As the following lines are spoken the six actors spread out into one line across the front of the stage. Each are in front of their own "camera" reporting their breaking news.

Chelsea: This is ABC. Breaking news; the 'me too' movement supports survivors of sexual violence and their allies by connecting survivors with each other.

Zach: CNN: One of the most important lessons of #MeToo is that the silence of others has enabled perpetrators to continue to harass Victims

Lucy: Fox News: The MeToo movement, a frenzied extra judicial warlock hunt that doesn't pause to parse the different between rape and stupidity.

Fay: Occupy Democrat: She slammed the GOP, saying the party "only has tears for billionaires & outrage towards 'others."

Matt: Red State: A lot of men have made jokes, comments, etc. that they meant nothing by and ended up having their lives ruined over it.

Vic: Thank you for tuning into BBC News. Our top story today; Almost 400 all-time high temperatures were set in the northern hemisphere over the summer, according to an analysis of temperature records.

Zach: (*Switching to a new camera angle*) Climate change is the five-alarm fire that America's political leaders pretend not to see.

Lucy: (*Switching to a new camera angle*) After all it's the big New Green Deal, which isn't the real deal, and America the prosperous is the Satan.

Fay: (*Switching to a new camera angle*) Despite the clear evidence before our eyes, climate change denial still reigns in the Republican Party

Matt: (*Switching to a new camera angle*) Climate change activists were throwing a "Climate Strike" in London during which they were doing interpretive dance, yoga and just downright weird things.

Chelsea: (*Switching to a new camera angle*) The U.S. spends more money than any other country on health care, yet life expectancy is shorter.

Zach: (*Switching to a new camera angle*) The challenge in adopting Medicare for all is not really about whether it would be a better system. Yes it would be.

Lucy: (*Switching to a new camera angle*) Everyone is now on government health care or mandatory insurance, destroying much of the free market in health care.

Fay: (*Switching to a new camera angle*) Countries that already have universal health care are wondering, 'What's the controversy?' I am too.

Matt: (*Switching to a new camera angle*) The fact that the U.S. government has not passed universal healthcare is that most people don't want it. It has nothing to do with race or slavery and everything to do with defeating Trump.

Vic: The number of school shootings—

Other news reporters begin to speak over each other all trying to make their stories heard. As this happens Chelsea turns towards Zach and Vic turns towards Lucy. They begin to be over powered by the noise and the opposing sides close in on Chelsea and Vic in the center. They bump into each other. Silence. Vic places her hand in front of Chelsea's mouth, causing Zach to cover his mouth and then Fay to cover her own. Chelsea then places her hand in front of Vic's mouth, causing Lucy and Matt to do the same to themselves. All turn out to audience with hands in front of mouths. They begin to wandering around the stage with their mouths covered, not paying attention to each other.

Matt moves stool DSR. Actors slowly exit one at a time until Chelsea is left alone on stage next to the stool. Chelsea, alone, starts doing her heartbeat rhythm, covers her mouth. Seeing no one is there continues to do it. Zach enters, mouth still covered as he notices her. Chelsea stops abruptly and covers her mouth. She tries to do the heartbeat towards him, but stops herself, stares at him with wide eyes, exits US

Zach does his heartbeat rhythm once as she exits and quickly recovers his mouth. He moves to the stool and sits as he does it again and still covers his mouth. He does it one last time this time he stops himself from covering his mouth and begins to speak.

SCENE 2: GLASS MENAGERIE MOMENT

Zach: I had never been a theatre kid. I mean, yes, my family had seen shows, but I never felt the need to see a show myself. In high school I went to see some friends in a production of *The Glass Menagerie*. The only other shows I had seen were the likes of *Seussical*, loud, bright,

boisterous and fun, but nothing that had ever really resonated with me. But when I sat down in the theatre that day and was suddenly completely transfixed on what I saw on stage. There were people telling real stories. Actors showing real vulnerability. I had never felt so much emotion just watching something before in my life. I remember seeing the lead actor-then something scraggly high schooler, but to me, a hero, and thinking "I want to take the chance to make others feel the way you make me feel sitting here in this seat."

Zach gets up, Matt enters. Zach goes up to Matt (CSL), brings silence hand down

Zach: Being moved at the theatre allows us to realize that such feeling is possible and even desirable elsewhere.

Matt brings hand back up, walks DSR by cube, Zach does rhythm. Matt does his beat, silences self again, walks USR, Zach follows. Zach does his beat again, crosses to Matt. Matt does his, Zach lowers Matt's hand. Matt leaves it down.

Matt: When we admit that we are wrong we change, and we grow.

Vic enters, Matt lowers her hand, Vic moves to position, sits in spot.

Matt: If we want to change the world, we need to change our story. There is no stronger connection between people than storytelling.

SCENE 3: GENERATIONS

Moves to stool and sits as Vic runs in and sits on cube in front of him

Matt: All early civilizations used some type of storytelling in order to educate not only their youth but society as a whole. Humans acquired the ability to pass down their learning (*Zach puts his hand on Matt's shoulder*) to the next generation.

Matt holds hands with Vic, Vic sits on Cube, Fay runs on

Vic: This mental ability was first learned through "play" that developed into storytelling, separating early humans from animals. However, the use of storytelling as a way of educating (*Matt puts his hand on Vic's shoulder*) did not die with ancient civilizations.

Vic holds hands with Fay, Fay sits on Cube, and Chelsea runs in

Fay: There is a small town just below the Arctic Circle in Canada, where the Inuit people have lived for thousands of years without anger. Their number one rule is never to yell at a child. (*Vic puts hand on Fay's shoulder*) They discipline their children through storytelling.

Fay holds hands with Chelsea, Chelsea sits on cube, and Lucy runs in

Chelsea: This use of storytelling as a way to discipline helps this community remain coolheaded. The Inuit elders believe that our brains are wired to learn and (*Zach place's his hand on Matt's shoulder starting a chain reaction so that all the storytellers are holding each other's shoulder.) tie things together into a narrative arc in a way that yelling does not. (<i>Chelsea does her rhythm*) Theatre is storytelling.

Chelsea holds out hand, Lucy and Chelsea stand together. The Other storytellers begin to take on the persona of children and snap into a tableau. Lucy walks between them, moves DSL, as the storytellers runs around, playing.

SCENE 4: ELI'S STORY

Lucy: It was a typical kindergarten field trip. Bring the kids to a cute Children's Theatre play, sit in a dark theatre and let the performers take on the role of teacher for an hour and a half. (Storytellers sit facing US as if watching a play.) Little did I know...(Storytellers sit, swaying back and forth) We settled into our seats getting ready for Harold and the Purple Crayon and I had found myself seated next to Eli. The lights went down and the play began something truly incredible occurred. You see Eli was an autistic boy who had never spoken a word in his life, but the lights went out and the actors began, and he spoke. (Everyone's heads snap to look in a specific direction, moves) Full sentences calling out to the performers, and even to me. (Storytellers move USC into diamond tableau) He turned to me using my name and said, "I bet the dragon is going to breathe fire" and then there was fire. (Everyone separates.) I didn't even know he knew my name. (Everyone slowly turns to face US) But as the show ended and the lights came up, he returned to his world of silence. (Storytellers form new tableau)

I don't know how, or why in that dark theatre Eli felt safe enough to speak and communicate, but I will never forget how that day changed my life and his. (*Lucy turns to look at tableau*) I don't know how, I don't know why.

As the storytellers speak they perform an action that reflects their response.

Zach: I felt connected to the people on stage

Vic: I felt safe in the darkness.

Chelsea: I wasn't the one being looked at.

Matt: I saw people being unapologetically themselves.

Fay: I didn't feel like an outsider.

Lucy circles them all, as they are doing their actions. They start doing their movements on repeat, overlapping each other. Lucy moves to the center, everyone falls silent

Lucy: He turned to me using my name and said, "I bet the dragon is going to breathe fire" and then there was fire.

All exit into the audience. Matt lags and does his rhythm to Lucy. They repeat until they are in sync, then Matt joins the rest in the house.

Lucy: I didn't even know he knew my name

SCENE 5: AUDIENCE RESPONSIBILITY

Storytellers sit in the aisle becoming one with the audience, as Lucy begins to repeat the movement and monologue above as if she started over. They move in unison while watching the Lucy onstage. And begin to speak from the house.

Chelsea: We have a part to play from the moment we enter the theatre the audience knows there is this sense of unity.

Matt: There is a sense of responsibility that allows audience members to think about everyone else in the theatre and not focus on their own experience.

Zach: Theatre is a moment where we stop our lives long enough to reflect on one another.

SCENE 6: MIRROR NERUONS

Storytellers run on stage! They begin to send actions to each other repeating back and forth.

After they share an action with one person they run off. This is repeated each time they reenter on their lines.

Vic: The mirror neuron system in our brains activates whether we perform an action or watch someone else perform that same action.

Matt: It's the reason why we cringe when someone stubs their toe, or we giggle when someone near us is laughing.

Lucy: Scientists have labeled these as the empathy neurons and, we as humans, are predisposed towards empathy.

Chelsea: But like any skill, empathy can grow with practice or it can wither from lack of experience.

Zach: Theatre inspires empathy, and scientist have found that watching live theatre causes our mirror neurons to fire more rapidly.

Fay: We see things differently but empathize with the situations. It seems we are wired to see people as similar to us, rather than different

SCENE 7: DAD'S PIECE

Vic runs on, meets Fay, they mirror each other. Fay Moves DL and Vic USR to join Chelsea on a bench. As Fay describes her father we see Vic trying to interact with Sad Dad (Chelsea) Fay: So how do I say this, my dad has always been a pretty emotionless person. I know a great attribute in a parental figure. Well, anyways, I do theatre and, of course, my dad was supportive, he always came to see the shows I was in but only because I was in them. I had kind of just accepted that that was the way it would always be. (Vic moves USL to Alone Dad (Lucy) who is standing on a cube) But I was in a production and naturally my dad came to see the show but it was different because he was alone.

Vic begins to comp as Lucy slowly turns around to face her.

Victoria: Weren't we made to talk to each other? Weren't we made to stay in the same room, to think about that which we have in common more than that which is different? What if we were made to laugh, and we were made to cry? But what if the key is we were made to do that together not alone? (Lucy repeats last action of comp, Vic freezes in last position of the comp)

Fay: Now I don't know what went through his head during that show and I can't even hope to imagine (Vic walks backwards to Changing Dad (Matt) but when he came out of the theatre. I saw someone I had never meet before, I saw a different man. The show had a simple message. (Matt slowly pulls Vic into a hug from behind.) Tell the people you love what they mean to you before you lose the chance. Now this message must really have resigned (Vic slowly moves C making her way towards Loving Dad (Zach) because he came out saying how much he appreciated me and my family and for the first time I met my dad.

Vic does her rhythm, Zach does his, they slowly sync up to do same rhythm, Fay watches.

Other Storytellers begin to set up next scene by clearing the stage and bring out the staircase. Fay walks between Vic and Zach, Vic and Zach back away

Fay: We were made to be together, not alone. (Fay walks up now completed stairs)

SCENE 8: THE HEARTBEAT STUDY

Fay does heartbeat entire time, while everyone else does it sporadically while they are walking around. Once each Storyteller says their line they join Fay on the stairs and begin to do their heartbeat in sync with everyone on the stairs. Enter Chelsea, Zach, Matt, Lucy, Vic, order of heartbeat.

Fay: Usually we have our own specific heartbeat that is specific to us, but when we fall in love, or are with a group of teammates, our heart beats can sync up and beat in time with one another. That, in itself, is astounding.

Matt: But how do we care for a perfect stranger?

Zach: Psychologists rocked the theater world when they decided to study what happens to audience member heart rates when watching a live performance

Chelsea: What they discovered was your heartbeat can sync up with other members of the audience, regardless if you know them or not. The heartbeats can remain in sync even after the show when talking about the performance.

Lucy: During a performance, audience members' heart rates become so in sync they accelerate and decelerate at the exact same rate

All but Vic start syncing their personal heartbeats cycle three up and three down volume wise. Vic moves to position on block

Vic: Experiencing the live theatre performance is strong enough to overcome social group differences and produce a common physiological experience in the audience members.

Everyone does the synchronized beat two times

SCENE 9: WISHES AND FINALE

Storytellers frozen in final position from the last scene. They begin to look around at each other.

Chelsea: Where do we go from here in a world (*As they say the next few lines they each turn away from each other on the stairs*) where we are blind to the needs of others?

Matt: in a world where there is a generational divide?

Fay: in a world where we become desensitized by media?

Zach: in a world where we refuse to admit we are wrong?

Vic: in a world of ignorance?

Lucy: in a world where we let hate guide us? (*Lucy gets off the stairs and turns back to the other Storytellers*) going to the theatre acts as a moral compass.

The others all follow Lucy in leaving the structure on their next lines.

Zach: It gives you questions to think about

Fay: Theatre is a transformative experience

Chelsea: It enables us to see through the eyes of other people

Vic: It changes people.

Matt: It inspires, engages, and educates

The Storytellers look to each other and decide to move their stairs so it faces straight out to the audience. Once it is straight out, they look at their structure and then run their gaze down the stairs and up to the audience. They step into the same line they had started the show in, this time addressing the audience directly.

Chelsea: It takes a moment

Zach: a moment of real vulnerability

Matt: a moment of changing our story

Lucy: a moment of a dragon breathing fire

Fay: a moment of meeting my dad

Vic: a moment where you are pulled into the same moment as everyone around you.

Chelsea: This, the gathering of humans in a room, where even if we have nothing else in common, we all saw this, we all experienced it, that's a start. And now a path forward is proposed.

They all begin to do the unison heartbeat on their chests softly.

Matt: So we are asking you to go inside heart, mind, and soul and push go, call in the reserves, because we have to keep coming back to it.

They file out into the audience to stand among them while they do the heartbeat. Vic remains onstage.

Vic: It is the moment of every story where the actors toss the ball to the audience and says catch. What are you going to do with this?

As Vic is saying this line actors from The Exact Same Address, join the Storytellers in the aisle, with the heartbeat. Vic goes back to the top of the stairs onstage. As she says the next line the Storytellers join her back on stage and the cast of The Exact Same Address center themselves in the audience continuing the heartbeat.

Vic: Theatre with a live audience creates a bond which has existed for thousands of years. Where a human being meets another, tells a story, and they are both forever changed.

Chelsea: We have work to do.

There is one more beat of the unison heartbeat, and then the Storytellers on stage reach out their palms to the audience and the cast from The Exact Same Address reach their palms back out to them.

Black Out. End of Play.