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Violent Conventions: An Analysis of the Unintended Aesthetics of On-Stage Accidents

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VIOLENT CONVENTIONS:
AN ANALYSIS OF THE UNINTENDED AESTHETICS OF ON-STAGE ACCIDENTS

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Theatre

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ABSTRACT

In theatre scholarship, the event of the on-stage accident is a fairly neglected area of research. Aside from brief archival detailing of some of the more tragic events, scholars have not approached the accidents from a theoretical or historiographical position. Many, I surmise, find little of interest in an on-stage accident due to its lack of aesthetic purpose or intentionality. In this project, I focus on those neglected accidents and, more specifically, accidents that take place due to a violent failure of theatrical convention. I discuss three specific moments where a theatre convention – established to concretize the world of the play for the audience – turns violent before a live audience. I detail the apparatus of the convention and how it worked, as well as how it violently failed. Additionally, I discuss the cultural and material make-up of the event.

My study begins with the recent on stage death of *KÀ* performer Sarah Guillot-Guyard in Las Vegas and a review of the terminology and scholarship pertinent to this study. I then focus on three discrete events/theatre conventions: nineteenth century gas light and the fatal accidents caused by its use, the recent Broadway musical *Spider-Man: Turn off the Dark* and accidental injuries caused by prop weapons used during stage combat. What separates these conventions from an average theatre accident is their reliance on a technology in establishing the illusion of violence or danger. In my analysis I examine the phenomenology at play when a violent convention actually causes injury to the performer in front of an audience.

CHAPTER ONE: INTRODUCTION

Director Michelle Newman discusses happy accidents in theatre: “[W]hen I speak of the accident, I am speaking of those moments of dilation, exquisite crisis or disclosure when something real, unrehearsed and unrehearsable, electric, purely spontaneous gets through onstage...” (Newman 62). Newman describes a magical element in the bringing to life of a play, an accidental moment when the artifice of the theatrical framework dissolves into a powerful exposure to something real. As a young college actor, I was performing the role of Candy, the old farm hand, in *Of Mice and Men* when I experienced this very phenomenon. In the play my character (whom I was far too young to be credibly playing) is strong-armed into letting Carlson, another farmhand, put down his beloved and faithful dog. After weeks of rehearsals with the dog, I had grown quite fond of my little acting partner. On opening night when Carlson took the leash to lead the dog away, I lay down on my bale of hay and turned my back to the dog and Carlson. Then pure theatrical magic happened. As Carlson started to lead my old dog away, the dog stopped, came back to my turned away body, and licked my face as if to say, “Goodbye old friend.” The audience let out a collective “aww!” as Carlson led the dog off to be put down.

This unrehearsed moment of pure connection is the type of accidental beauty Newman discusses. For a brief moment the illusory nature of the stage play stopped. The dog – not “acting” at all – with an unplanned moment of genuine affection, exposed the audience to something real. In my twenty years and fortyish productions of creating live theatre, this moment is still one of the most powerful I can recall. These spontaneous moments become a vital part of the aesthetics of the play, and, when possible, happy accidents are recreated in future performances with a hope of recapturing that initial electric moment. As in my own experience,

these moments affect the audience in a very real and visceral way, even if they don't know that they are accidental. Additionally, having heard of the moment that the dog "stole the show," audience members to the following performances of my college production had the expectation that they too might capture the magic of opening night. Though the dog would not provide a similar magical moment for the run of that production, the possibility of the happy accident remained an audience expectation, and now an important part of the memory and history of that production. But what about the moments in theatre where the result of an accident is not happy, but rather violent? My example from *Of Mice and Men* is touching, and points to moments that make live theatre so powerful. It could have, just as easily, ended with the dog biting my ear, attacking Carlson, or something far more violent. A violent stage accident, while tragic, carries with it the same potential for dilation in performance. If we are willing to embrace the possible beauty and immediacy created by happy accidents, should we not also analyze critique and historicize violent accidents and their potential in performance? In this project I examine three specific sites of violent accidents in theatre history: how they happen, how they are received, the effect they have on the theatrical framework, how they affect future performances and the role that technology plays in the event.

In June of 2013, Cirque du Soleil performer Sarah Guillot-Guyard tragically fell to her death during a performance of *KÀ* in Las Vegas. When news of the accident crossed my screen I felt both a personal and professional urgency to talk about the accident. Guillot-Guyard was the single mother of two young girls. Shortly before the accident occurred, my wife and I had welcomed our son into our family. As a theatre professional and new father, the death of a fellow artist, while engaging in her art, sat heavy in my heart. As a theatre practitioner, I am drawn to plays that address violence in our world. As a designer and Technical Director, I specialize in

designing, planning and executing the technologies employed in spectacular theatrical conventions similar, though often on a smaller scale, to the ones used in *KÀ*. Upon reading about her death, I recognized the possibility that I could be involved in that type of tragedy in my work life. The accident also highlighted that, even in a high level organization like Cirque du Soleil, certain accidents are inevitable. The purpose of this project is not to propose a solution to violent accidents in theatre; that task is best left to the capable hands of each show's technical and artistic staff. Instead, my hope is that by engaging in a critical intervention into ways in which violent conventions are employed, technologies are utilized and the failure of those conventions are examined, a discourse may be created that moves beyond a simple dismissal of the accidents as tragic flukes.

This tragic event provides a timely launchpad for this study: an accident, more specifically an accident created from the failure of a stage convention meant to represent violence or danger, in this case aerial stage combat. In what was advertised as “a thrilling spectacle of agility and bravery that will have you on the edge of your seat” (Showtickets.com), *KÀ* performers wowed audiences with extravagant, dangerous-looking acrobatic feats and gravity-defying staged combat. At the time of the accident, with a budget of \$165 million, *KÀ* was the most expensive live theatrical production recorded (Isherwood). Under the direction of Robert LePage, known for his small scale avant-garde theatre work, this Cirque du Soleil production moved the company into an unfamiliar marriage with narrative. *KÀ* featured the familiar Cirque mixed elements of acrobatics and clowning, but new to the equation was the element of a linear, structured plot which requires the audience to engage empathetically with the characters in the show.

Kà tells the story of imperial twins from a fictionalized far-eastern land, violently separated in their youth. The brother and sister are individually forced to re-discover their identities by facing *Kà*, the essence of fire, which holds the power for either total destruction or illumination of the world. “The show's title,” according to the Cirque du Soleil website, “is inspired by the ancient Egyptian belief in the ‘Ka,’ an invisible spiritual duplicate of the body that accompanies every human being throughout this life and into the next” (Cirque du Soleil). Throughout the play the twins escape death and encounter love before their reunion. The two inspire the Forrest people to revolt against the oppressive Spearmen. This revolt culminates in a climatic large-scale battle scene between the two factions (*Kà EXTREME*).

The battle scene is perhaps the most spectacular scene from the show. Aided by wire rope cables and pulleys, performers scale a one-hundred-fifty-foot vertical wall called the “sand cliff deck.” Performers rise up and fall quickly in a highly choreographed acrobatic spectacle. Sarah Guillot-Guyard, an ensemble member, was in the midst of one of these vertical moves when a cable attached to her harness worked its way out of the pulley sheave and sheared under her weight on a sharp piece of rigging nearby. From ninety-four feet above the stage deck she fell, head first, screaming and grasping for her life. In his *Vanity Fair* exposé, critic Michael Johnson Gross captures the accident in gruesome detail: “She fell face downward, in full sight of several fellow performers, who were stranded in midair, hanging by their wires, and in full sight of the audience” (Gross). So convincing were the theatrics of Cirque’s signature spectacle that upon witnessing Guillot-Guyard’s fall, Gross reports, audiences were unsure if the action was part of the show. In *Kà*, he writes, “even the laws of gravity can seem to have no meaning” (Gross). Reporter Andrew Rafferty corroborates this account of the audience’s reaction, writing that “initially, a lot of people in the audience thought it was part of the choreographed fight”

(Rafferty). It was only in the moments after the fall when performers began screaming and the show was stopped that the audience understood what they witnessed was not a death-defying act of representation, but rather, an act of death.

The death sent shockwaves throughout the international Cirque organization. The show was shuttered, and the Nevada state Occupational Safety and Health Association (OSHA) authorities began what would become a four-month investigation into the accident. Cirque du Soleil is widely regarded as a leader in rigging safety and often provides workshops at conferences all over the world. I attended a rigging safety workshop run by Cirque at the 2007 United States Institute for Theatre Technology (USITT) conference in Phoenix, AZ. When Cirque first began its shows, they followed the longstanding tradition of the acrobats setting and checking their own rigging. As the acrobatics and spectacle requirements became more complex, however, so too did the technology behind the effects. *KÀ*'s aerial cues were controlled by computer-automated systems, and while specialty riggers off stage previously operated the flight systems, by the time of the accident, performers used joysticks in their harnesses to control their speed (Gross).

As a result of the June 29th death of Guillot-Guyard, Cirque halted the production for more than two weeks. *KÀ* reopened on July 16, 2013, but in a modified form without the climatic and deadly battle scene. It also should be noted, that the onstage death of Sarah Guillot-Guyard was the first in the history of Cirque du Soleil (Gross). Upon the completion of its four-month investigation, Nevada OSHA issued Cirque du Soleil six citations totaling \$25,235.¹ The most damning of the Cirque citations accused the company of not properly training Guillot-Guyard on the equipment for this scene. A major point of contention in the report was her use of the joystick

¹ The Las Vegas MGM Grand, the venue for *KÀ*, was cited by OSHA and fined \$7,000 for exposing its employees to workplace hazards.

speed control during the stunt. Accounts varied, but some witnesses claimed her self-controlled speed was erratic. Cirque was also cited for not properly training Guillot-Guyard for the specific stunt (Kearney).

Among the issues Gross uncovered was the fact that Guillot-Guyard had never performed in this role before the accident, though she had undergone training for the role at least a month earlier. Gross also detailed a former Cirque employee's theory that an improper type of wire rope was used and that may have contributed to the death, though OSHA findings denied this claim.² While the *Vanity Fair* piece casts at least a shadow of a doubt as to whether Cirque du Soleil holds a degree of negligence for the event, the exposé concludes that the accident was a freak combination of several elements resulting in a tragic death.

Director Robert LePage and the creative team of *KÀ* established spectacular effect with both the sand cliff deck and the high-speed aerial combat. This effect was successful, in part, because it pushed the boundaries of what the audience expected in a Cirque show using advanced technologies to create a new theatrical convention for the audience. By rotating the sand cliff deck in new and unbelievable ways, and utilizing advanced flight technologies to allow performers to rise and fall rapidly in concert with the deck's movement, *KÀ*'s theatrical conventions created an expectation within the audience to accept that, within the world of the play, characters can essentially defy gravity during these elaborate stage combat routines. Sarah Guillot-Guyard's character, along with others in the scene, was able to fly rapidly around the

² James Heath, a former rigger at Cirque du Soleil, insisted that the 19x7 wire rope used by *KÀ* was not suitable for the swivel harnesses used in the show and that XLT4 wire rope was better designed to handle the stresses of the swivel harness. Many of Cirque du Soleil's other expert riggers have long disagreed with Heath stating that the XLT4 wire rope is not flexible enough for the acrobatic techniques used in *KÀ*, that 19x7 wire rope is rated to carry a load of over 3300lbs and that the rapid ascent that caused the wire rope to jump out of its pulley would have caused any wire rope to shear. OSHA did not cite the type of wire rope used as a contributing factor in the accident (Gross).

sand cliff deck, representing the danger and violence of the climactic battle scene because the framework of the convention was established and the audience accepted this as a reality in the world of the show. When the technology failed, the convention was violated, leaving the previously established framework shattered and the audience in a state of rupture. Aside from the obvious concerns about health and safety, incidents like this also raise questions about the establishment of violent conventions and how that relationship between convention and audience operates. The accident also points a spotlight on how that relationship is altered when the convention fails. My project examines two specific phenomena related to such accidents: the technology used in creating a theatrical convention to represent the illusion of violence, and the actual violence done to both the performer and the theatrical framework when that convention fails.

A SURVEY OF LITERATURE

In my research, I have found no in-depth critical study of violent stage conventions and the meaning of their failure in live performance. Theatre scholars who critique theatrical conventions may mention the possibility of accident, but they focus primarily on convention's normal function within the theatrical framework. Scholar Andrew Sofer discusses in great detail the conventions involved with stage props but only acknowledges that accident will cause the convention to fail. He leaves unexamined the results of that failure. Likewise, stage combat scholars like J.D Martinez and Dale Girard focus their writings on creating a protocol to avoid accidents, leaving aside considerations of real violence that may be a result of accidents. Scholars who critique violence on stage also focus specifically on planned representations of violence, with only a few mentions of the stage accident. As I discuss in detail later in this chapter, Jody Ender's monograph *Murder by Accident* is unique in its approach to the stage

accident. Her text deals with the legal and moral implications of accidental deaths in both modern and medieval performance settings. Enders introduces a useful axiom for interpreting accidental stage action and a critical idea to this project, intentionality.

Though theatrical accidents remain largely uninvestigated from a scholarly standpoint, violence has been examined in great length, and the work done in such studies offers important frameworks and insights to this project. In an attempt to organize the colossal amount of literature on “violence” in a productive manner, I have categorized the approaches scholars have taken into four categories. The first and by far the largest are the throngs of philosophers and academics who write about violence in the world. By this I mean real violence that takes place outside of a theatrical framework. The second category drills down to a more theatre-specific level and deals with violence represented in performance, such as an illusion of a violent or dangerous act during a play. Thirdly, I group together those scholars who investigate and theorize the act of witnessing violence and pain. Finally, I combine writings about the performance of real and intended pain or violence in front of an audience. For the sake of this project I have relied on this axiom for differentiating the discourse on violence, but it’s important to acknowledge that other studies addressing violence certainly would organize and prioritize the field in very different ways.

The vast scope and amount of writing produced regarding violence in the real world certainly resonates with this work but requires a condensed view due to my narrower focus. Because the thrust of my project focuses on representations of violence, I have engaged an enormous umbrella to corral the scholarship and criticism on violence that consider topics like war, domestic violence, terrorism and corporal punishment. I have identified a few seminal

writers who have provided foundational terminology and critiques of real world violence that are most relevant to my project.

A common theme in the writings of violence scholars is power. Bruce Lawrence and Aisha Karim identify a critical social and political shift during the English Civil War in the seventeenth century with regards to the nature of the individual and sovereign control. An early contributor to the relation of power to violence is Thomas Hobbs. Hobbs' 1651 *Leviathan* introduced the core idea that men are equal and have the right to defend themselves, but if left to their own devices, the violence will lead to perpetual war. In order to avoid eternal conflict, Hobbs suggested, individuals must surrender to a sovereign rule. Hobbs' solution for the common fear of violent death was an individual dedication to the common good. This concept is the basis for the social contract and established the foundational idea that violence is a political tool for power and control (Lawrence and Karim).

Hannah Arendt's 1951 work *The Origins of Totalitarianism* advanced the premise that violence is a political tool used to control and transform human nature. Most specifically, Arendt analyzed the Nazi's use of violence as a means of control and extermination during World War II (Lawrence and Karim). Arendt's 1970 monograph *On Violence* further elaborated on the workings of violence as a tool for power and control. Arendt identified five aspects of political violence: power, strength, force, authority, and violence. She complicated the relationship between violence and power, concluding that violence has the ability to destroy power, but is problematic in creating a long term political power. Arendt also introduced the topic of terrorism and its role in violence in the 1960's (Arendt).

The most well-known critic of violence is French writer Michel Foucault. He engaged and theorized the existence of a complex and historical relationship between power and

knowledge. In *Discipline and Punish*, Foucault proposed that when investigating violence and power dynamics it is crucial to acknowledge and engage in the historical épistème of the events. Using an archeological/genealogical lens, Foucault traced the development of punishment and prisons based on the power dynamics at play in each épistème and their relation to the individual. Foucault separated the path of punishment into four parts: torture (which deals very specifically with the witnessing of violence as a tool for power), punishment, discipline and prison. Foucault also introduced one of his most famous and talked about concepts in this work, Panopticism. For the birth of the modern prison the Panopticon, is a critical step because it “automates and disindividualizes power” and allows for the many to be controlled and monitored by the few (Foucault 202). The writings of Hobbs, Arendt and Foucault are part of a throng of theories on the ways that real world violence operates. Their contributions highlight the idea that violence is culturally specific. The real violence endured in a specific epoch is a part of the cultural instincts of that era, and that due to the individuals place in the power structure certain violence acts are accepted within that social structure. I argue, as part of this project, that the real violence encountered by the audience during the following accidental events is distinctly tied to that event’s cultural proximity to violence in the empirical world. In other words, the nineteenth century exposure to a ballet girl catching fire by gaslight onstage was a violence that Victorian audiences would have encountered offstage as well.

Violence and the theatre have a long history and continue to operate in a way that continually challenges the audience and apparatus of the theatrical event. In her book *The Medieval Theatre of Cruelty*, Jody Enders establishes parameters for her investigation into theatrical violence. When attempting to critique violence onstage, she maintains, it is first important to identify the type of event. Enders identifies three primary categories for violence on

stage: (1) the illusion of pain and violence created with special effects and staging; (2) pain that is real, but the result of an accident inflicted by illusory violence; and (3) public displays of real pain brought on by legal punishments like executions or floggings (200). Enders' recognition speaks to the conscious effort of scholars to focus their work on the planned, realistic staging of pain or violence. In particular, scholars writing about dramatic violence justifiably focus on planned representations of violence and how they can be understood and complicated.

The power of violence in performance has long been a concern for theatre critics and practitioners. In the earliest writings on Western theatre, divergent views emerged on how violent acts should be staged. In the vast majority of the surviving ancient Greek plays, violent acts happen offstage.³ In contrast, spectacles of violence were featured in the culture of ancient Rome. In his 2004 study *Theatres of Sacrifice: From Ancient Ritual to Screen Violence*, Mark Pizzato chronicles the long history of violence and sacrifice. Pizzato examines one of the fundamental questions to the representation of violence: what is so appealing about it? Pizzato posits, using psychoanalytical theory, that audiences are drawn to violent sacrifice in order to experience a social and individual catharsis. Pizzato calls on Sigmund Freud's theory that humans all have an innate need to experience violence. Freud suggests that the "death drive" is deeply embedded in the human psyche (Freud 79). Freud argues that humans are in a constant struggle between the instincts for life and death. It is this ebb and flow between the two opposites that has always made the spectacle of death fascinating and entertaining (Freud 83). This idea that a "brush with death" is alluring is common among those working to unravel the appeal of violence.

³ It should be noted that the Dionysian theatre festival of Athens evolved from a ritual sacrifice performed in front of the masses (Pizzato 10).

Another common approach to explaining the use of violent representations has to do with the fact that humans have historically had close interactions with violent acts. Pop-culture critic Harold Schechter historicizes the human draw to violent spectacles citing; “King Charles I was executed in 1649, his blood was mopped up with rags, which were torn to pieces and peddled to eager bystanders. Even the sawdust that had been sprinkled on the scaffold to soak up the gore was swept and offered for sale” (Schechter 46). Witnessing violence is innate to the human condition and has a long history in the realm of spectacle and performance. The events detailed in the following pages all rely on the allure of violence and danger in order to create the spectacles and conventions I discuss.

Violence is also seen as a tool within the theatrical context. Most notably violence is embraced in the early twentieth century writings of the influential theatre theorist Antonin Artaud. “A violent and concentrated action is a kind of lyricism: it summons up supernatural images, a bloodstream of images, a bleeding spurt of images in the poet’s head and in the spectator’s as well” (Artaud 82). For Artaud, violent sounds, gestures and images have the power to shock the audience and force them to respond in a visceral way, in contrast to realistic theatre, which relies on language and narrative to evoke empathy in an audience. Artaud proposes a “Theatre of Cruelty” that assaults the audience with violent images and sounds, forcing them to face the plague of modern society (Artaud). Since his influential text, other experimental artists and companies have embraced the idea of using violence as a communicative device. Jerzy Grotowski and the Living Theatre utilized violence as a tool for engaging the audience in a more immediate and ritualistic way.

As studies into onstage violence continue to grow, it is apparent most, if not all of the critical work related to theatre speaks to representations of violence. Performance scholar Wendy

Hesford, for example, considers representations of terror in docudramas about the recent wars in Iraq and Afghanistan. Les Wade examines a post-modern ethic in representing violent sex acts in Mark Ravenhill's play *Shopping and Fucking*. Scholarship like that of Wade and Hesford focuses on moments on stage where violence is acted out in a planned way, with a highly orchestrated and extreme aesthetic. Theatre scholar William Boles writes about contemporary British plays by the likes of Ravenhill, Sara Kane and others who have been grouped together, based on the extreme violence in their plays, as the "new brutalists" (Boles). Plays like Sara Kane's *Blasted* push the extreme limits of what an audience can be made to experience as well as to what level live theatre can represent extreme violent acts.⁴

Several performance artists also embrace and use violence in their pieces. The works of Chris Burden, Marina Abramovic and others go beyond the realm of representation. They abandon illusion for the real. David Graver writes about the performance of real pain during performance art pieces, questioning how real violence alters the theatrical framework. "How can the protocols of theatricality be adapted to contain real violence rather than just images of violence?" (Graver 49). Performance scholar Lucy Nevitt grapples with the notion of witnessing real violence. She posits that many performance artists who utilize real violence in performance, do so in an attempt to force the audience to come to grips with their own relation to violence in the world (Nevitt). Often referred to as "ordeal", these performance art pieces blur the line between performance and self-mutilation. While these performance events are provocative, they speak to a different type of interaction with violence and danger than I am proposing or investigating.

⁴ Sarah Kane's play *Blasted* contains several extremely violent acts. Set in a bombed out hotel room, Kane's characters engage in violent sex acts onstage. The most troubling violence in the show occurs when the male character, Ian, eats a dead baby (Kane).

The final category for looking at violence has to do with its reception or witnessing. The central question here: how does witnessing real and illusory violence/pain/danger affect the audience? I discuss and call upon the writings of Elaine Scarry, Jody Enders and Marla Carlson in an attempt to provide a framework for discussing the witnessing of the violent conventions.

Elaine Scarry's seminal text, *The Body in Pain*, advances the phenomenological meanings of pain, how our bodies feel it and how our minds and spirits try to avoid it. Centrally, Scarry investigates the mind's ability to make and unmake the world and language during torture. In exploring the phenomenon of torture and warfare, Scarry provides insights into the nature of power. Scarry creates some invaluable vocabulary for discussing the pain of others. When pain is experienced, language becomes impossible (13). With language abolished all that is left is pure experience or perhaps a link to the primal real.

Recently theatre scholar Marla Carlson has complicated Scarry's approach to the performance of pain. Carlson argues that pain is unique, "not because it is inexpressible or radically unsharable, but because it creates an urgent need to communicate things to which no one is eager to listen" (2). For Carlson, pain does not render language impossible; it demands it to be communicated: "Language runs dry not because words do not exist, but rather there is so little opportunity to use them that they have become absurd" (18). In this project I extend this notion to include the exposure to real violence on stage. Using specific performance events, I discuss how the exposure to real pain and violence on stage renders the very language of the theatre both absurd and inexpressible.

Carlson further discusses the historical implications of performing pain. According to Carlson, a different framework is needed to understand pre-modern versus postmodern audiences and their reaction to pain. A pre-modern audience would understand a performance of pain using

a sort of “co-suffering” because pain and suffering were a part of their everyday existence (M. Carlson 20). They suffer along with the performer in order to better grasp the religious implications of the action. A postmodern audience more clearly understands the performance of pain as a controllable phenomenon. In discussing performance artists Ron Athey and Marina Abramovic, Carlson posits that pain is often eroticized in a way that makes its viewing pleasurable (M. Carlson 114).

While Scarry and Carlson offer contrasting conclusions, they both approach pain using reception as a key piece of framework for their analyses. It is this sense of reception that I harness in investigating the violent conventions. By engaging both Scarry and Carlson, I complicate the reception of the failed conventions. In applying Scarry’s argument to the tragic accidents, the audience’s reception of the violent convention can be seen to disrupt the language of the theatre. In essence, the established apparatus of attending the theatre would be disturbed, leaving a brief time of chaos where meaning and convention lack a communicative ability. The pain the onstage victims feel is impossible to communicate to the audience, but the absolute breakdown of theatrical convention coupled with the violent accident has to do something. I argue that the rupture in dramatic convention elicits another trauma to the audience; for that brief moment the audience and actors are left void of a language. In that moment the pre-established language of the theatrical convention is violated by the real violence.

Jody Enders offers a third and equally important voice to this discourse in her study *The Medieval Theater of Cruelty: Rhetoric, Memory, Violence*. Enders analyzes representations of violence during the medieval era using rhetoric and law to contextualize the concept of violence. “Rhetoric is the theoretical site at which the violence of representation is articulated as theory, rehearsed in the imagination, and concretized dramatically” (9). Enders discusses actual deaths

taking place on stage in medieval times. In her chapter, “Death by Drama”, she discusses the famed beheading in the French city of Tournai in 1549. The brutal act involved a French prisoner who assumed the role of Holofernes and had his head cut off by another character on-stage (204). Enders concludes that whether or not the decapitation took place does not necessarily matter. What matters is that the aesthetics of pain and violence so dominated the cultural instincts of the time that the decapitation could be tolerated by the live audience. Enders writes, “They could be tolerated in both drama and real life not because ‘intolerable’ instincts were acceptable in one venue and not the other, but because they were acceptable in both” (212). Ender’s conclusion above provides a key cultural context for the reception of pain and violence, and I mirror that approach in contextualizing the accidents in this project. Particularity, in my next chapter on the conventions of gaslight and accidental burnings of ballerinas in the nineteenth century, I argue that the technology of gaslight and the dangers it presented so dominated the cultural instinct that the conventions’ violent failures were tolerated and even expected. The conventional failures critiqued in the following chapters cause a violence, which I have defined as an abrupt destructive force to both the physical body of the performer and the empathetic framework of the theatrical event.

Representations of violence on stage are always stylized, and that stylization affects the contract with the audience. In her book *Theatre and Violence*, Lucy Nevitt discusses two stylized approaches to the rape and attack of Lavinia in Shakespeare’s *Titus Andronicus*. As scripted, the assault takes place off stage and the physical damage to Lavinia is only revealed to the audience when she returns to the stage and the audience witnesses the damage. One version of how this moment was represented comes from Peter Brook’s 1955 Stratford Shakespeare Memorial Theatre production. Brook presents a symbolic stylization of the moment where Lavinia entered

with a distorted gesture and red streamers hanging from her waist and mouth, accompanied by harp and piano music. The result was a very poetic and eloquent image. As a contrast, Nevitt also offers another version of the same moment from a 1970 production in South Africa. In this version the attack is represented in a very realistic and visceral way. Lavinia re-enters the stage with visibly severed hands and blood pouring out of her mouth. The result is a very graphic attempt at a naturalistic representation. Nevitt's argument in the two examples is that violence is always represented in a stylized way with a specific result in mind, and that style is part of the convention or contract with the audience (25-27).

In my analysis, the audience is primed to receive the planned representations explained above, but through a violent accident is exposed to real violence as well. I utilize phenomenological theories to discuss the audience's exposure to the accidental real violence. Bert States writes about the phenomenology of theatre and how objects are received within the theatrical framework as well as how their primal essences establish themselves. In *Great Reckonings in Little Rooms: On the Phenomenology of Theatre*, States discusses the possibilities for images created that go beyond representation or signification. In particular States investigates objects on stage that complicate our interpretive capabilities. An example that States uses is water which unlike "real chairs, clothing, flower vases, or the painted facades of a village square – retains a certain primal strangeness: its aesthetic function does not exhaust its interest" (30-31). For States it is water's ability to leak, or to do things which retain its primal nature in contrast to the planned representations onstage that expose the phenomenon of that object. I want to clarify that, while I use phenomenological tools in my study, my focus is performance history and analysis, not phenomenology studies, and I do not attempt any sort of phenomenological reduction or reading of these events. Instead I focus on the historiography of the empirical

essences of objects revealed to audiences during a moment of violence. Theatre scholar Pannill Camp notes that historical phenomenology allows critics to “emphasize what is felt and lived, rather than read” (Camp 83). States’ approach to phenomenology is useful because it creates a vocabulary to articulate how the violence first appears, and how it may move beyond representation.

I also investigate the phenomenology of the after-event. What kind of life does the convention and objects used in the convention hold after they have proven violent? Andrew Sofer posits that in the texts of some plays there are inherent astral elements, or “dark matter”, that are not scripted in the text, or physically represented on stage, but still lives within the performance. An example of this phenomenon, provided by Sofer, comes from Samuel Beckett’s *Waiting for Godot*. “The offstage Godot, elusive and indifferent, may or may not offer salvation to Vladimir and Estragon, but the belief that he might ties Beckett’s tantalized clowns to their merciless tree indefinitely” (Sofer, *Invisibility* 10). The tangible presence of the belief that Godot holds a release is as much a character in the play as Didi or Gogo. I extend this notion beyond the play script to the performance event and argue that audiences who attended performances that were known to have violence accidents encountered the continual dark essence of that violence in future performances.

Accidents, or more precisely systemic failures, are at the heart of the matter for this study, and in order to ground my analysis I also involve the work of Charles Perrow, a sociologist who researches high-risk technologies in the world such as nuclear power plants and the transport of highly toxic cargoes. In *Normal Accidents: Living with High-Risk Technologies*, Perrow discusses the systemic nature of high-risk technologies and how they fail. Perrow argues, “[N]o matter how effective the conventional safety devices are, there is a form of accident that is

inevitable.” He christens this form of accident *normal accidents* or *system accidents*, emphasizing his notion that in any complex system some accidents are unavoidable and inevitable (3). In the chapters to come I call upon the terminology and ideology of Perrow’s term, along with his notions of the inevitability of accidents, in investigating the technologies used and systems created for violent conventions. Perrow’s conclusions go a bit further than typical system safety engineers who discuss systemic failures in that, as a social scientist, he includes the human element as a part of the system. Additionally, I complicate the very notion of accident as it pertains to a highly technological theatrical convention’s failure.

TERMINOLOGY

This study focuses on theatre conventions designed to establish danger or violence for the audience. In all three case studies for this analysis, the on-stage accident was due to a failure or slippage in a convention established to create the illusion of violence. Given the wide spread usage of the term “violence” in theatre scholarship, it is critical to better define what exactly I mean when I label a convention as violent. I use the term violence to refer to an abrupt destructive force. While the majority of the research into violence in theatre deals with planned representations and their success, I propose a critical look at their failure. All of the theatre conventions that I’m discussing in this project have failed in a way that caused an intense and destructive action to a performer in front of an audience. For example, a prop hand gun on a table on stage presents an illusion of danger. The firing of the gun is meant as a realistic but safely orchestrated representation of gun violence. The convention is violated, however, when the prop gun is fired and there is an actual discharge that injures or kills a performer on-stage. That is the first facet of violence I’ll be dealing with, a sudden serious injury sustained due to the failure of a stage convention. The other aspect of violence that I’ll be analyzing is the phenomenological

appearance of the technology used to create the illusion as the convention moves from illusion to reality in front of the audience. This phenomenological approach deals with the way in which an audience comes to recognize first the illusion of violence within the context of the convention, and then the reality of it when the convention fails. So the violence of this project is a multivalent one that includes a destructive action to both performer and the constructed language of the theatrical convention for an audience member.

In addition to critiquing the meaning of witnessing the violence of a failed theatre convention, I critique the objects and technologies involved in the failure. The term technology encompasses industrial and automation technologies as well as the prop weapon as a technology of stage combat. As I discuss in the following chapters, each of the events covered in this study utilize a technology to create the illusion of violence or danger. For the majority of this study the technology is advanced and culturally relevant, further complicating the audience's reception of the accident. The technologies that I discuss involve industrial technology like gaslight in the nineteenth century, which had a cultural life as well as a theatrical life. I analyze the technology of stage flight and its development into a complex computer automated system. The final technology I examine is stage combat. I dissect the nature of staging physical violence in a realistic way, as well as discuss the nature of weapons used to employ the technology.

Another important term and concept to identify is the theatrical convention. By theatrical convention I mean an on-stage representational construct that allows the audience to suspend their disbelief in the illusion of the play and empathetically invest with the action presented on stage. Famed theatre theorist Antonin Artaud discusses how theatre creates a language of its own, "[T]heatre...makes use of everything-gestures, sounds, words, screams, light, darkness-rediscovers itself at precisely the point where the mind requires a language to express its

manifestations” (Artaud 12). Perhaps the most important concept in the success of a live performance is the theatrical convention. Theatrical conventions are created when a planned gesture, lighting effect or some other symbolic action indicates a reality that exists within the world of the play. This arrangement is established through its consistency and repetition during the course of the performance event. This arrangement becomes a unique language shared by the performers and audience during the performance. By creating a language specific to the performance event between the audience and performers, conventions serve as the glue that holds the world of the play together for the audience. Conventions allow the audience to accept an otherwise impossible world of the play and to emotionally and logically align with the characters and actions. Conventions allow the audience to “suspend their disbelief” so as to accept the illusion of reality.⁵ In the most basic sense, Mira Felner defines the theatre convention in her textbook aimed at introducing laypeople to the art of theatre. Felner writes that theatrical conventions are defined as “rules of conduct and understood communication codes used in the theatre” (Felner 4). There are two common uses of the term convention in theatre. One is the previously mentioned theatrical convention which serves as a contract between the audience and performers and the other use of the term convention applies to dramaturgical rules for communication and is called dramatic conventions. Dramatic conventions apply mainly to literary devices employed by the playwright in the crafting of the play script. Where dramatic conventions build the structure of the drama for the artists, the theatrical convention builds the structure of the live performance of the play for the audience.

In this study I use the term accident to mean an unexpected and unintentional act that cause injury or damage. In *Murder by Accident*, Jody Enders investigates the intersection of

⁵ Coined by Samuel Taylor Coleridge in “Progress of the Drama”, 1818.

death and the live theatre event during medieval times. Enders questions what happens at the moment of a real death during a 1380 performance of the *Mystere de la passion*; was it “still a play? Did it cease to be one?” (11). Enders notes some standard ideals that have helped define what constitutes theatre like Walter Benjamin’s “reproducibility” or Richard Schechner’s “twice-behaved” behavior. Intentionality is the key for Enders. What is the intent of the event? Enders admits that there can be no murder by accident because there are no accidental intentions. Further, theatre and representation are both intentional acts and neither can happen by accident. However accidental events do happen in front of an audience and as part of her investigation Enders provides a crucial taxonomy of theatre accidents for this study. Enders proposes four taxonomies of acts viewed on stage:

1. There are acts committed accidentally and viewed or experienced deliberately.
2. There are acts committed accidentally and viewed or experienced accidentally.
3. There are acts committed deliberately and viewed or experienced accidentally.
4. There are acts committed deliberately and viewed or experienced deliberately. (18-19)

I focus on the first two taxonomies outlined by Enders and propose a complication caused by violent conventions that blurs the line between the two. In the performance events I analyze I argue that by establishing a convention of representing violence or danger that intent is implied and believed within the theatrical framework.

Enders also establishes a criterion for discussing the intentionality of actions on stage. She defines four classifications of intentions: Actual, Achieved, Perceived and Declared. Actual intentions are defined as those actions that an agent intends to do. They are invisible to the audience. Achieved Intentions are actions that an agent actually does. Enders talks about this being the moment when the invisible becomes visible, or reveals itself. Perceived intentions are defined as how the audience perceives the actions of the agents on stage. And lastly, declared intentions encompass the instance when an agent makes a linguistic or gestural declaration of

their intentions before, during or after the action happens (Enders, *Murder* 21). Enders applies this taxonomical paradigm to theatre conventions. As discussed earlier theatre conventions are the glue that holds the world of the play together. The suspension of disbelief, critical in establishing the illusion of mimesis is categorized by Enders as an “Implied Declared Intention” (Enders, *Murder* 93). In examining our failed conventions in the coming chapters I revisit Enders’ notion of the Implied Declared Intention and its application toward these events and the audience’s participation in them.

STUDY SCOPE AND METHODOLOGY

In the enormous field of theatrical violence I intend to introduce a new line of scholarship that explores the failure of violent conventions, and due to this specificity certain limits define this study. I limit the types of events I discuss to modern theatre events that involve a technology to create the convention. The violence I critique is twofold. First, I study how the unintentional failure of violent conventions like stage combat and special effects caused violence to performers. Second, I explore how these mishaps rupture the empathetic framework of the theatre exposing the audience to real violence. I use a phenomenological lens to discuss the ways in which stage objects retain an empirical meaning beyond the theatrical setting, as well as to discuss the afterlife of the accident. In all three chapters’ case studies, I highlight the cultural and theatrical role of the accident in professional theatre using news reports and archival documents. I also use my own experience as an audience member as a primary source for research in my chapter on *Spider-Man: Turn Off the Dark*.

As I have been crafting this project I have come across many theatre accidents that merit further investigation, but due to the scope of this research I have specifically limited myself to accidents that happen in front of a live audience due to a violent theatrical convention failing. To

this end I have not explored accidents on film sets, accidents in rehearsals or accidents that do not involve the representation of violence or danger. Additionally, I have not included performance events that may happen outside of the Western performance tradition. As part of my analysis has to do with the cultural make-up of the accidents I have tried to keep it as comparative and relative as is possible. The stage accident is an important part of theatre history, and I am hopeful that this project will open avenues for future research into the way theatre scholars attend to accident and conventions in theatre history.

CHAPTER SUMMARIES

To begin this study, I turn to gaslight in the nineteenth century. I detail the technology involved in Victorian gaslight, explaining how it worked and how it failed. I provide an analysis of how gaslight was used and the ways in which it changed the nature of culture and theatre during the nineteenth century. Many theatres used gaslight as a theatrical special effect in conflagration scenes; as such, audiences came to understand the use of real gas flames as a theatrical convention. Regularly theatre managers also faced the tragic accidents where performers (frequently female performers) were badly or fatally burned on stage after brushing against a gas fixture. During this span of time in the nineteenth century gaslight and fire were ever present in society as well as the theatre. This relation of theatre and fire within the cultural discourse, I argue, added an aspect of gruesome spectatorship whereby audiences gained a sense of titillation from the brush with a dangerous theatre.

In the third chapter I focus on multiple stage accidents in the Broadway production of *Spider-Man: Turn off the Dark*. The 2011 musical gained worldwide notoriety in part because it was plagued by several severe actor injuries during its lengthy preview period. As was reported by Mike Fleming, the rapid succession of four injuries during the preview process caused the

Occupational Safety and Health Administration (OSHA) along with the New York department of Labor to shut the production down in order to meet with the producers and technicians in order to establish more rigid safety protocols (Fleming). In October of 2010, while still in previews, Michael Riedel of the *New York Post* detailed the first of these mishaps involving actor Kevin Aubin, one of the many actors who donned the Spider-Man costume during the show. Aubin was crouching at the back of the stage when suddenly he was catapulted into the air and then came crashing down to the stage deck from approximately twenty feet in the air, snapping his wrists. What complicates the mishap further is that it took place in front of an audience of ticket brokers and group sales agents (Riedel).

While accidents like this are infrequent and tragic, they do signal a specific type of failure. There was of course either human or mechanical error that caused the accident, and in the case of the numerous *Spider-Man* accidents, both would eventually seriously injure actors, but there was also a failure of convention. The convention of flight which was designed to whisk the audience away to a magical land of heroes and villains came crashing down in a terribly violent manner. In a sublime moment of violence, the audience to this special performance was traumatically exposed to the de-concretization of the reality of their world. This rupture happens on a daily basis in theatres all over the world where something goes wrong on stage and a theatrical convention fails, but what makes the case of *Spider-Man* unique is that the failure in convention leads to something violent and potentially deadly.

In this chapter, I call upon my own experience as an audience member to a 2012 performance of *Spider-Man: Turn off the Dark* on Broadway to contextualize the technology, accidents and performance. I offer an analysis on the convention of stage flight and the advanced technologies used to achieve that effect. I also chronicle what went wrong during the

performances and the audience's reaction to the accidents. Co-Creator Glen Berger's book *Song of Spider-Man: The Inside Story of the Most Controversial Musical in Broadway History* serves as an aperture into the inner workings of the creative team, and some of the conflicts and breakdowns that led to the controversy surrounding the show. Charles Perrow's analysis on systems of accidents is used to unravel the specifics of the accidents in *Spider-Man* alluding to their inevitable nature within this complex technology. I also attend to the ways in which the press treated both the musical and the injuries. I argue that the press, knowingly or not, treated the accidental injuries that took place in *Spider-Man* differently than comparable injuries in other Broadway shows in part because the critical reception of the work was so harsh. Additionally, I propose that the coverage of the accidents led to an expectation within the audience for something to go wrong creating a sort of inter-textual event.

In the fourth chapter I turn to the convention of stage combat. I analyze four stage combat accidents that ended in real violence for the performers. I detail the well documented incident where actor Daniel Hoevens, playing the role of Sir Edward Mortimer in *Mary Stuart* by Freidrich Schiller, stabbed himself in the neck during what was supposed to be a stage combat stunt with a dulled prop knife. I also visit accidental blinding of actor David Birrell during a production of *Passion* when he was shot in the eye during a duel on stage. The relatively recent scholarly discourse on stage combat is populated to a large extent by guides aimed at teaching safe techniques for onstage violence. Some of the foundational texts like J.D. Martinez's *Combat Mime: A Non-Violent Approach to Stage Violence* (1982) and Dale Anthony Girard's *Actors on Guard: A Practical Guide for the use of Rapier and Dagger on Stage and Screen* (1996) provide step-by-step instructions on safe and effective techniques for representing combat to an audience. The only mention of accident, in these and most stage combat texts, is made in an effort to stress

safety, and advise directors to consult a professional. Stage combat has come to exist and thrive under the singular ideal that no real violence be achieved. Leslie Pasternak offers a framework for understanding actual violence in the place of staged violence. Three events will happen “1 – The victim will experience pain, 2 – The attacker will experience a split focus, and 3 – The audience will, in that moment of actual injury which is immediately obvious to most spectators, be wrenched from its concern for the character to a concern for the actor” (Pasternak 9-10). Pasternak’s conclusions stand as a cautionary dictum against the use of real violence and stress the importance of non-violent representations. Her third event, that the victim will feel pain and that the audience will experience a wrenching, invites further analysis.

In this chapter I analyze a frightening instance of failed stage combat, whereby actors like Hoevels and Birrell were injured by the very violent technology they were attempting to represent. I discuss the prop weapons used by Hoevels, Birrell and two other live performance firearm mishaps. I critique prop weapons and discuss the mobility and essence available to stage props as proposed by Andrew Sofer. The role of staged combat is examined including key writings and organizations around the world, and proper terminology and techniques are discussed regarding the accidents in this chapter. I also critique the ways in which Hoevels’ accident was eroticized or spectacularized in media reports. “The rumours are wild, with some claiming that he was the victim of jealous rival” (Pearse). I analyze the incident and the ways that it took on a life of its own within the discourse created by the press. Josette Féral’s work on extreme violence on stage offers a discourse on how moments like Hoevels’ accident can potentially move the “event” beyond the theatrical framework and take up a non-representational value.

CHAPTER TWO

FLAMING BALLERINAS: GASLIGHT, VISUALITY AND VIOLENCE ON THE VICTORIAN STAGE

In the 1844 production of *The Revolt of the Harem* at the Drury Lane Theatre, Clara Webster, a promising young ballerina, took her place on stage to start the second act. The setting for the ballet was a luxurious bath where Webster delicately lounged with other ballerinas at the front of the stage. Moments into the act Webster's dress ignited from the gas footlights. Realizing she had caught fire, she stood to shake the flame out but instead caused it to spread over the entirety of her muslin costume. Much to the audience's horror, Webster began to run about the stage engulfed in flames. The more she ran, the more the flame was fanned. The other shrieking dancers at first surrounded her but soon realized their own potential for ignition and abandoned her to burn. Webster eventually made her way to the wings where a carpenter was able to grab her and wrestle her to the ground, extinguishing the flame and burning himself badly in the rescue. After a few moments an announcement was made to the audience that Webster was only slightly injured, and the ballet was allowed to continue. In reality Webster was badly burned and was attended to by doctors at her apartment until she died two days later. Up until the time of her death the Drury Lane theatre professed publicly that Webster was doing well and on the mend. Upon the examination of the body, the coroner found her arms, face and neck to be badly blistered and discolored, reporting that she suffered unthinkable pain while flailing wildly in front of the audience ("Awful Accident").



Fig. 1. “Fire at the Ballet”; *Frank Leslie’s Illustrated Newspaper*; 28 Sept. 1861; Web; 12 Apr. 2015.

The tragic accident was well documented in the news publications of London, and audience members-turned-critics offered their own vivid accounts to the tragedy.⁶ “Webster’s face was much blistered,” reads one account, “and in some parts scorched, the eye-lashes and eye brows burnt off: but the hair of the head was untouched. The lower extremities were much scorched, and the flesh of the hips was much burnt. The hands also suffered dreadfully” (*Illustrated London News* 397). Webster’s death in 1844 provides a glimpse into a cultural artifact of the nineteenth century theatregoing experience, and this episode, while horrific, was not unique to the Victorian stage. With the adoption of the new technology of gaslight, theatres faced a new world of theatrical possibilities as well as an exponential increase in deadly consequences.

⁶ Mary Grace Swift provides a succinct survey of accidental gaslight burnings of dancers on the American stage in her 1982 article “Dancers in Flames,” including the infamous death of the Gale Sisters in Philadelphia.

Webster's demise was a well-reported event in the London press in large part because she had developed into a respected dancer in a profession dominated by French performers. Just months before her tragic death her performances were beginning to garner critical acclaim. In an earlier ballet at the Drury Lane it was noted, "Another ballet of action, entitled, the 'Deserter of Naples,' is more remarkable for the effective dancing of Clara Webster, than for any intrinsic merit of its own" (*The New Sporting Magazine* 343). Webster's accident also cannot be attributed to the notion that she was a novice dancer. At the time of her death, Webster had reached a certain level of acclaim as a ballerina. Remarking on her role in the long-running production of *The Corsair* at the Drury Lane, theatre reporters noted her visibly improved "firmness of execution" and "terpsichorean knowledge" from the previous season (*Literary Gazette* 645).

Her untimely death was viewed as not just a lamentable accident but a national loss. "Her death was caused by the injuries she received in consequence of her dress taking fire in Drury Lane Theatre, during the performance of the 'Revolt of the Harem', which as deprived the stage of the best English dancer of the day" (*The Gentleman's Magazine* 106). England had lost arguably its best dancer to a uniquely nineteenth century technology, gaslight. And the audience was forced to witness a violent spectacle of death and suffering. "This frightful event, taking place on the stage, in sight of the audience," relates the *Illustrated London News*, "the whole house was in a state of consternation, and screams issued from the ladies in front of the boxes and pit, who were the first to perceive the appalling accident" (*Illustrated London News* 397).

Gaslight was first introduced to the London public in an exhibition at the Lyceum theatre in 1808 where the German inventor Frederick Albert Windsor set up a display and lectured about his gas lamps with the intent to light all of London's streets with gas lamps ("A Century of Gas"

108). This important event caught the imagination of the London public already focused on industrialization and industrial technologies. Historian Leslie Tomroy writes that gaslight was the first of a new type of industrial technologies in the nineteenth century that were dependent on large infrastructures and structures. These new technologies were also the product of newly developed advanced scientific methods. Gaslight, explains Tomroy, “was a departure from technological advancements at the beginning of the industrial revolution which required less capital, were artisanal in nature and could operate independent of a wide spread infrastructure” (Tomroy 2-3). Though the process of coal distillation had been known dating back to the 1700s, technologies did not exist to harness gas in a useful way. Coal gas is distilled by heating coal in an enclosed container until the flammable gas is released from the coal. During the eighteenth century scientists began serious experiments into the nature of gasses, and in particular technologies were developed to store and purify distilled gasses (Tomroy 9).

Early attempts to use coal gas as a lighting source were troubled with unwanted chemicals like sulphureted hydrogen burning to create noxious fumes and strong sulphur odors. An 1819 edition of *The Monthly Magazine* printed “Mr. Peckston’s Theory and Practice of Gaslighting”, which warned that burning unpurified coal gas would emit “suffocating odour” and sparks (607). With the development of the science of pneumatic chemistry (the study, collection and measure of gasses), scientists were able to plan for the industrial purification of coal gas to create the best burning mixture for lighting without the above mentioned detractions.

Storage of the newly distilled coal gas was also advanced by pneumatic chemists who were able to theorize and test storage methods for large quantities of gas. The storage relied on a large air-tight container partially filled with water in order to regulate, store and pressurize the distilled gas. “The gas-holder (or, as it is more commonly though improperly called, the

gasometer), is that vessel in which the purified gas is stored-up for use” (“Mr. Peckston's Theory” 609). The below image (fig. 2) diagrams the movement of the holder to accommodate more or less gas pressure.⁷

Storing and filtering the coal gas was only part of the solution required to achieve the ability to light London with gas. The other large component was the stabilization of the cultural and financial elements in order for newly formed companies like the Westminster Gaslight and Coke Company to attract investors and begin to build an infrastructure for citywide distribution.

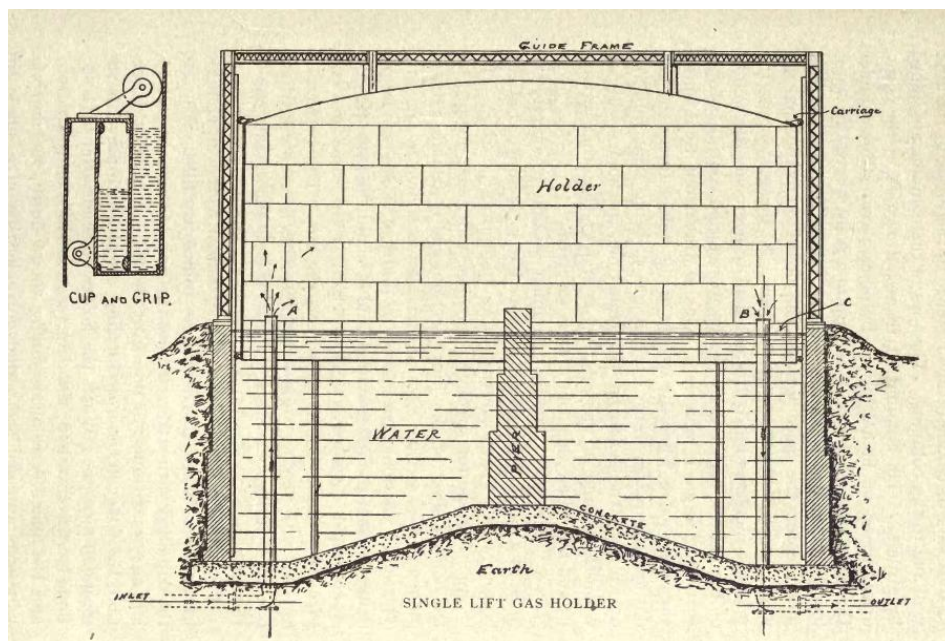


Fig. 2. Gas Holder for use in storage of coal gas; *Catechism of Central Station Gas Engineering in the United States*; 1909; Web; 23 April 2016.

“Gaslight served as one of the first large scale examples of this complex infrastructure,” relates Tomroy, “after which the Railroads and Electricity would follow” (Tomroy 6). Skepticism and fear dominated the early discourse regarding the use of coal gas as a lighting source. Victorian

⁷ *The Handbook for Gas Engineers and Managers* (1907) by Thomas Newbigging provides a great source for the vast variety of nineteenth century patent plans for gas holders.

society was well accustomed to fearing the explosive nature of gaslight. Historian Wolfgang Schivelbusch writes about the industrial technologies of the nineteenth century and the cultural impact of gaslight in particular. Schivelbusch notes that “steam and gas struck the same fear into the nineteenth-century heart. Boilers and gasometers were both expected to explode and any moment” (Schivelbusch 34). Satirical cartoons captured the angst among Londoners about the volatility of this new technology. In the years after Windsor’s demonstration, artistic images illuminated the explosive fears surrounding the creation, storage and use of coal gas for the purpose of lighting (fig. 3).

Coal gas also had close ties to death due to its poisonous nature, “Explosions are a dramatic consequence of secretly leaking gas. But there are others, too, for gas has the additional property of being a more or less poisonous chemical” (Schivelbusch 38). So poisonous were the fumes of this new technology that it became a reliable path to end one’s life. One publication warned, “Gas poisoning was soon to become a standard method of committing suicide” (“Essays on Applied and Natural Sciences”).⁸ Carbonic acid was identified as a fatal chemical present in coal gas by the medical journals as well as the gas industry. In addition to Londoners worrying about flammability issues they also were warned of the poisonous chemical.

⁸ *Illustrated London Magazine*. January 5, 1853 ran an article titled “Essays on Applied and Natural Sciences: The Chemistry of the Breakfast Table. The Material of the Table – The Bleaching of the Table – Cloth.” The article reported on the not uncommon use of coal gas as a means to end one’s life, and the common nuisance of table linens being bleached by the gas emissions. As described in the article, suicide could be achieved either by turning up all the gas in the home, or by connecting a hose to a gas fixture and breathing the coal gas directly in.



Fig. 3. “The Blessed Effects of Gaslights or a New Method of Lighting as Practised in Great Peter Street, London”; Published by S.W. Fores; 10 Nov. 1813; Web; 23 Apr. 2016.

Fire was a constant danger in theatres of the nineteenth century, yet Victorian theatre professionals were slow to respond to these dangers.⁹ Several factors complicated a unified plan

⁹ Outside of the theatrical framework deaths and burnings also occurred at an alarming rate due to the large Crinoline dresses that made up the fashion of the day. Alison Matthews David critiques the dangerous nature of fashion in the gaslight era in her 2015 monograph, *Fashion Victims: The Dangers of Dress Past and Present*.

to legislate and codify theatrical practices dealing with gaslight. The rapid rush and large-scale industrialization of gaslight provided theatres with new lighting capabilities, but these innovations came with little guidance as to how to safely operate the new technology. The first wave of public discourse regarding the dangers of gaslight had to do specifically with the tragic death of Webster. “How to prevent clothes from taking fire”, published in *The Economist* on December 21, 1844, stresses the flame-proofing of the ballerina’s clothing and placed a sort of blame upon the young ballerina for contributing to their demise. The article notes, that the inquest following Webster’s death indicated that after Webster had caught the flame, her rapid movement about the stage contributed to her demise. Fault was also placed on the dancers who chose to not apply a “kind of starch prepared with an infusion of alum, or muriate of ammonia” that rendered the dresses flameproof, but also discolored them and made them far too stiff to dance in (“How to Prevent” 1543). Managers for the London theatres posted warnings that all performers must apply the chemical mixture of muriate of ammonia or a diluted solution of chloride of zinc to flameproof their costumes. The *Medical Times* issued an article clarifying where the apparent liability for safety rested. “In order to minimize their legal-financial liability, managers now advised performers that it was their misconduct that constituted the primary danger from fire” (“Times” 213). Indeed, the inquest held after Webster’s death indicated that had she applied the chemicals to her dress, she would have avoided the terrible event. So ballet girls were faced with an impossible choice. They could apply the solution of muriate of ammonia and make the dress fireproof but impossible to move in, potentially putting them at risk of losing their job. Or they could dance in the free-flowing yet highly combustible untreated dresses and risk death.

The story of Clara Webster is well documented but not unique.¹⁰ Similar horrific, though not always fatal, onstage-burnings took place with alarming regularity. Another such event took place at the Princess's Theatre in 1863 when the dress of a young dancer, Ann Hunt, caught fire in the wings. Sarah Smith, another dancer waiting nearby, saw the flames and tried to extinguish them only to ignite her dress as well. As reported in *The ERA*, the duo ran onstage in full view of the audience eventually making their way to the opposite wing where there stood a terrified group of dancers. The pair was soon extinguished by the stage manager, who was also badly burned. While Ann Hunt survived the ordeal, Sarah Smith died from her burns ("Accidents from Fire" 9). Smith was lauded for her bravery and self-sacrifice in attempting to save Hunt. Sarah Smith is memorialized with a plaque in Postman's Park (fig. 4).¹¹



Fig. 4. Sarah Smith's plaque form Postman's Park, London; Used with permission from Spitalfieldslife.com; 2016; Web; 15 May 2016

¹⁰ Emma Livry, a promising French Ballerina, was fatally burned Nov. 15, 1862 at the Paris Opera during a production of *La Muette de Portici* when her costume brushed against the gas jet (Kelly).

¹¹ Sarah Smith's fatal burning took place at the Princess's theatre and not the Prince's theatre as the plaque indicates ("The Late Fatal Fire").

Soon after Smith's death, public outcry over the sensational theatre fires and ballet-girl burnings intensified. The discourse called into the question the fashion of the day, which included the "Crinoline Mania" (fig. 5). Fashion historian Alison Matthews David describes crinoline and how it functioned. Crinoline was the petticoat understructure of dresses that allowed the dresses to keep a large hoop shape at the bottom of the dress (David). This "Crinoline Mania" was not limited to the stage, but rather a general fashion that extended into all of Victorian culture as did the fatal accidental dress fires in the home ("Accidents from Fire" 9).



Fig. 5. "Fire: The Horrors of Crinoline and the Destruction of Human Life";
Wellcome Library, London; 1860; Web; 18 Apr. 2016.

John Robert Townshend, The Lord Chamberlain (1859-66 & 1868-74) was the censor for the Royal Household and the general authority figure regarding theatrical issues in London. The Lord Chamberlain met with the London Theatre managers in early 1864 to try to curb the danger of ballet girls catching fire. The result was an agreement that the accidental burnings were the result of carelessness by the dancers. This meeting and the agreement reached upon its conclusion met with public discord. The largest call to action came in the form of a letter to the editor of *The ERA* from playwright and director Dion Boucicault in 1864. In the letter Boucicault attempted to explain how these types of accidents happen during a production with no fault on the dancers. "The accidents occur thus," he wrote, "When the stage is crowded and on the entrance of the principals, the ballet are moved back, and thus one girl pushes and crowds upon another; and as they are thus forced backwards with their faces kept turned towards the public, how is the poor girl in the back row to know when her skirts get into danger?" (Boucicault, "Accidents"). Boucicault, along with others critical of the misguided blame on the dancers, created a public awareness that the danger was caused by the faulty arrangement of the gas fixtures, primarily the lack of wire guards over the gas burners. "Guards for the fires and wire mediums for the foot and wing lights," stressed a letter to the editor in an 1863 issue of the *ERA*, "are the only sensible and effectual means by which stage accidents from fire can be guarded against" ("Accidents from Fire" 9). Using the only authority possible, the Lord Chamberlain issued a "Protection against Accidents by Fire at Theatre" in February of 1864, declaring that all gas burners be furnished with efficient guards, that gas burners in the wings begin no lower than four feet from stage level and that wet blankets and water buckets be kept in the wings (Boucicault, "Accidents").

This lack of oversight was not intentional, but rather a result of a century's old system of theatrical governance that positioned the Lord Chamberlain as arbiter for all legitimate theatre in London.¹² What constituted "legitimate theatre" also proved problematic. Any venue that was outside of the city limits was outside of the jurisdiction of the Lord Chamberlain, and any venue whose primary function was as a music hall also was exempt from his rule. The Lord Chamberlain's purpose was to serve as censor for theatre plays, primarily making sure that plays were not disparaging of the crown or revolutionary in any way. By default the Lord Chamberlain also contracted architects to inspect existing theatre buildings and approve new construction ("Reports from Committees"). As the danger from gaslight and deadly accidents became more prevalent, the inadequacy of the Lord Chamberlain's governance led to public outcry and ultimately a request to have safety and building inspection duties reassigned to a more qualified agency.

Establishing safety guidelines for gaslight on stage was a first step toward reform, but the deadly nature of fire and crowd panic also demanded attention from the Lord Chamberlain and local magistrates. Controlling crowd panic and ensuring quick emergency exit strategy became central to theatre safety in the late nineteenth century. Jean-Baptiste Fressoz chronicles nineteenth century risk and technology, and noted that in 1858, a small explosion caused a great panic at the Victoria Theatre, and fifteen people were crushed to in the chaos to exit the theatre. A much larger fatality occurred in 1881 in the Nice Opera House, where a piece of scenery caught the flame of the gaslight. The on-site fire officer used his authority under established

¹² The Licensing Acts of 1737, 1752, 1788 and 1843 established, and later revised, the Lord Chamberlain as the authorizing figure for commercial theatre in London (Brockett).

emergency protocols to turn off all gas to the theatre,¹³ but in the darkness that followed, audiences created a stampede toward the blocked exits. The result was a fatality of more than two hundred people, many of which died from the stampede and not the smoke or flames (Fressoz 746).

Between February and August of 1877 a special committee of the House of Commons held hearings to examine the Lord Chamberlain, architects and theatre managers on the topic of theatre fires. During the examinations the issue of oversight was front and center. Mr. Spencer Ponsonby Fane, an agent from the Lord Chamberlain's office, recommended straight away that all fire safety and building inspections be removed from the responsibility of the Lord Chamberlain's office. "The Lord Chamberlain's opinion," concluded the Committee's Report, "is that there should be a department charged with the inspection of all public buildings, paid by the public, with a staff of inspectors" ("Reports from Committees" 86). The Lord Chamberlain's purpose was to license theatres and serve as a censor for Parliament, but as theatre fire safety became more urgent it became clear that he was well out of his area of expertise and authority.

Frightfully for theatre audiences, managers and ballerinas, there was no standard for fire safety in theatres, writes Robert Jones in his 1890 book on the uses of asbestos. (Jones). Old theatres that hadn't burned down yet were allowed to operate without proper escapes or fireproofing, and inspections of new construction were left to the discerning eye of the Lord Chamberlain and his appointed architect inspectors. In this regulatory void, entrepreneurialism flourished, and fireproofing companies as well as scientists drove innovations to make all construction safer. Asbestos was introduced as way to create fireproof surfaces in buildings

¹³ In Paris it was required that a "fireman of the brigade" be positioned at all theatres, but in England each theatre hired and trained their own fireman to monitor the flames from backstage. The common fear in London's theatres was that the firemen would be too drunk to be much use and would harass the females in the show (Reports from Committees").

(Jones). Another innovation that began to take hold in the nineteenth century was the fire curtain. WM Paul Gerhard reported in an 1899 report on fire safety that a wide variety of fire curtains were used in Europe. These included actual iron grates that would lower down, walls of water pouring from the proscenium arch to create a water curtain between the stage and audience and, of course, flame proofed canvas curtains. Secondary exit lights, clearly marked exit doors, exits that allow for an audience to clear a theatre within 3 minutes, protections against smoke inhalation, flame proofing scenic paints and set pieces and equally thought out and planned exits for the stage personnel all were fire safety innovations that developed in the last forty years of the nineteenth century (Gerhard).

One of the deadliest theatre fires during the gaslight era occurred on December 9, 1881, when the Ring Strasse Theatre caught fire in Vienna. Once the fire started the gas was turned off to prevent an explosion, but, as in the Nice Opera House tragedy earlier that year, this precaution had an effect as dire as that which it was intended to avert. The theatre and audience went completely dark, and neither actor nor audience could see escape routes. Choking in the darkness, the audience and performers rushed in a great panic to escape the burning building (Fressoz 746). Following the fire, where 794 people died, the Austrian Society of Architects and Engineers appointed a special committee to investigate the conditions of safety in theatres, the causes of accidents, and means of fire prevention (“Fires in Theatres” 95). Figures calculated by Augustus Froesch as part of this special committee, reported that there were 187 theatre fires worldwide between 1861 and 1877 (“Fires in Theatres” 95). Gaslight historian Terrence Rees writes that, in London’s theatres, in the period between 1866 and 1885, there were no less than two fires per year, with the exception of 1878 when there were none and 1871 when there were ten outbreaks (Rees 165). In an 1865 article, remarking on the Surrey Theatre fire, *The Builder*

noted, “[T]he natural end of every English theatre appears to be a fire: it is simply a question of time” (*The Builder* 79).

Dangerous as it may have been, gaslight in theatre remained the primary source for theatrical illumination throughout most of the nineteenth century. The idea of discarding the technology seemed comical. Following the Ring Strasse Theatre fire, the satirical magazine *Punch* responded to calls for changes within the public with the following quip: “Because gas has exploded, shall we abolish gas, and go back to oil and candles, with double chance of fire?” (“Burning Questions” 294). *Punch* had a point. Gaslight was a far brighter and more controllable lighting source than its predecessor, the candle. In the years prior to the advent of gaslight, candle light served as a device for general illumination. On-stage candles were placed at the foot of the apron (footlights), behind the wings (wing lights, seen running vertically behind the scenery flats at the left of fig. 6),¹⁴ and above the performers nestled behind the borders. Lighting historian Frederick Penzel documents that in addition to the above-mentioned lighting positions, candles also served as the general illumination for the audience and dressing rooms (Penzel). This configuration of candles forced performers downstage close to the footlights and the audience, separating them from the scenery (see fig. 7).¹⁵ It also meant that the audience was fully illuminated with the actors. When gaslight was adopted the lighting positions stayed much the same and would alter only slightly until the electric spotlight was introduced. With the advent of gaslight and more importantly the gas table in the 1840s, the intensity and selective location of light became controllable.

¹⁴ In Fig. 6 the painting indicates the arrangement of gas and candle wing lights running vertically up the back of the wings.

¹⁵ Fig. 7 also indicates the location of the footlights, with the advent of gas the footlights operated as a float that could raise and lower at the same location (Rees).



Fig. 6. Jean Beraud; *In the Wings at the Opera House*; 1889; Oil on Canvas; Carnavalet.paris.fr; Web; 28 May 2016.

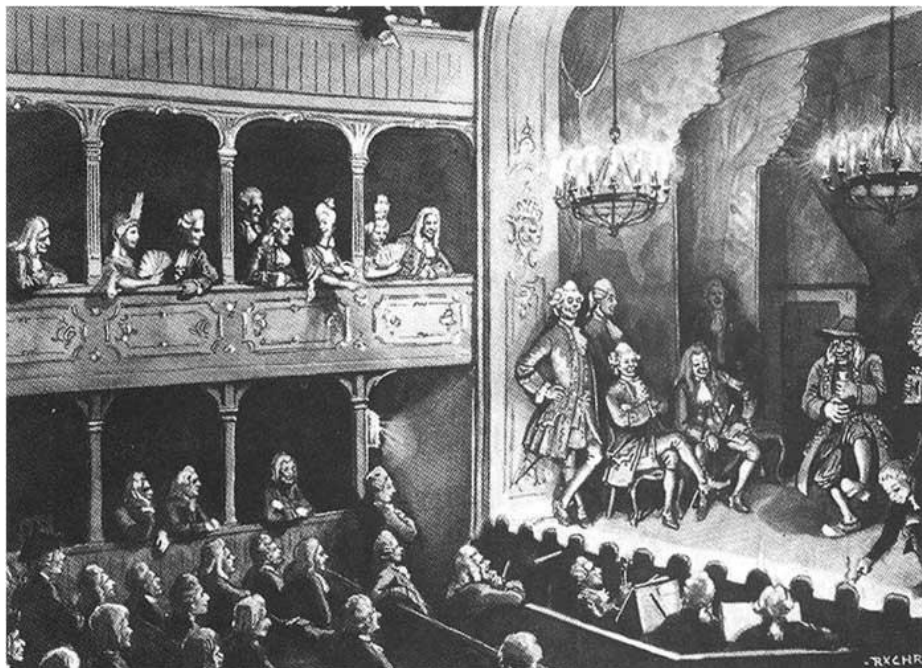


Fig. 7. Lighting at the Royal Danish Theatre, Copenhagen; 1740; Bristol.ac.uk; Web; 29 May 2016.

While gaslight did not radically alter the nature of lighting convention, there were some other changes that are important to mention. Gaslight made everything much brighter, so bright in fact that the actors were forced to change their method of applying stage makeup. The added brightness also forced a more rigorous attention to detail in preparing scenery for the stage as every blemish was now visible (Penzel 41). With that brightness came other changes to the environment. For instance, the theatre got very hot. In the Alhambra Theatre the temperature was recorded as high as 95 degrees Fahrenheit in the balcony seating (Rees 176). In addition to the scorching heat, gaslight also emitted strong fumes that often would make audience members and performers ill. This led engineers to develop new ventilation techniques that could release the oppressive heat as well as exhaust the noxious fumes. These perils complemented the already mentioned flammability issues, which were far more dangerous than the candlelight for a several reasons. First, there were more individual flames in gas lit theatres because it was not as costly to maintain as individual candles. Second, the flames from the gaslight were much larger than that of a candle. Finally, and perhaps most deadly, the irregular flow of gas to the flame caused its size to fluctuate in an unpredictable way. “The lack of consistent guidelines and procedures in the gas industry had detrimental consequences for the entire system,” explains Fressoz. “For instance, in London, it was recommended not to leave a gas lamp unattended because the flow of gas was chaotic: the flame could quickly become a foot tall or be suddenly extinguished (Fressoz 749). This instability proved problematic when theatre managers or technicians would try to place gas jets near scenery, or when performers would try to gage a safe distance from gas jets.

The gas table allowed for some real advances in lighting convention in the 1840s. One major shift had to do with the ability to selectively control what part of the stage was lit and what

was dim. During a performance, a “gas-man” (usually multiple) would operate this large table filled with valves that controlled different gas jets on stage and in the audience (fig. 8).¹⁶

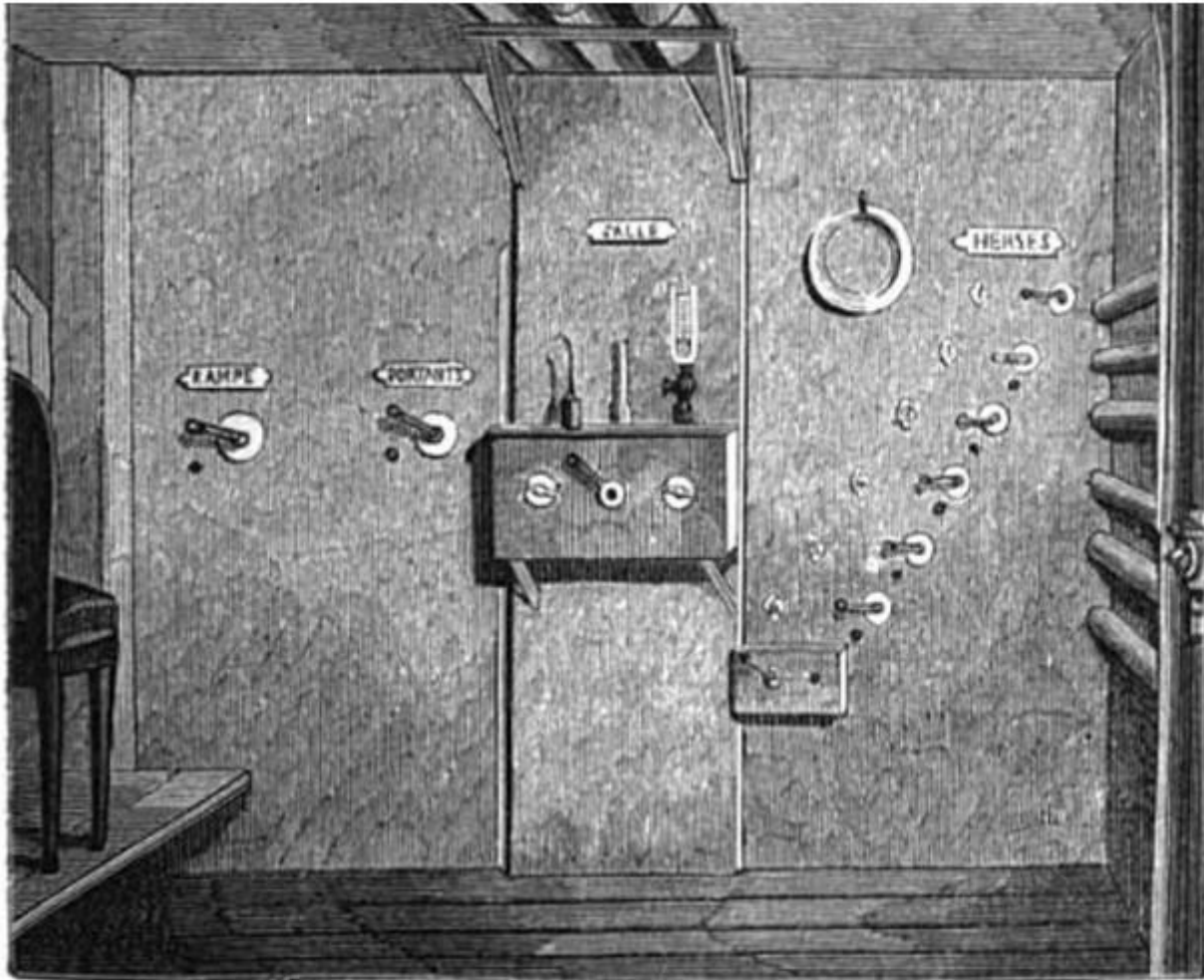


Fig. 8. Gas table at illustrated by Moynet; *L'ENVERS DU THÉÂTRE MACHINES ET DÉCORÂTIONS*; Pg. 107; “Poste du Gazier”; 1875; Web; 18 Apr. 2016

Gas tables were normally located below the stage; however, locations greatly varied based on the theatre architecture. This enabled scenic painters to create visual layers on the stage and direct

¹⁶ Some operas in Parisian theatres employed as many as thirty gas-men for a performance (Fitzgerald 49).

the focus of the audience to a specific area.¹⁷ Another new possibility created at this time was to move the actor off the apron and back into the proscenium. Once the convention of dimming the auditorium became more widely accepted, the audience's focus during the performance could be manipulated and concentrated by the designers and producers. "Richard Wagner's performances at Bayreuth took place before an almost totally darkened auditorium. This was a radical attempt to abolish the theatre as a social place and to transform it into a mystical one" (Schivelbusch 210).

Also coming into prominence at this time was the use of the limelight, which used a mixture of gas and oxygen to superheat a piece of limestone until it became incandescent creating a brilliant shaft of light when reflected through a lens (Rees 43). While the limelight did produce a focused beam of light, it was not used as our contemporary spotlight would be used. Theatre artists instead harnessed its powerful beam to create spectacular illusions on the stage, such as rays of sunlight or moonlight (Rees 64). Nineteenth century theatre critic Percy Fitzgerald remarked that while gaslight enabled the use of more colors on stage, "it was the application of the limelight that really threw open the realms of glittering fairyland to the scenic artist," allowing for brilliant spectacles only imaginable in mythic tales (Fitzgerald 41). It is the convergence of these new lighting conventions, used to create elaborate theatrical spectacles, coupled with deadly accidents, like those that befell Webster and Smith, that would render the potential for profound experiences for the nineteenth century audiences.

¹⁷ The art of "lighting design" was not established until the early 20th century with the introduction of standardized electric lighting fixtures. During the gaslight era the task of organizing and planning the gaslight effects fell, in most cases, to the scenic painter as the importance of his work became much more visible with the brighter gaslights. Adolphe Appia is widely considered the "father" of lighting design through his revolutionary writings on the three-dimensionality of light and space during his work with Richard Wagner. See *La mise en scène du théâtre Wagnerien*, 1897.

In addition to the great many dangers present in the development of gaslight and its technologies, the theatrical spectacle also was impacted in profound ways. Gaslight altered the social and cultural space in Victorian England by changing the potential for visibility. Industry flourished with the ability to better light factories, and the infrastructure created through the development of gaslight laid the foundation for the infrastructures that would be needed for steam engine and railway technologies. Gaslight also altered the theatrical aesthetic standard. Gone were the days of dimly candle lit actor/audience shared spaces. The expectation for spectacle was great, and gaslight would provide a volatile technology to accommodate it.

Where many present-day theatrical productions attempt to mask conventions used to create illusions and special effects, Victorian audiences were well aware of gaslight as a convention to be used in these special effects, gaslight that was often used to create representations of conflagrations on stage. Fitzgerald critiqued the conflagration scene in the popular 1880 revival of *The Corsican Brothers* at the Lyceum Theatre, providing a historical perspective on how much spectacle had changed from the 1840s. By 1881, the date of Fitzgerald's critique, the conflagration scene was a common and well-planned spectacle. During the infancy of gaslight, theatres would symbolize a burning building by waving a torch inside the building. So poor were the representations, scoffed Fitzgerald, that they "could be as effectively consumed out of sight of the audience, just as Medea could put her offspring to death in private". By the 1870s London's theatres had mastered fire effects in fantastic ways. The conflagration scene during *The Corsican Brothers* included glaring red embers, walls cracking with heat, "charred rafters tumble down with a crash, the flames roar, and blaze, the air is charged with a crimson glow". So perfect was the imitation that Fitzgerald found it "impossible to distinguish the mimic from the real conflagration" (Fitzgerald, *The World Behind the Scenes* 52).

The use of limelight combined with real jetted gas flames served as a sensational effect. Terence Rees describes some of the techniques used in creating conflagration spectacles in his book, *Theatre Lighting in the Age of Gas*. Fire effects were created with a mixture of red-colored limelight shooting shafts of light onto the burning buildings, forge bellows emitting smoke into the air, and most powerfully, actual gas flames jetting into the air behind the set. A cacophony of effects combined to achieve a theatrical spectacle common to Victorian audiences. The drawings below further illustrate the ways in which gaslight was harnessed for theatrical effect during the nineteenth century (fig. 9, fig. 10). In fig. 9 the ferocity of the flames and represented danger are strongly expressed by the illustrator. In the illustration the real flames appear to be engulfing onstage structures in an almost uncontrollable way. In fig. 10 the backstage operation is illustrated. Here the operators and safety personnel control the effect, which appears no less frightening.

Spectacles like these were common to the Victorian stage as “sensation dramas,” productions that led audiences through a titillating brush with danger created by an industrial technology. Historian Michael Diamond writes about spectacles and sensation scenes in the nineteenth century. He identifies the on-stage conflagration as one of the most powerful sensation scenes. “The great sensation scene was of a house on fire across the whole width of the stage, with firemen scaling ladders and a real fire engine” (Diamond 224). Dion Boucicault was one of the most popular of the playwrights who employed these sensation scenes. One of his most successful early sensation dramas was *Colleen Bawn*, which helped to introduce the visual importance of these consistent dramaturgical conventions of nineteenth century melodrama.

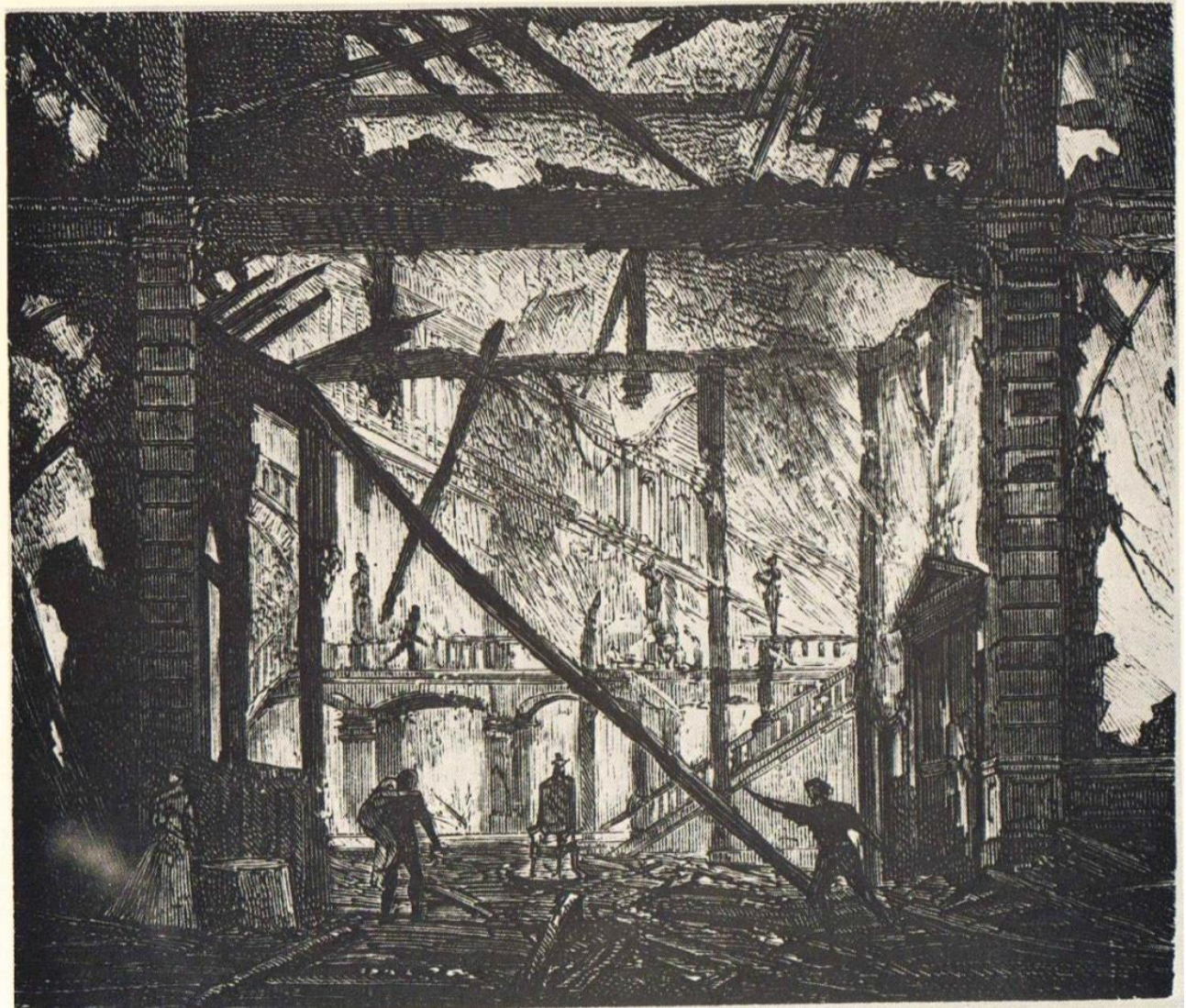


Fig. 9. The front view of a burning palace in *La Madone des Roses*; Painted by Roecchi;
L'ENVERS DU THÉÂTRE MACHINES ET DÉCORÂTIONS; By Moynet; 1875;
 Web; 13 May 2012.

One result of the enormous popularity of the *Colleen Bawn* at the Adelphi was the introduction of the term sensation scene. The manager at the Adelphi boasted to the audience after the performance that he had “produced a ‘sensation drama’, and the scene which justifies the use of this term is called a ‘sensation scene’” (qtd. in Diamond 212). Sensation scenes often contained violent visual effects including earthquakes, avalanches, train crashes and conflagrations (Diamond 213).

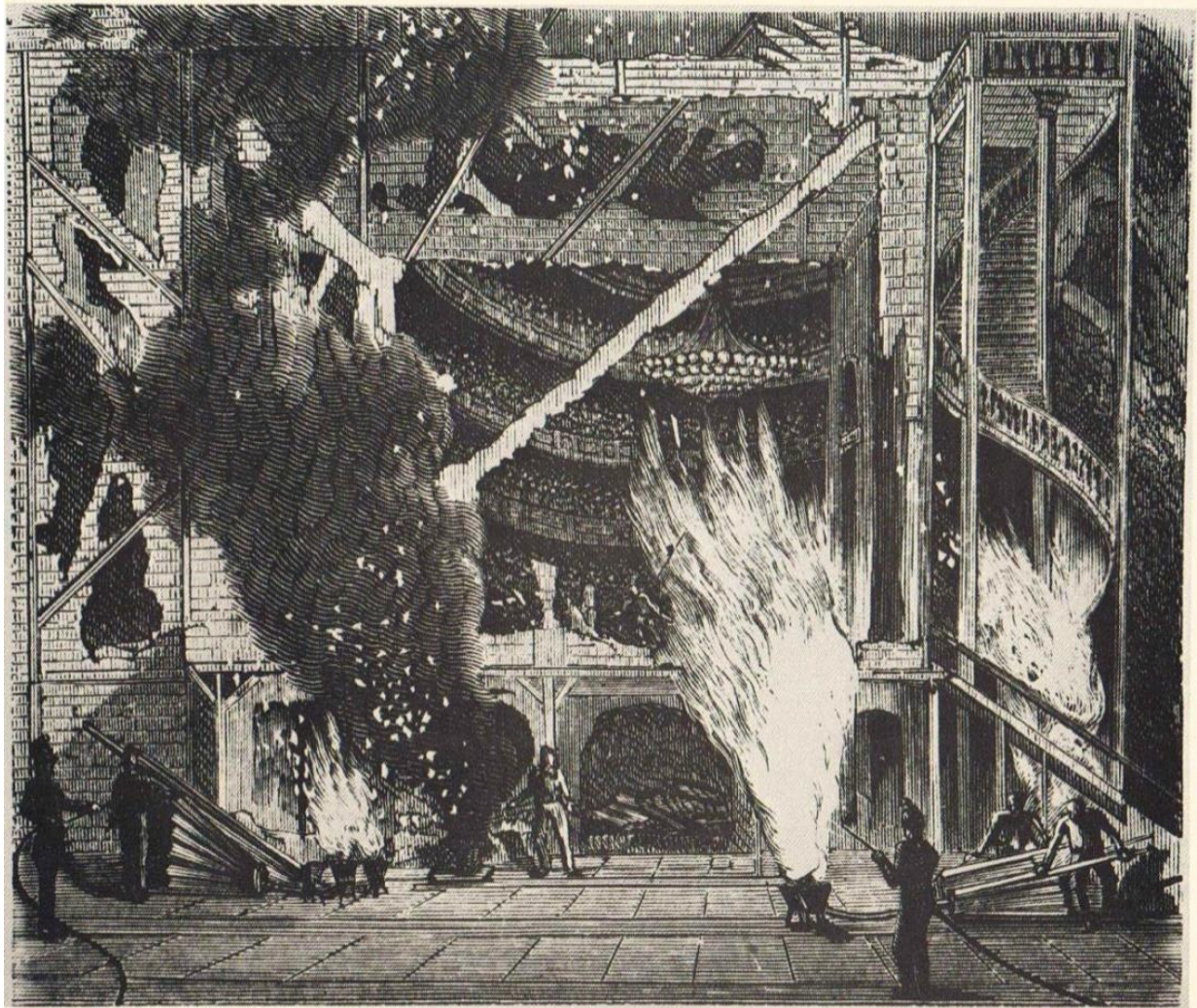


Fig. 10. The backstage view showing the jetted gas flames used in the effect; Painted by Roccchi; *L'ENVERS DU THÉÂTRE MACHINES ET DÉCORÂTIONS*; By Moynet; 1875; Web; 14 May 2012.

Fire and more specifically gaslight were a constant presence in the theatre of the nineteenth century. Gaslight provided general audience illumination, theatrical lighting and also was a convincing and powerful part of the theatrical convention of representing fire onstage. The spectacles of fire on stage were not limited to burning buildings. Gaslight was used to create fire inside a fireplace, a common stage direction in nineteenth century theatre. Gaslight was also used to represent the flames of hell, as recounted in Henry Morely's 1891 *Journal of a London*

Playgoer from 1851-1866. Recalling the 1858 opera *Don Giovanni* at the Covent Garden Theatre, Morely notes the use of gaslight flames near the end of the show. “Finally, on the wedding night,” he writes, “the statue comes and carries down the impious man through the trap-door, out of which shoot flames” (Morely 187). Gaslight flames were used to represent real flames onstage.

Danger was an important element in the sensation scenes, and the imposing spectacles continued to grow more imperious. Danger was also always present for Victorian citizens who were in a sort of tug-of-war with gaslight. Coal gas technology improved technological and industrial advances, but also carried with it an ever-present deadly danger of catching an article of clothing or a scenic element on the stage. The combustible nature of gaslight’s surroundings did not go unnoticed in the presses. Even so, demands for more dangerous and larger spectacles continued to grow. “To make things worse,” warns a 1865 article in *The Builder*, “these materials are consumed or exploded in the very closest contact to timber spars covered with pasteboard, painted canvas, light gauze, and such like inflammable fabrics” (*The Builder* 67).

Witnessing the fire spectacles demanded a sort of split focus from the audience. The audiences rushed to the theatre to behold the wonders of modern technology in sensation scenes, ready to soak in the danger and release when the thrilling special effects appeared before their eyes. And within the same theatrical framework they potentially would observe a ballerina, violently thrashing about the stage, desperately grasping for her life and engulfed in flames from the same gaslight that thrilled them at their last visit. The *ERA* reported that the sensational nature of these spectacular burnings was too real and too thrilling in the eyes of some audience members, in light of the accidental burning of Hunt and Smith. “However fond the public may be of sensational effects,” the editorial argued, “when they go ready braced to witness them,

extemporaneous terrors, such as a possible death before their eyes, produce a revulsion of feeling the opposite of pleasure, and of every source of it” (“Accidents from Fire” 9). For theatre audiences in the nineteenth century fire became a highly complicated visual image.

Bert States argues that even within the theatrical framework certain objects maintain a “certain primal strangeness” (States, *Great Reckonings* 30-31). Objects like fire and water retain a primal essence that will react contrary to a planned representational attribute. Fire from the gaslight often blurred the boundaries of representation and exposed its primal essence. And, unlike in a time before gaslight, audiences had grown familiar with the thrill of their own relation to the primal nature of the flame. This primal power of flame made for supreme spectacles that thrilled and excited, but also carried a volatile objectness about them.

In experiencing the flaming ballerinas, the Victorian audience was exposed to the primal strangeness of fire in a particularly horrific way. In hindsight, it can be argued that there was no aesthetic function to these tragic accidents, but the audience did not know that. The audience was accustomed to thrilling elaborate special effects meant to fulfill the most spectacular of aesthetic functions, many of which also used flames from the gaslight in a theatrical special effect. As States would say, for the “first four seconds” the audience faced a perceptual explosion where the object or image establishes itself (States, *Great Reckonings* 27). At the convergence of horror, technology and theatrical convention, Victorian audiences faced a powerful instant where perhaps their primal interpretive capabilities had been confused - a sort of primal confusion where the convention turns violent and the audience is unable to comprehend the gaslight as either fire or theatrical convention.

While States offers poetic language about how an object’s essence is perceived in a theatrical framework, it is important to note the problematic nature of applying a

phenomenological reduction to sensation scenes using fire or ballet girls burning to death. Pannill Camp argues to some of the stumbling blocks theatre critics face when calling upon phenomenology to discuss historical theatre events. “Phenomenology is a philosophy formed within a specific historical moment” (Camp 85). For historical events, access to the object and any experienced essence or knowledge does not exist because the subject for that event is not available for the reduction. Subjectivity is paramount to the phenomenological reduction, and without the subject, the experience with an object’s essence is unknowable. Instead of focusing on a single subject’s reading of the phenomena, these horrific events can offer historical and cultural information about how fire, gaslight and sensation scenes would have been experienced by an audience. These cautions in mind, phenomenology nevertheless offers a useful vocabulary and way of thinking about historical performance events without a formal reduction.

The terminology of phenomenology provides a way of analyzing the essence of fire as it revealed itself to participants in nineteenth-century sensation scenes as well as in deadly burning accidents. The visual aspect of sensational fire scenes is very much dependent on the nature of vision in the nineteenth century. Gaslight and its rapid development during the nineteenth-century cannot be divorced from this burgeoning visual culture. Lighting historian Wolfgang Schivelbusch explores the many ways gaslight revolutionized the visual abilities of the whole of society in Victorian England, turning “night into day” (Schivelbusch). With the advent of gaslight, factories were no longer dependent on daylight or kerosene lamps to operate, and public spaces were no longer dark, foreboding places but rather brightly lit streets where people could see their surroundings as well as be seen. The nineteenth century spectator was no longer limited in positioning themselves in a dark world, but rather they were quite aware of their relation to light and its sources as well as the spectacles they encountered at the theatre.

A most relevant construct for accidents on stage was developed by Jody Enders in her 2009 monograph, *Murder by Accident*. Enders begins with a useful definition and caveat for on stage accidents, arguing that “an unintentional act – an accident – is still an act with consequences, some more noteworthy than others” (8). Intentionality is a key concept to come to terms with as it pertains to onstage accidents. While it is true that, as Enders puts it, there is no accidental intention, she nevertheless stresses that “there is no theatre by accident because there is no accidental impersonation and no accidental representation” (12). There are two parts of the violent representation and accident to consider: one is the action onstage and the other is the witnessing of the violent accident. While the horrific burning of Webster was not intentional, the fact that her death unfolded as a theatrical spectacle is not accidental. That is, the witnessing of the act requires an understanding of how visibility and the role of the observer changed during modernity. Audiences to accidental burnings in London’s theatres were addicted to the technology, to the sensational spectacles and to the thrill of seeing the not uncommon accidental burnings. In order to accept new technologies like gaslight, audiences were also forced to accept that the nature of accidents and traumas resulting from those technologies were a part of the visual sphere.

The successful and powerful theatricality of the sensational fire effects, as well as the accidental burnings, depended upon the audience’s newfound visibility and awareness described above. The powerful and prioritized sense of sight encountered something both representational and very primal in these fire effects. Technological advances situate the nineteenth-century as the height of modernity. The many writings on modernity are part of a vast discourse on how the

world changed from a pre-modern or medieval world view to a more modern view.¹⁸ Gregory Bruce Smith, writing about Heidegger, stresses the key difference the modern subject had from an earlier pre-modern subject. “Man treats the world as a consciously created perspective or ‘picture.’” Within the visual picture man is able to establish himself in a subjective way as viewer of the objective world. “The modern age is distinctive in that Reality comes to be understood as a picture, as our picture.” In modernity the reception and reality of the world is driven by the subject, whereas a pre-modern reality of the world is based on the creation of God (G. B. Smith 374). The prioritized sense of vision which constructs a world picture also informs the growing appeal of spectacles in sensation dramas.

An important aspect for examining sensational fire spectacles and tragic actor burnings is to situate an understanding for how the audience saw themselves in relation to these objects. One aspect of the modern epoch is how people see the world and themselves in it. Heidegger specifies that a world picture “does not mean a picture of the world but the world perceived and grasped as a picture...the world picture does not change from an earlier medieval one into a modern one, but rather the fact that the world becomes a picture at all is what distinguishes the essence of the modern age” (Heidegger 130). Heidegger argues that the perception of the reality

¹⁸ Eric Hobsawm focuses his critique of modernity on issues of revolution, starting with the French Revolution and concluding with the beginning of World War I. Hobsawm coined this era the “Long Nineteenth Century” and proposes that the modernization of Europe is a result of the French Revolution and the Industrial Revolution. (See Hobsawm’s *The Age of Revolution: Europe 1789–1848*, *The Age of Capital: 1848–1875* and *The Age of Empire: 1875–1914*) Thoughts and definitions of “modernity” vary greatly. While scholars like Hobsawm focus on technological, industrial and political revolution others, such as Michel Foucault, offer vast writings on the archeology of knowledge and subjectivity and how it altered in the modern era. (See Foucault’s *Archaeology of Knowledge, Discipline and Punish: The Birth of the Prison* and *The Order of Things: An Archaeology of Human Sciences*.)

of objects in the world is only possible after they have been transformed into a picture. Only after that transformation is complete are subjectivity and individuality possible for the viewer.

The visual crafting of the world and the individual within the world is at the heart of modernity in Victorian England. In the nineteenth century technological developments like the photograph altered forever the modern notions of the world and the self. In their analysis on museum cultures of the nineteenth century, Constance Classen and David Howes identify vision as gaining new importance in the understanding of the world. “In contrast to the multisensory modes of previous centuries,” they explain, “in the 1800s sight was increasingly considered to be the only appropriate sense for aesthetic appreciation for ‘civilized’ adults” (Classen and Howes 207). Sight developed as the most dependable of senses as it became closely allied with scientific practice and ideology (Classen and Howes 208). This reliance on vision as the dominant sense for understanding the natural world created what Nicholas Mirzoeff calls a “visual culture” in the nineteenth century. “Visual culture,” Mirzoeff explains, “is concerned with visual events in which information; meaning or pleasure is sought by the consumer in an interface with visual technology” (Mirzoeff 3).

Melodrama and sensation scenes, in particular, drew their interest because they were specifically tied to local places and modern times, and the visual spectacle was becoming more popular financially than classical poetic drama. The Victorian public sphere was a sensation-driven space. Christopher Kent writes, “The visual pictorial aesthetic triumphed over the aural, and an important reason for this victory must be the greater degree of innovation in the technology of the visual, above all in the production and control of artificial light” (Kent 2). In writing about sensation plays, the railway and modernity in the nineteenth century, Nicholas Daly offers a broad distinction for modernity as a “disruption of a traditional social and political

order, as well as the creation of a new experience of time and space” (Daly 15). Boucicault made the link between contemporary events and creating a visual spectacle of that familiar event in a photographic way. “The poetic and romantic drama had no longer its old charm;” he concludes, “the actual, the contemporaneous, the photographic had replaced the works of imagination. It was in turning over *The Illustrated Journal* that the idea struck him that the stage might be employed in a similar manner to embody and illustrate the moving events of the period” (Boucicault, “Leaves” 230). Boucicault’s revelation was driven to large extent by his business acumen. Boucicault disapproved of the pay structure for dramatists and used his popular sensation plays to re-order his play to earn up to half of the total ticket sales (Boucicault, “Leaves”).

While hosting a gathering of friends Boucicault boasted, “I propose to write three new pieces: one a society drama, relying mainly on its literary treatment; the second a domestic drama, and the third a sensation drama. The pieces shall be produced at the same time, and I guarantee that the success of each shall be in the inverse ratio of its merits”. Boucicault carried out his plan and the three pieces were written and performed in October of 1866. *Hunted Down* and *The Long Strike* were the social and domestic dramas, and *The Flying Scud* was his sensation drama. Just as Boucicault had predicted, *The Flying Scud* proved most popular (Boucicault, “Leaves” 234).

“Sensation scenes” became a wildly popular spectacle in Victorian melodrama because they offered the audience a touch of technological wonder, melodramatic plot devices and an intimate exposure to the suspense and release of the thrilling scene. One of Boucicault’s most popular plays, *The Streets of London*, was adapted from his popular American melodrama, *The Poor of New York* (originally adapted from the French *Les Pauvres de Paris*). In continuing with

his mandate of keeping plays and spectacles local and recognizable to audiences, he adapted *The Poor of New York* into several British locale-specific versions: *The Poor of Leeds*, *The Poor of Manchester*, *The Streets of Islington*, and eventually *The Streets of London* (Daly 18). *The Streets of London* emulated real landmarks and elements of the streets, including real gas flames in the street lamps during the street scenes (see fig. 11).¹⁹ Contemporary reviews described the amazement at the effect, deeming it “perhaps the most real scene ever witnessed on the stage in London”. Audience members marveled at the “real lamps run down each side of the way; the chemist’s shop on the right throws its crimson, violet and green lines of colour across the street” (*Illustrated Times* 87). The use of real gas streetlights on a diorama-like scenic background made it appear that the audience was in fact watching events on the real street nearby.

While the attention to detail in recreating a realistic London onstage is indicative of melodramatic sensation plays, *The Streets of London* distinguished itself with an elaborate conflagration effect near the end of the play (fig. 12).²⁰ Boucicault had, by this time in his career, gained a firm grasp of popular spectacles as he crafted this London based version of his play. Boucicault biographer Townsend Walsh quotes Boucicault’s awareness in creating a successful spectacle, “I localize it for each town, and hit the public between the eyes; so they see nothing but fire” (Walsh 95).

¹⁹ Michael Booth offers an in-depth study of plays during the Victorian era that depict the city of London. Many of the examples described real gaslight being used to light street lamps during exterior scenes and fireplaces for interior scenes (M. Booth).

²⁰ “Boucicault continued to mine the sensation vein in subsequent plays. In *The Octoroon; or, Life in Louisiana* (1859), a ship goes up in flames on stage at the end of Act 4... [and] in *The Red Scarf* (1869), the villain ties the hero to a log in a saw-mill, sets the saw going and sets fire to the mill” (Daly 19).



Fig. 11. “Scene from the New Play, *The Streets of London*, at the Princess’s Theatre”; *Illustrated Times*; 27 Aug. 1864; p. 129; Web; 24 Apr. 2016

Boucicault scripted the action as such:

The house is gradually enveloped in fire...bells of Engines are heard. Enter a crowd of persons. Enter Badger, without coat or hat—he tries the door—finds it fast ; seizes a bar of iron and dashes in the ground floor window, the interior is seen in flames...Enter Dan.

Dan. [Seeing Badger climbing into the window.] Stop! stop!

Badger leaps in and disappears...The shutters of the garret fall and discover Badger in the upper floor. Another cry from the crowd, a loud crash is heard, Badger disappears as if falling with the inside of the building. The shutters of the windows fall away, and the inside of the house is seen, gutted by the fire; a cry of horror is uttered by the mob. Badger drags himself from the ruins...

(Boucicault, *The Poor of New York*, Act V Sc.2)



Fig. 12. Advertising card for *The Streets of London*; Princess's Theatre; Coloured ink on paper; published by Concanen, Lee & Siebe; London; 1864; Museum no. S.2520-1986; © Victoria & Albert Museum, London; Web; 12 May 2016.

As biographer Richard Fawkes writes, Boucicault's grand sensational conflagration was represented by constructing scenic drops hung in succession from upstage to downstage in a zigzag pattern and rigged to be released during the fire effect in order to give the illusion that the building walls and roof were falling in the blaze. Additionally, the shutters were rigged using a material called "quick match," which allowed the connective joint to burn quickly, allowing the shutters to drop independently from the walls. The window frames were constructed out of iron and covered in oakum soaked with alcohol, allowing the window frames to burn with real flames in a controlled way (Fawkes 6). A large scrolling drop painted with flames was revealed and continuously scrolled behind the scenic units during the fire spectacle. The flames of the fire were created using a combination of several different techniques. Steam released from behind the

set created the illusion of smoke. The actual flames were created with small individual fire boxes controlled by property-men backstage that included lycopodium to create a red glow behind the scenic elements. Gas jets shot large actual flames into the air behind the scenic elements. Historian Daniel Gerould writes that the final and most startling component of the overall effect was the entrance of a real fire brigade onto the stage to battle the raging flames (Gerould 7). Audiences confronted with the fire effects faced a moment of extreme tension when the real fire brigade showed up on stage. Boucicault had added the ultimate final touch to his sensation scene, which truly “hit the public between the eyes” (Walsh 95).

The Streets of London premiered at the Princess’s Theatre in 1864 and was wildly successful. One year earlier on the same stage, Ann Hunt and Sarah Smith ran shrieking about the stage while burning in front of the audience. Boucicault’s sensational special effect titillated and thrilled Victorian audiences due to its close depiction to real places and its exposure of the industrial technology of gaslight. Both events existing within the same social sphere, contributing to the same discourse of visual spectacle, and both inherently tied to the technology of gaslight.

These events viewed within the same visual environment present what Matthew Wilson Smith calls an “almost unbearable dissonance between industrial-age traumas and the melodramatic imagination” (M.W. Smith 498). In his 2012 article “Victorian Railway Accident and the Melodramatic Imagination,” Smith argues that nineteenth century Londoners faced an almost moral predicament with the new, but common, railway accidents. The accidents were deemed systemic in nature and had no person to blame for the tragedies. This lack of a villain in real life horror caused, “One of the central quandaries of representation in the Victorian period was this: how might one represent an ill that is not villainous but systemic?” (499). In the same

vein, gaslight accidents left the public and authorities without a liable source as well. Additionally, because the technology was so powerful and ultimately uncontrollable, accidents had to become an acceptable part of the technology for the Victorian audience. Smith argues that in an attempt to restore the moral universe of the middle class the melodrama adopted the railway accident and constructed conventions of evil villains in an effort to correct a narrative for Victorian society.

The speed and power present in this new industrial technology was something new and prompted psychologists to codify a theory of this shock absorbed in rail accidents as “railway spine”. “Railway spine” was initially seen as a physical wound of the spine, but as the psychological concept of hysteria developed the diagnosis of “railway spine” shifted to a psychic wound (M.W. Smith 501). Concepts of “accident” radically changed during the industrial revolution. With the introduction of technologies like gaslight and the railway systemic accidents increased in number and severity leaving all of Victorian society to feel powerless and victimized. As Smith posits, “accident has become at once mysterious and expected...there is danger overhanging somewhere on the Line - and yet the signalman’s inability to predict precisely where, when, or how that danger will explode brings him to the edge of madness” (M.W. Smith 519). The danger in the theatre was similar in that, regardless of the advertised safety protocol the individual theatre had created; gaslight was capable in an instant of burning a performer, piece of scenery or the entire building. And worse yet, once gaslight was out of control, containing it proved a task too large for Victorian theatres.

For theorist Jeffrey T. Schnapp, it is speed that alters the notion of accident and disaster during the industrial revolution and is crucial in the European transition into modernity. In his article, “Crash: Speed as Engine of Individuation” Schnapp analyzes how accidents and disasters

affected humans differently in a pre-modern world versus a modern world. The newfound visuality of the nineteenth century coupled with the development of high speed transportation technologies. If the picture is the defining idea of Modernity, Schnapp argues that the railway created a rapidly moving picture. Speed becomes an intoxicating sensation, in Schnapp's thesis, to which the modern man becomes addicted, repeatedly seeking out the rush of that sensation (3-4). The crash, then, is the only break in the cycle and thus becomes a necessary and "normal accident" for modernity. "If the driver was a god or angel in pre-modern times, the gods or angels of the modern era will be found holding the reins or sitting behind the wheel, so identifying individuality with the possession of and mastery over wheels" (3-4). The technology of the late nineteenth century and for modernity mandated an acceptance that accidents were inevitable. I might also add to Schnapp's quote that the mastery over the wheel is fraught with an ever present brush with violence or death. The industrial size of the railway accident and the common gaslight fires kept the modern Victorian in a state of dilation between the thrill of the spectacle/speed and the inevitable violent crash.

As I mentioned earlier, Jody Enders, in writing about medieval violence, concludes that whether or not an extreme violent act depicted on stage actually took place does not necessarily matter. What matters is that the aesthetics of pain and violence so dominated the cultural instincts of the time that the decapitation could be tolerated in real life, "they could be tolerated in both drama and real life not because 'intolerable' instincts were acceptable in one venue and not the other, but because they were acceptable in both" (Enders, *Medieval* 212). An aesthetic of violence and flame correlates well with our Victorian crowds in the era of gaslight. The instability of the new industrial technology forced the visual culture to accept the theatrical convention of gaslight as "always primed" for violent accident, in large part due to their inability

to fully harness the technology. Accidental burnings in the Victorian era had to be tolerated because the use of the technology of gaslight mandated it. “It is at the moment when theatre is the least theatrical that it seems the most theatrical, its real violence masquerading as fiction” (Enders, *Medieval* 229). The theatrical expectation of real live flames and the potential for young ballerinas to catch fire was a part of the cultural instinct of the time. Historian Peter Norton posits that the very notion of accident began during the industrial revolution to divert liability away from employers who were using technologies that were inevitable to fail (“qtd. in Cornish). The theatrical event and workers was not exempt from the same vulnerability that faced the railway worker, coal miner or any other industrial worker who expected accidental violence at any moment.

By the late 1890s gaslight had all but vanished from the Victorian stage as the primary lighting source, replaced by electric light and an entirely new wave of conventions and methods for stage illumination. The many advantages of electricity greatly outweighed the new obstacles to be overcome. With electric lighting came exacting methods and scientific approaches that made lighting a far safer and more reliable medium.²¹ Though the role of sensational spectacles would alter after the advent of electricity, audiences would never turn away from the thrills they were introduced to in the nineteenth century. To the contrary spectacular pyrotechnics evolved in the twentieth century to become an expected aesthetic device in live music concerts, and sadly accidental fires and deaths still beleaguer fire effects to this day.²² The notion of the theatrical accident also continues. In the next chapter I continue my analysis of theatre conventions for

²¹ Stanley McCandless outlined his technique for illuminating the stage in his 1927 book, *Method of Stage Lighting*, which would become known as the ‘McCandless Method’.

²² During a 2003 Great White concert at the Station Night Club in Connecticut a pyrotechnic display caused the overhead rafter structure to catch fire. The building burned rapidly and over 100 audience members died in the conflagration (Anderson).

danger and violence and the technological role in their failure. I turn to the convention of stage flight and the technologies and accidents involved in the most expensive musical in Broadway history, *Spider-Man: Turn off the Dark*.

CHAPTER THREE

SPIDER-MAN FALLING: VIOLENT CONVENTIONS, ADVANCED TECHNOLOGIES AND THE ACCIDENTS THAT FOLLOW

“In this world, with great power there must also come – great responsibility”



Fig. 1. *Amazing Fantasy #15* “Spider-Man!”; Writer: Stan Lee; Illustrator: Steve Ditko; Published by Marvel Comics; New York; Aug. 1962; Web; 29 May 2016.

“Finally, near the end of the first act of ‘*Spider-Man: Turn Off the Dark*,’ the audience at the Foxwoods Theater on Saturday night got what it had truly been waiting for, whether it knew it or not. Calamity struck, and it was a real-life (albeit small) calamity... And for the first time that night something like genuine pleasure spread through the house.”

(Brantley, “Good Vs. Evil”)

The recent Broadway production of *Spider-Man: Turn off the Dark* was supposed to be an amazing confluence of a master directorial innovator, Julie Taymor, the genius musical minds of our generation Bono and The Edge and the great American mythic hero, Spider-Man. What transpired was a complicated tale of ruin, and perhaps redemption, so great not even the superhero dramatist William Shakespeare could script it. The troubled history of *Spider-Man* has been zealously chronicled, leaving a legacy of financial ruin, lawsuits, creative disarray and, most interestingly for this study, an ever-present expectation for danger and even death. *Spider-Man* began preview performances on November 28, 2010, and went on to engage in the longest preview period in Broadway history (183 performances), not officially opening until June 14, 2011 (Berger 311). While not a favorite of critics, for a brief time *Spider-Man* was the highest-grossing show on Broadway. In the last week of 2011, *Spider-Man: Turn off the Dark* shattered the record for the highest single-week gross of any show in Broadway history, taking in over \$2,900,000. (Berger 315-16)

In the summer of 2012 I travelled to New York City to see for myself this much-maligned musical. At this point in the run of *Spider-Man: Turn off the Dark* the original cast was still intact, and the “reboot” had taken full effect (more on this later). The show was popular and, though a TKTS²³ guide in Times Square attempted to dissuade me from seeing the show, I walked to the Foxwoods Theatre and waited in line for rush tickets the morning of the show. Actors between jobs often find work as TKTS guides, offering suggestions and insider tips on what show Times Square tourists might find the most bang for their buck. When I was approached by the guide as I looked over the offerings for that day’s shows, I knew already that

²³ TKTS is a discount ticket resale booth in the heart of Times Square. Theatres send unsold tickets to the TKTS booth on the day of the show where they are sold at a discount with hopes of filling the house.

Spidey was on my agenda. I knew of its troubled history and had hoped to actually capture a glimpse of that chaos during my visit, so when I answered the guide's, "any specific shows you hope to catch while you're in town?" with, "I'm here to see *Spider-Man*," and he looked at me like I was about to drink rotten milk, I was certainly not dissuaded. I didn't think much of the TKTS guide and his "look" at the time, but now looking back on it I can see his efforts were perhaps a part of a larger disdain from the theatre community about the show and its troubles.²⁴

I was well informed about the show's less-than-glowing reviews and its troubled history of delays, budgetary woes and actor injuries. One might argue that unless you lived on a remote desert island during 2009 – 2011, you were inundated with media reports of all kinds telling the tale of *Spider-Man: Turn off the Dark*. Adding to the hype about *Spider-Man*, the film industry had re-captured the superhero genre in a big way during the 2000's with blockbuster films like *Fantastic Four*, *Superman Returns*, *X-Men First Class*, *Ironman*, *X-Men origins: Wolverine*, *Ironman 2*, *Captain America: The First Avenger*, *The Watchmen*, *Kick-Ass*, *The Green Hornet*, *The Incredible Hulk*, *Thor*, *Batman: Dark Knight*, *Green Lantern* and of course *Spider-Man*, *Spider-Man II* and *Spider-Man III* (IMDB.com). Julie Taymor, one of the most acclaimed and visionary directors, was at the helm working in concert with Bono and The Edge, of U2 fame. This show was supposed to be the next *Lion King*, but with superheroes flying throughout the theatre!

In this chapter I revisit my experience with *Spider-Man: Turn off the Dark* and look specifically at the convention of stage flight, so crucial to this production's potential success and

²⁴ Several Broadway actors, including Adam Pascal (of *Rent* and *Aida* fame), called for Julie Taymor to be prosecuted for assault due to the actor injuries reported during the technical rehearsals. (Gamerman). Alice Ripley, recently off her highly acclaimed run in *Next To Normal*, Tweeted- "Spider-Man should be ashamed of itself. This is completely unacceptable and embarrassing to working actors everywhere" (Broadwayworld.com).

eventual turmoil. As detailed previously, conventions make up the common rules of the event between the audience and actors. In the case of *Spider-Man* the convention of stage flight creates the framework or language for the aerial effects in the show. Technology plays a big part in the convention of stage flight utilized in *Spider-Man*, and I detail the advanced nature of that technology and how it failed during the performances. I examine the many accidents that occurred during the production's history through the lens of accident theory, exploring the idea of high risk accidents and inevitable accidents. I draw in Charles Perrow's concept of "normal accidents" into my analysis on the accidents in *Spider-Man*. Did the advanced technology employed in the flying sequences of *Spider-Man* constitute a "high risk technology," and can those events been seen as "normal accidents"? I also analyze my experience with the "dilation" I felt as an audience member calling upon Andrew Sofer's notion of "dark matter" and James Joyce's concept of "aesthetic arrest," as filtered through Ann Bogart. What happens when an audience expects violent "accidents" during a performance? Would the show have survived and gained the level of financial success that it did without the history of those life-threatening events?

Ticket purchased, I took my seat high in the house left orchestra balcony. From my vantage point I could see the stage and the audience equally, almost akin to a tennis umpire bouncing focus from one side to the other. The seats were not great, and in fact many of the upstage video elements were obstructed from my view. For my purposes, though, I felt quite fortunate in my position. I was ideally positioned to see the audience's reaction should an oft reported technical glitch, or even a more serious accident occur during my time with Spidey. In the moments prior to the beginning of the show I wondered how many of the audience, filled

with a great many school aged kids, had seen the show before and how many had cell phone cameras ready to catch video of the next accident.

As the lights dimmed and the show began I felt an odd imbalance, with my focus split between wanting to enjoy the show/spectacle and trying to anticipate a potential accident. “It is impossible to plan an accident,” writes Director Michelle Newman, “you can only create the conditions in which one might occur” (Newman 63). In her article “Notes on Falling and Flying,” Newman discusses this type of imbalance. Newman references Eugenio Barba’s notion of performers taking on a purposeful “precarious balance” in order to achieve “dilation.” Dilation here refers to moments when the actor is able to engage the entire network of energies within their body, unlocking that same dilation for the spectator. Newman asks, “[W]hat happens when balance is challenged to the point of the wobble, even the fall? What is the quality of dilation produced by the possibility of the misstep, the mishap?”(62). I use this notion of a precarious balance to characterize not only my split focus, but also the experience of the performers, technicians and creators as they toiled for five years on this project. Because the play had become so well known for the accidents I was left in an imbalance with the knowledge/expectation that an accident could be part of my experience. I also couldn’t help but feel that any performer involved in the show must have experienced a vulnerability knowing that they carried with them onstage the history of those past injuries. The conditions for a violent accident were well established as I settled into the Foxwoods Theatre.

Given the publicity campaign before previews, the high profile players and the immense criticism of the show, how could anyone’s focus not be split? In late 2010 through 2012 there was a cultural firestorm surrounding *Spider-Man: Turn off the Dark*. Susan Bennett discusses the split focus as a constant and inevitable part of the theatre going experience. In her book, *Theatre*

Audiences, Bennett proposes that a theatre audience must occupy two frames simultaneously when viewing a performance. The inner frame is, of course, the show and the acceptance of the conventional framework and temporary suspension of disbelief. The outer framework is something the audience brings into the theatre from beyond the performance event. The outer framework includes all cultural, personal and instinctual knowledge that has been imbedded within the conscious of the audience about the event beforehand. "It is the intersection of these two frames which forms the spectator's cultural understanding and experience of theatre" (1 & 2). Given Bennett's model I would offer that an audience to *Spider-Man: Turn off the Dark* is even more keenly aware of this split frame with which they are experiencing the show, and that the outer cultural knowledge of accidental violence was both impossible to ignore and served as a thrilling extra character in this framework.

As Bennett discusses (borrowing from Stanley Fish), audiences form discrete interpretive communities. These interpretive communities share pre-existing strategies for constructing and assigning prior meaning to a performance event (Bennett 40). So, prior to seeing the actual musical, audiences coalesced on an interpretive strategy that included historical accidents, severe injuries, and critical embarrassment alongside the cultural excitement in seeing Spider-Man swing through the air. Part of their strategies would be formed by information about the previous performance. How could they not go to Spider-Man to see a fall, or to the nineteenth century ballet to see a flaming ballerina? As discussed with the gaslight tragedies, there existed around *Spider-Man* the expectation and acceptance of the advanced technologies to fail violently. As the *Spider-Man* audience enters the theatre, they enter with the history of the show's past violence as a part of their framework for viewing the show. This was very much my framework as mysterious electric guitar filled the theatre space and I settled into my umpire like position. Part

of me also wondered what feeling Taymor and the creative team wanted audiences to have at this point, with or without the historical context bouncing through the Foxwoods.

Taymor is a director with a history of creating visually stunning elements that demonstrate the true power of theatrical representation. Best known for her direction of Disney's *The Lion King* on Broadway, as well as extensive opera and film direction, Taymor's use of puppetry to create a fantastical reality in her stage works established her as an ideal candidate to revolutionize the Broadway musical with *Spider-Man*. And there was every indication at the onset of the creation that the "Spider-Man Musical" had the potential for amazing visual elements. Taymor's attraction to the project from the beginning was its opportunity to connect with a mythic place that few Broadway shows get a chance to go, theatre critic's Patrick Healy and Kevin Flynn reported that Taymor was trying to take Spider-Man to a fantastic mythic place that can only be on stage. (Healy and Flynn, "Broadway Superlative"). Taymor spoke more in-depth about this mythic structure during an interview with Oprah in 2011, explaining that "my background is mythology and folklore. So I started to look at the comic books, and on page one of *Ultimate Spider-Man*, I found the story of Arachne." The Greek mythological character of Arachne was Taymor's way in to the superhero story. Taymor's attraction to the Arachne myth allowed her to bring an element of Greek tragedy to the modern American story of Spider-Man ("Oprah").

I briefly mentioned earlier about the two versions of the show. Before I get too far into my night at *Spider-Man*, it's important to discuss the differences between what Taymor originally envisioned and the "reboot" version that most of the audiences saw. Taymor and co-creator Glen Berger's first version of the book for the musical heavily involved the mythical character Arachne, as well as a Geek Chorus (Taymor's homage to a Greek Chorus). The show

began introducing the myth of Arachne through a chorus of weavers creating a tapestry and telling how Arachne mocked the gods, hanged herself and was re-created by Athena to be the world's first spider. The action then shifts to the teenaged Peter Parker giving a book report on Arachne in class. There he is bullied by the "Geek Chorus" and a connection to Mary Jane is introduced. On a class trip to Dr. Osborn's genetics lab, Peter is bitten by a genetically enhanced spider. Peter then begins to discover his powers: he can climb walls, shoot webs and has a newfound strength to beat back his nemesis bullies. Peter then faces the death of his beloved Uncle Ben, and in his grief he is visited by Arachne who gives Peter his spider costume and inspires him to turn into the Spider-Man and begin his crime fighting ways. Peter takes a job at the Daily Bugle as Spider-Man's personal photographer, while Dr. Osborn attempts an experiment on himself that kills his wife and transforms him into the Green Goblin. Spider-Man shows up, and he and the Green Goblin face off, the Green Goblin eventually kidnapping Mary Jane and flying her to the Chrysler Building. Arachne looks on as Spider-Man and the Green Goblin engage in an epic aerial battle over the audience where the Green Goblin dies and Spider-Man saves Mary Jane. The act ends with the iconic upside down kiss between Mary Jane and Spider-Man.

The second act introduces a whole new swarm of super villains and Spider-Man begins battling the bad guys full time, neglecting Mary Jane. Arachne also continues to haunt Peter to the point that he can no longer tell dream from reality. Peter decides to abandon Spider-Man. Arachne becomes enraged by Peter's betrayal and unleashes all of his enemies on the city; the Geek Chorus tries to interrupt but is soon run off. Just when life is getting back to normal for Peter and Mary Jane, the Green Goblin and the other evil villains begin to destroy the city while Spider-Man does nothing. Arachne again visits Peter in a dream where the two get married,

tormenting Peter to question if he can ever be good enough for Mary Jane. Arachne invades the Daily Bugle and forces the editor to run a story to bait Spider-Man back into action. With the help of Mary Jane, Peter decides to resume his life as Spider-Man and defeats the villains wreaking havoc on the city. Arachne takes Mary Jane, and the Geek Chorus questions who the real enemy is. Arachne traps both Spider-Man and Mary Jane in her web forcing Spider-Man to pledge his love to Arachne or Mary Jane will die. Spider-Man and Arachne engage in another over-the-audience battle, and eventually Spider-Man agrees to save Mary Jane's life by committing to Arachne. Arachne is inspired by Peter's gesture and spares Mary Jane, releasing Peter from his oath, realizing her own humanity, and in turn ending her purgatory on earth. Mary Jane finally sees that Peter is Spider-Man and agrees to stay with him as he is called away to another superhero duty.²⁵

This original version of the production, relying so heavily on what critics viewed as the obscure character of Arachne, failed to tap into the powerful mythic structure Taymor had envisioned. Critics found Taymor's story and plot devices, like the Geek Chorus, "incoherent" (Dietz). Music for this first version was also highly criticized in the press. On the pre-show press tour Bono and The Edge played the song from the show that worked best as a musical theatre number, "Rise Above," sung by Peter Parker, played by Reeve Carney. This power ballad showed hope for what the rest of the show could be; however, few of the other musical contributions lived up to the hype, the music seemed to "blur into a sustained electronic twang of

²⁵ In this summary I combine information from a multitude of sources including: (Markovitz), (Berger), (Brantley, "1 Radioactive Bite") (Dietz) (Healy, "'Spider-Man' is said to drop Greek Chorus of Narrators") ("Healy, 'Spider-Man': Turn On the Changes"). Glen Berger's book, *Song of Spider-Man, The Inside Story of the Most Controversial Musical in Broadway History*, offers an in-depth history of the development of the two separate plots.

varying volume, increasing and decreasing in intensity, like a persistent headache” (Brantley, “Good Vs. Evil”).²⁶

As criticisms mounted, one thing became clear to Taymor and the artistic team: previewing a show without out-of-town tryouts was a disaster. But previews outside of New York were impossible. It was decided early in the process that due to the complex nature of the flying stunts, previews would be pointless in another venue. The stunts were all choreographed in Las Vegas at aerial effects designer Scott Rogers’ studio, where flying sequences and actors could explore possibilities as preview choreography, and where proper space and financial constraints were most easily met. In Las Vegas, co-creator Glenn Berger writes, the aerial effects were stunning, and then the entire operation was moved to Broadway to begin the preview process (Berger). But for the sake of the development of the production, the constant critical eye was a detriment. Taymor explained in her interview with Oprah, “We’re doing stuff that’s never been done before. There’s a whole rooftop scene on top of the Chrysler Building. There’s flying and motors and wires and things that I don’t even know how they did them. I mean, what are you going to do—fly like Peter Pan onstage?” Taymor insisted that there was no time to work out the kinks in the show because everything happened in Times Square. Audiences in out-of-town previews, Taymor assured Oprah, are aware that the show is not yet perfect. They accept the flaws and technical stops and starts as part of the nature of the preview performance. Taymor related that “*Lion King* had its first preview in Minneapolis, and we actually had to stop in the middle of it. The producers came out onstage” (“Oprah”). Critics typically do not attend out-of-town preview performances, but rather wait until a show makes the move to Broadway to write a

²⁶ It should be noted that sound had plagued the production since the beginning of the preview process. Scenic elements made proper speaker placement impossible, with muddled the sound. In June of 2011 a new sound designer was brought in and speaker placements as well as scenic units were altered to improve the sound quality (Berger).

review of the performance. *Spider-Man*, however, faced newspaper critics and online bloggers from the initial, New York preview performances, giving them no room to fail.

What would the show have looked like with an out-of-town tryout, and what would Taymor have figured out in the preview process? “I want the audience to feel spiritually moved, excited, and exhilarated by possibility,” she told Oprah. “Touched by the hero epic, which tells you that you must sacrifice in order to have it all.” Taymor saw a poetic beauty in the story of Spider-Man that could be evoked through a powerful mythic spectacle. In particular she wanted to develop the character and story of Arachne as a way provide a complex depth and new twist to the familiar Spider-Man story (“Oprah”). Taymor clearly had hopes of creating a moving piece of theatre. What resulted was something far more arresting.

Director Anne Bogart discusses works of art that “stop you in your tracks” (Bogart 63). Bogart borrows James Joyce’s concept of “aesthetic arrest” to describe the moments when an audience is so moved and impacted by what they see that they are utterly paralyzed by the event. For Bogart, “static art” freezes the audience in the moment, in contrast to “kinetic art” which drives an audience to action with the event. Bogart discusses the erotic attraction created when two elements meet, writing, “Human beings are attracted, physically and emotionally, towards places where the elements meet: Where earth meets water, water meets air, air meets fire, etc.” (Bogart 65-6). I offer that *Spider-Man: Turn off the Dark* caused aesthetic arrest with the dangerous flying stunts and violent accidents that became a part of the experience of the show, whether they happened or not. Where “air meets earth,” Taymor’s creation found an unintended attraction that became the identifying attribute of the musical.

On March 9, 2011, the reboot began and was widely chronicled by Broadwayworld.com, the *New York Times* and the *New York Post*. Unhappy with the critical bashing and the inability

of Taymor achieve the initial hope of mythical complexity, the producers released Taymor from her day-to-day duties as director and brought in Phillip McKinley to lead the significant structural changes to the show. McKinley was most known for his work as a director and producer of circus spectacles at Ringling Brothers and Barnum & Bailey. Existing writer Glenn Berger was teamed with Roberto Aguirre-Sacasa to rewrite the book of the musical and Paul Bogaev and Peter Hylenski were brought in to address the sound issues with the show (BWW Staff). The entire second act was rewritten with an expanded Green Goblin role as antagonist. The original second act (as well as the majority of the storyline of Taymor's beloved Arachne), save the opening introduction and creation story, had been cut. The aerial battle between Spider-Man and the Green Goblin above the audience, which had concluded the first act in version one, was now the show-stopping climax of the play (Brantley, "1 Radioactive Bite"). These changes, the creative drama, and the soon-to-be-discussed accidents all were a part of my evening with *Spider-Man*. Back in the Foxwoods theatre my time with Spidey was rocking along. Many of the dramaturgical troubles frequently pointed out in the press were revealing themselves, such as the hokey dialogue and cheesy cardboard cut-out scenery, as well as generally one-dimensional characters. The "reboot" had clearly transitioned this dark mythic story into a family friendly superhero romp. But, honestly, without Taymor's complex Arachne plotline it was easy to enjoy the show, all the while keenly looking for the next accident.

The show is full of grand theatrical spectacles, most of which involve aerial stunts. The show begins with perhaps the most successful of these. Dancers swing the entire depth of the stage on aerial silks, creating a tapestry/web with each passing swing. The mechanics of the effect compared to what was to come are awe-inspiringly simple, and introduce the audience to the mythical character Arachne. This simplicity and grace was short lived as the mythical

creature Arachne transforms into the topic of a mundane science report by our protagonist, Peter Parker, about spiders. Quickly the grace and elegance of the initial flying sequence dissolves into what this show reveals itself to be: a campy super hero experience. And in this superhero world the aerial effects must achieve superhero status.

The designer of the aerial effects for *Spider-Man: Turn off the Dark* was Scott Rogers, a Hollywood stunt coordinator who also choreographed and coordinated the aerial sequences for the Sam Rami Directed films; *Spider-Man*, *Spider-Man 2* through his company Fisher Technical Services Inc. In his book, *Song of Spider-Man: The Inside Story of the Most Controversial Musical in Broadway History*, Glen Berger details his version of the entirety of the process, including his role as co-creator, in bringing the show to life. Berger also details Rogers' methods. Rogers' experience with creating amazing high-speed flying sequences for the films was exactly the type of aesthetic that creator/director Julie Taymor needed to tell the story of Spider-Man. Rogers created an innovation in Theatre flying which he called the "four-point bushing system," a flying system borrowed from TV football coverage which suspended a camera above the playing field suspended by four cables each of which controlled via remote control (68). Ellen Lampert-Greaux wrote a detailed account on Fisher Technical Services' approach to *Spider-Man*. "Your friendly neighborhood Spider-Man refers to himself as a 'webslinger,'" she explains, "which is not the same as flying—he can jump very high and very far, and he can swing on a web line from location to location, but unlike a lot of other superheroes (and supervillians, for that matter) he does not possess the power of flight" (Lampert-Greaux). It was critical in the development of the flying stunts to have a coordinator who knew Spider-Man and had the background to create the effects needed for this scale of show.

Rogers was a principal coordinator for Fisher Technical Services out of Las Vegas, and in his work there he had already created similar high speed stunts before. “The show utilizes flight speeds of up to 35fps [feet per second]” (Lampert-Greaux).²⁷ The spare dimensions of a Broadway theatre posed several challenges to Rogers and the team. Space was a huge issue for the setup at the Foxwoods. To accommodate the space needed to mount all of the rigging for the required flight sequences Rogers utilized an automated flight system called Navigator. Navigator allowed the programmer to command the system to multi-task during the live production, allowing the same equipment to serve multiple purposes. “In one number, a winch may be a simple single point pendulum,” explains Lampert-Greaux, “and in the very next, the same winch can be incorporated as part of a complex multi-winch 3D rig. With some clever rigging and coordination, a limited amount of machinery can be made to do an almost unlimited number of different flight rigs and sequences” (Lampert-Greaux). Rogers created, with his rig for *Spider-Man*, a complex technology for stage flight that pushed the limits of live aerial stunts on the Broadway stage. The combination of computer-automated flight control and advanced rigging techniques situated this production as a highly advanced technological convention.

The spectacular nature of the show demanded believable, high speed, superhero-level flight sequences above the heads of the audience. Because Spider-Man did not fly, but rather swung on webs his flight was best represented using a pendulum rig. The Green Goblin, however, did fly and needed a more complex four-point 3D rig. Rogers and his crew were forced to create a flight plan that could accommodate both harness types in the air at the same time and in the same plane above the audience (See fig. 2). The flying rig, designed by Rogers, utilized seven separate winches and allowed the suspension lines for Spider-Man to be moved anywhere

²⁷ 23.8 MPH.

in the audience freeing Spider-Man to engage in multi-directional flight over the audience (Lampert-Greaux). Because Spider-Man flew in a multidirectional way and with multiple performers, the need for a human element to connect and disconnect the performer to the line was mandatory introducing yet another layer of complexity to the system. Additionally, Spider-Man and the Green Goblin utilized two entirely different flight systems, which doubled the complexity of the effects.



Fig. 2: Spider-Man and the Green Goblin engaged in battle above the audience; Credit: Sara Krulwich; *NYtimes.com*; 15 Apr. 2011; Web; 19 Aug. 2013.

The massive overall system included twenty three winches of various types, “collectively adding up to over 1100HP of total power” (Lampert-Greaux). Because the performers flew through the air both above the stage and above the audience, winches and rigging points were installed both in front of the proscenium and upstage. To accommodate the multi-directional flight over the audience Rogers and FTSI employed a process called “muling” which utilizes a muling pulley and diverter sheaves to change the direction of the flight path. So, instead of the winch lifting the performer directly, the suspension lines ran through several pulleys that allowed for the direction of the performer to be altered. The mechanical nature of the muling pulley also created a great deal of force during operation, as much as over a ton of force by Rogers’ estimates (Lampert-Greaux).

Many of the traditional “flying companies” that work on Broadway shows use automated show control and winches to fly performers, but the complex multi-directional flight in *Spider-Man: Turn off the Dark* deviated from the industry standard for theatrical flying systems on Broadway. Flying by Foy standardized a basic technique and has held a functional monopoly on stage flight dating back to 1954 and *Peter Pan*. The Foy system is premised on humans backstage operating the flight manually. Foy created a system call the “Inter-Related Pendulum” which allowed Peter to move further and faster than with previous methods (“Foy”). As described by stage flight historian John McKinven, two operators manipulate “pull ropes” that travel through two compound drums giving the operators a mechanical advantage (McKinven 82). The operators control the up-and-down as well as the side-to-side movement using a pendulum effect as a team. A restriction of this system is that it only operates on a single plane, and there is no way to independently control the side to side movement and the up and down movement.

In 1962-63 Foy created another industry standard flying system for low-height theatres called the “Track on Track” system. The great advancement with this system is that it allows the manual operators to independently control the performers up and down as well as the side to side movement by removing the necessity of a pendulum. A series of pulleys provide the mechanical advantage in the “Track on Track” system and allow the operators to control the flight and landing with great precision (McKinven 83). This manual system was tried and true, but also did not allow for the high speed, multi-directional flight over the audience that Taymor and Rogers envisioned. In contrast Rogers would abandon this slower human based technology for a faster wench driven computer controlled system. Automation in stage flight occupies a position similar to stage lighting in the 1970’s when computerized lighting control was introduced into the industry.

Historian Christin Essin provides an in-depth history of the lighting technology and technician involved with the original 1975 Broadway production of *A Chorus Line*. Essin argues that Tharon Musser’s lighting for *A Chorus Line* functionally served as another character during the performance. Deceptively simple, the scenic design employed a wall of periaktoi (three-sided columns that rotate to reveal different scenic surfaces on each face) upstage that would reveal dance mirrors, a black wall and finally a grand finale drop. Musser knew that the lighting for the show would have to match the focus and passion of the story the dancers told with their bodies and to create that control she demanded the use of new computer aided lighting control (Essin). As Essin reports, the union stage technicians saw the new technology as a job killer and firmly believed that their highly trained hands could control the lighting cues better. In the end technology won out, as Musser created a lighting sequence and pitted man versus computer to see which executed the sequence best. During the test the union crew, “were physically unable to

set the levels and fade the cues fast enough,” and relented to accept the new technology (Essin 206). Technicians from the production lament about how in synch the technicians had to be with the performers on stage engaging in choreography of their own. The computer lighting control technology eliminated that need; instead of a coordinated team of stagehands working in unison, a single operator simply pressed a button.²⁸

The automation used in *Spider-Man: Turn off the Dark* seems to mirror this path of technological growth and evolution. The many advantages of automated flight make it difficult to opt for a slower, less awe-inspiring, manually controlled system. Automation systems, like the one used for *Spider-Man*, offer improved precision and accurate repeatability for complex effects. They reduce load-in time with less weight and equipment. They take up less space in the theatre. And they enable high-speed multidirectional flight impossible with human-controlled systems (stagetech.com). Much like the lighting control operators from the 1975 production of *A Chorus Line*, humans just can’t compete with the computer’s control capabilities. But, as with any complex system, other issues arise.

Along with the new technology, however, came a new problem: time. Any rehearsal/tech process inevitably forces changes and refinements to flight patterns and cues. With a traditional Foy system, these can happen quickly, as they are controlled by human operators. Rogers’ new “four-point bushing system” controlled by Navigator had to be re-programmed every time there

²⁸ This technological shift spared the follow-spot operators of the 1970’s. Today, however, new remote operator technology is again testing the adaptability of technicians. A new advancement called the “Ground Control Followspot System”, from Production Resource Group, LLC, is altering how technicians interact with the live events onstage. PRG’s new system allows the followspot operator to control the lights remotely with a video screen and simulation apparatus from up to 2000 feet away (PRG). The next generation of stage technicians may never even have to step foot in the theatre. No longer will operators have to climb to unsafe lighting positions above the audience, the automated spotlight can also be placed anywhere a conventional lighting fixture could be placed, creating amazing new possibilities in terms of control and angle.

was even the slightest change to the flight cue. This issue consistently produced delays in the tech process (Berger 69). More disruptively, in the case of any non-flight tech issue on stage, like a set piece moving too slowly or a costume getting stuck on a piece of scenery, the only way to alter the timing of the flight cue was to issue a full emergency stop. During previews and eventually during the run, when a non-life-threatening glitch came up the emergency stop would be employed, often leaving performers just hanging over the audience with no manual way to elegantly land them or even go to a black out to cover the mistake. The traditional procedures for “normal accidents” in flying sequences were complicated with *Spider-Man* because of Navigator’s rigid stop protocol. In his book, *Normal Accidents*, Charles Perrow discusses high-risk technologies such as nuclear weapons systems and power plants, as well as the transport of toxic cargoes and their ability to fail. Perrow posits that the more complex and high risk the systems are the greater the inevitability of an accident. The advanced technology in *Spider-Man* imposed a new inevitability to the stage accident and normal mishaps became glaring and embarrassing show stopping glitches. Other than actor’s cleverly ad-libbing while stranded above the audience, the production team was not able to create a workable theatrical convention with the audience to support the abrupt stop and cover-up of the glitch.

With all of this talk of different industry standards for flying systems, it’s important to identify a major black hole in entertainment technology: the lack of formal licensing or certification programs required to fly human beings (Mitchell 32). High schools, colleges, community theatres and small storefront theatres throughout the country are free to use whatever contraption they can devise to create the convention of flight. Thankfully, some have hired a well-trained technical expert who demands reputable companies like Flying by Foy or ZFX be contracted to install a system and train operators, but with funding for the arts shrinking, the

price tag for those contracts can double or triple entire production budgets. Pricing for these companies is proprietary, but in general, a rental of a standard track on track system could cost as much as \$6,000. Much can go wrong when amateur artists are left to create areal effects without well-trained technical experts to oversee the safety of the event.²⁹

Shows on Broadway operate under several safety inspectors. The state of New York Department of Labor inspects and approves flying effects for shows like *Spider-Man*. In fact, all of the aerial effects which failed resulting in actor injury were approved by the Department of Labor prior to the tech process. The reality is that many of Broadway's biggest shows endure accidents that result in serious injuries. *Wicked* superstar Idina Menzel fell during a matinee performance of the long-running hit show, fracturing a rib (McKinley). As mentioned in the introduction, Cirque du Soliel tragically lost one of their artists in a deadly flying accident (Rafferty). These and many more accidents are caused by some similar interactions with high-tech effects. In an interview with MTV, Actors Equity Association (i.e., Equity, the union for stage performers) spokesperson Maria Somma offered, "What we're dealing with is some very advanced technology and shows are employing technology more and more, and they keep pushing the limits" (Swartz).³⁰ Somma alludes to the inevitable nature of accidents as technologies get more advanced. Much like the gaslight technology created an expectation for accidents, accidents on the stage at Spiderman became an inevitable part of the show.

²⁹ On January 30, 2016 Italian Actor Raphael Schumacher died as a result of an onstage hanging effect during a performance in Pisa, Italy. Though the details are still being investigated, including the possibility of intended suicide, concise safety protocols were not in place for the effect (Moyer).

³⁰ Actors Equity Association (AEA) is the union for professional stage actors in the United States. In the following chapter I discuss Equity in more detail. For more information, see www.ActorsEquity.org.

As the technologies for representing the conventions of violence increase so too do the systems to organize these technologies. Perrow states, in discussing normal accidents, “[N]o matter how effective the conventional safety devices are, there is a form of accident that is inevitable” (Perrow 3). These are termed *normal accidents* or *system accidents*. Perrow employs the term to illuminate the idea that in any complex system some accidents are unavoidable and inevitable. All of the Broadway and Cirque du Soleil shows mentioned above employ advanced technologies to create gravity defying effects. Whether it is high-speed, winch-driven flight, or hydraulic elevator-type lifts, the technologies test the limits of live performance.

Perrow contends that when a technological accident occurs, it constitutes a systemic failure. “An accident is a failure in a subsystem, or the system as a whole, that damages more than one unit and in doing so disrupts the ongoing or future output of the system” (Perrow 66). While Perrow is talking specifically about nuclear weapons, I find his framing of the systemic failure highly applicable to the accidents that vaulted *Spider-Man* into infamy. Normal Accident Theory (NAT) attempts to create a vocabulary for the consequences of modern technologies and the catastrophic accidents they cause. Rogers’ flying system was precise and operated within a complex interactive environment. So if everything works perfectly, scenic pieces move on cue, actors hit their marks, and technicians complete their cues as planned the system works without fail, but if there is an unplanned or unexpected interruption in the system the sequences become uncoupled and the normal accident occurs.

A common criticism of NAT, explained by Maria Laura DiDomenico and Daniel Nunan, is that blame for failure shifts from the individual, and that to a large extent in any highly complex system accidents are inevitable (Nunan and DiDomenico). A competing accident theory, High-reliability Theory (HRT), contests Perrow’s idea that all complex, tightly coupled

systems will experience normal accidents. HRT argues that it is possible to design tightly coupled technologies which can survive normal accidents (Nunan and DiDomenico). Normal Accident Theory's central message is not really about prevention, but rather a sociological message about the connection between technology and humanity. Just as accidents became an inherent risk involved with advanced technologies in the Victorian industrial landscape, there was an inherent risk with the advanced technologies in *Spider-Man*. Plainly put; disasters from advanced technology will continue to happen as technology continues to grow more and more complex.

Were the accidents in *Spider-Man: Turn off the Dark* inevitable? In a legal sense the inevitable accident is valid in discussing accidents involving humans. Sports law author Glenn Wong defines an "inevitable accident" as "an accident that could not have been foreseen or prevented by the due care and diligence of any human being involved in it; an accident caused by forces beyond the power of any human being" (Wong 65). The lingering legal battles over *Spider-Man*'s accidents pit the notion of inevitable accidents against the accusation of negligence on the part of the creators, producers and Scott Rogers specifically. Some professions—like professional sports, dancing and theatre—carry with them a certain implied risk as part of the physical nature of the work. Football players get hit, dancers spin on toes and knees and actors are required to engage in realistic representations of physical violence, aerial stunts and maneuvering complex stage machinery. The challenge, then for a show utilizing advanced technologies like *Spider-Man*, is determining what type and frequency of normal accidents are inevitable workplace hazards and what is not.

Recently National Public Radio ran a story on *All Things Considered* about the traffic safety industry trying to illuminate the term "accident" in favor of the term "crash." Historian

Peter Norton discussed the evolution of the term “accident.” “The word accident has a connotation that it’s a chance event,” he explained, “something that’s bound to happen; it’s inevitable; it’s not something that could ever be completely prevented” (qtd. in Cornish). It is this inevitability that critics and traffic safety officials say creates the foundation that an accident absolves participants of responsibility. Norton related that in the early 1900s injuries at industrial factories were termed accidents in order to absolve the owners of responsibility. This concept carried over to the automobile industry in its early years as not to scare away new customers with potential dangers of the new technology (Cornish). This language paradigm was a huge obstacle in preventing traffic fatalities because accidents seem dependent on chance, and in order to curb traffic fatalities there must be a basic understanding of controllability.

When the media reported the many injuries on the set of *Spider-Man* as accidents, it’s likely that they inadvertently established the notion that the show and technology were uncontrollable, and that future injuries/accidents were inevitable. And, in reporting so gleefully on the accidents and dramaturgical failures the media promised audiences the potential spectacle of real violence when they attended *Spider-Man: Turn off the Dark*. In creating the aerial effects for *Spider-Man; Turn off the Dark*, Rogers and Taymor needed a complex technological system to create the convention of superhuman ability. The speed and above-the-audience nature of the aerial effects communicate to the audience that they are witness to the supernatural. Because of that highly technical system, could risk of bodily injury just be assumed as just a part of the job? Other technologies outside of automobiles and stage flight don’t have the terminology of accident. Alan E. Stewart and Janice Harris Lord argue for the removal of the term *accident* from the reporting of auto accidents, “[P]lanes don’t have accidents,” they contend, “They crash. Cranes don’t have accidents. They collapse. And as a society, we expect answers and solutions”

(Stewart and Lord 334). In theatre the term accident is common, not only in describing mishaps, but also in embracing spontaneous actions bred from planning and hard work.

Other Broadway shows have apparent inevitable accidents and injuries linked to them as well. Theatre critic Dinitia Smith noted that during the 1996 production of *Bring in Da Noise, Bring in Da Funk* dancers reported dancing through great pain. The Tap/Funk dance musical created by star Savion Glover displayed dancers tap-dancing for nearly ninety minutes non-stop (Smith). Dancers call it “killing the choreography” and it occurs when, as a dancer, you dance yourself full of endorphins so that you don’t feel pain (D. Smith). The show demands the actors to endure injury in order to perform—not broken tibias, perhaps, but inflamed patella tendons and hairline fractures of the heel bone—and the show must go on (D. Smith). Similarly, during the 1996 Broadway season Jonathan Larson’s *Rent*, demanding vocal roles caused injury to cast member’s voices. One of the leads of the iconic play, Adam Pascal discussed the systemic vocal injury he encountered weekly,³¹ saying that “by the end of the Sunday matinee I can barely utter a word...the songs have lots of rock elements that push it over the edge...plus the songs are high in everybody’s range”³² (D. Smith). What separates injuries like these from gaslight accidents or the accidents with *Spider-Man* is the violent/dangerous intent. While dancing is physically demanding, there is no convention established that communicates with the audience that the dancer is intending to engage in a violent or dangerous act. Likewise, rock operas are challenging for vocalists to escape without injury, but that injury comes during the inevitable course of that strenuous work, not while creating an illusion of violence.

³¹ Yes, the same Adam Pascal that wanted Julie Taymor charged with assault for injuries during *Spider-Man*.

³² Vocal technique experts posit that with proper technique and training singers can perform demanding rock opera roles without injury (Lovetri).

Injury and accident were both ever present in my mind as I watched the 2012 performance. The moment I had been waiting for had arrived, the “Big Jump”. This was a moment in the musical where two of the most publicized and devastating injuries and accidents took place. In quite possibly the signature aerial stunt in the show, Spiderman kneels on a ramp that rises slowly, revealing him standing on a skyscraper, high above the city. Once raised, Spider-Man jumps off the twenty foot elevated ramp, does a back flip and lands at the foot of the stage in his iconic crouching Spider-Man pose. (See fig. 3)



Fig. 3. Spider-Man poses after having landed the “big jump”; Backstageblog.com; 10 Dec. 2010; Web; 12 Apr. 2016.

Then the ramp lowers and he leaps backwards, doing a somersault (a “back gainer”), lands on all fours and begins crawling as if he were scaling the side of the building. During a technical rehearsal on September 26, 2010 actor Brandon Rubendall was rehearsing the maneuver. The ramp rose and Rubendall performed the back gainer and landed the iconic pose. He stood, the ramp lowered, and the cables sent him hurtling upstage. An issue arose, as Berger details, “the ramp was maybe 5 degrees off, but those 5 degrees were enough to force Brandon to slam into

the ramp. Brandon broke his toe and caused some hairline fracturing in the rest of the foot” (141). This initial accident revealed how even the most minuscule alteration in the stage mechanics would radically alter the programming in the Navigator system.

This initial accident and injury highlights the point that even the smallest snafu in the effect or scenery can have catastrophic effect. Rubendall was not seriously injured, but more serious injuries would result from this dramatic effect. On October 19, 2010, a group of sales agents and ticket brokers settled into the Foxwoods theatre for a short sneak-peak preview. Berger reports, “During the preview Kevin Aubin (who replaced Brandon Rubendall) performed the ‘Big Jump’. He completed the effect with what appeared to be a harder than usual landing. The Sales agents didn’t notice the grimace on Aubin’s face and left the theatre impressed.” Later a doctor confirmed that Aubin broke both of his wrists (Berger 150-151).

My moment to perhaps catch a glimpse of catastrophe had arrived...the “Big Jump”. The ramp rose, Spider-Man flipped through the air effortlessly, and landed perfectly in his iconic Spider-Man pose, leaped back once again and began scaling the skyscraper. The most objective response I can offer is that IT WAS AWESOME! Having played superheroes with my brother growing up and longing for that feeling of the impossible; seeing Spider-Man maneuver through the same air that I was breathing and land in the same fashion that I had emulated as a young lad was absolutely a moment of aesthetic arrest. I was frozen in the moment, impressed, surprised—and perhaps a little bit disappointed. Though I wasn’t expecting or hoping for serious injury during my visit, I did have an impulse toward wanting to see a glitch, and to watch how actors and audience would react. My experience during the performance for this effect, and all of the effects during the performance went off without a hitch. This was the conundrum that the producers and Taymor grappled with during the arduous tech process. On the one hand, tech was

slow and some potentially dangerous accidents did occur, but on the other many times the planned aerial effect went precisely as planned. In describing a moment from the end of the play where Spider-Man and the Green Goblin engage in an epic battle above the audience co-creator Glen Berger marveled, “Thirty hidden motors were controlling the speed, height, and trajectory of these two dancers wrestling and singing through the air. *And it was amazing*” (Berger 149).

Berger’s book is of course one sided, but remains diligent in its efforts to tell a complete story of the creation and demise of the musical *Spider-Man: Turn off the Dark*. Berger takes the reader through the complicated genesis, evolution and failure of the most expensive musical in Broadway history. Berger also imparts tidbits of wisdom gleaned from his time with Spidey. One that resonated most with my topic here was as follows:

“Rule #1: In every theatrical production, there is a victim.

Rule #2: Don’t be the victim.” (103-104)

The idea of “victim” would take a whole new meaning once word of the accidents made it to the press, and nine days after Aubin’s fall in the preview, on October 18, 2010 theatre critic Michael Reidel broke the story, not only about Aubin, but also Rubendall’s foot, and soon *Spider-Man: Turn Off the Dark* became the most talked about show on Broadway. Reidel made a name for himself through his continual scooping of the troubles of *Spider-Man*, even before it went into previews. Gaining leaked info from cast members and other creative team members, Reidel began to paint a graphic and sensational picture of the most expensive show in Broadway history. Reidel began to write more and more about the show and its troubles, referring to it as “a bone-breaking Spectacle of Insanity” (Riedel).

Not to be outdone, Patrick Healy of the *New York Times* also stepped up his coverage of the yet to open Broadway Show. Between the two of them, and in concert with what seemed like

a million internet bloggers, the show behind the show began to overshadow the actual musical. Before the show had even begun previews they had garnered more press than many Broadway shows would ever get. Once in preview the press would only intensify its coverage.

During a preview performance on December 20 actor Chris Tierney, costumed as one of the many Spider-men, fell thirty feet breaking his back, elbow, and scapula and fracturing his skull. During a highly dramatic moment where Mary Jane hangs off of a skyscraper for her life, Spider-Man is forced to leap off the skyscraper to save her. As choreographed, Spider-Man sprints to the edge of the thirty foot structure and pauses standing almost horizontally over the building edge, as only a superhero could, before diving to save Mary Jane. On this night, however, when Spider-Man reached the edge of the building there was no pause. Instead, Tierney fell in full view of the audience, grasping for the edge of the building. As critic Patrick Healy reported about the investigation into the fall, the effect had been choreographed to follow a strict 3-step routine. Step one: the technician has to affix a flashlight to his headband and locate the safety line coiled on the floor. Step two: the technician takes one of the ends of the safety cable and clips it to a ring embedded in the floor. Step three: the technician clips the other end of the safety cable to a harness on the actor (Healy, “2 Safety Violations”). Once complete, Spider-Man is supposed to be able to freeze mid-leap on the top of the bridge creating an iconic image from the comic book. On this night, however the technician didn’t get the clip attached to the floor, leaving the actor untethered (Healy, “2 Safety Violations”).

After Tierney’s fall Healy interviewed the actor’s father, reporting, “Timothy Tierney said his son did not assign any blame for his fall and was not considering a lawsuit. ‘Chris told me that the word “accident” was invented for a reason, and this was an accident, pure and simple’” (Healy, “‘Spider-Man’ Actor Fortunate”). Clearly, from Tierney’s perspective this

mishap was accidental, and that no blame was needed to account for his injuries. The investigation revealed, however, that due to a poor protocol for ensuring Tierney's cable was safely connected; a technician was left fumbling for a flashlight with someone's life hanging thirty feet above.

After the first injuries, lawsuits by injured actors began lining up. Richard Kobak, an original cast member, sued Live Nation Worldwide (owners of the Foxwoods Theatre) seeking \$6 million in damages for injuries he claims resulted in programming errors by crew members in charge of programming the Navigator showcontrol software. Kobak claimed "two herniated discs, a concussion, whiplash and holes in both of his knees" (Gioia). Kobak filled in for Tierney after he was injured as one of the many Spider-Men. Kobak claimed that weight calculations in the programming software were not made until after he had performed the role sixteen times forcing heavier than planned landings. The lawsuit also named Scott Fisher, Fisher Technical Services (who contracted Scott Rogers), as "negligent, careless, and/or reckless" (Gioia).

Another lawsuit was brought by dancer Daniel Curry, who suffered a serious ankle injury when his foot was trapped in a piece of moving scenery on August 15, 2013. Near the beginning of the second act Curry stepped too near a piece of hydraulic machinery and his foot was mangled badly in the machinery (Trueman). In September, Healy reported, Curry filed suit, "contending that his accident was due to malfunctioning equipment in the show, and not to human error, as the show's producers have maintained." The Court findings revealed the severity of Curry's injuries, "he sustained fractured legs and a fractured foot, and has had surgeries and amputations as a result" (Healy, "Dispute").

After Tierney's fall, ambulances were rushed to the Foxwoods theatre, and the actor was whisked away to receive medical attention. Within an hour of the show being cancelled a video

of the fall was posted to YouTube.³³ In his retrospective, Berger questions bitterly whether the audience member had been filming the entire show or if they had just started recording before the fall (Berger 191). Alternatively, by the time of Tierney's mishap, press coverage had well established the interpretive framework that *Spider-Man* was a troubled production... a preverbal death-trap. And this potential for violence formed an appeal about the show that encouraged thrill-seekers to film the more complex aerial stunts hoping to catch catastrophe. How many of the audience was there specifically to see failure, injury or perhaps death? Instead of audience members did they become tourists of violence?³⁴ In my own experience, I was not interested in injury, but I felt a tension and nervousness when watching the stunts that I don't feel watching flying effects in other shows.

In his book *The Tourist Gaze*, John Urry puts forth his concept of gaze as one that situates the power of the gaze with the tourist rather than the object of the gaze. Urry identifies the "tourist gaze" as "one possessed of specific leisured properties; that it is directed to sights separated off from everyday experience and carries with it the expectation of pleasure" (qtd. in O'Dwyer 35). Thanatourism or dark tourism first entered the critical vernacular in 1996 and can be defined as the travel to a site of death or violence for the purpose of entertainment (Lennon). While the term thanatourism may be relatively new, the concept is not. In fact, Freud would argue that the "death drive" is deeply embedded in the human psyche (Freud). Freud maintained that humans are in a constant struggle between the instincts for life and death. It is this ebb and flow between the two opposites that has always made the spectacle of death fascinating and

³³ <https://www.youtube.com/watch?v=Jbquv3CDMDM>

³⁴ <http://www.youtube.com/watch?v=jTTFTODJdGc>

entertaining. “At this point, I honestly hope they never fix the (non-injurious) glitches,” reported online critic Scott Brown. A common sentiment in the press was that *Spider-Man: Turn off the Dark* was a chance to see danger and violence. Brown reflects on his hope:

Is it ghoulish that I'm half-expecting someone to fall? You bet! But don't worry about it: Your gleeful morbidity is part of a larger cultural disease, of which Spidenfreude is only the outermost protrusion. And isn't that half the fun of "circus art," anyway? The phrases "death-defying!" and "without a net!" weren't invented by Julie Taymor and Bono. Look, we're sick fucks. We've always been sick fucks. The only difference is, nowadays we pay more for it than we did in the 1890s. (Brown).

Brown taps directly into the basic principle of Thanatourism. Humans are attracted to the dangerous and excited by the potential brush with death. This was a cultural instinct during the nineteenth century gaslight tragedies and it's a cultural instinct today. A key difference, of course, is that now the internet provides a layer of anonymity and freedom to claim those desires in a way that wasn't possible in Victorian England. Even satirical stalwart TheOnion.com took its shots:

In yet another setback for the \$65 million dollar Broadway musical *Spider-Man: Turn Off The Dark*—a production plagued by multiple delays, poor early reviews, and severe injuries to its cast and crew—a thermonuclear device detonated during the first act of Tuesday night's preview performance. “The bomb should not have gone off at all”, said lead producer Michael Cohl, adding that the explosion that vaporized most of Manhattan was "not that unusual" for a major Broadway show still in development. "Spider-Man is supposed to swing down to the stage and deactivate a nuclear bomb, but his wires got tangled up, and by the time he got there and remembered the disarm code, it was too late. We're going to hire two more stagehands to make sure this doesn't happen again (“Nuclear Bomb”).

Ben Brantley's 2011 review hinted at this idea that the audiences were gaining more glee from the accidents and technical glitches than from the show itself. Brantley recounts a now-infamous moment in the performance that he saw, where a technical glitch in the flying software caused the Green Goblin and Spider-Man to freeze, hanging over the audience powerless. Left only to their quick wits, Green Goblin actor Patrick Page improvised, “You gotta be careful.

You're gonna fly over the heads of the audience, you know. I hear they dropped a few of them." Brantley reports that at that moment, the audience finally found something to cheer. "Roar, went the audience," he writes, "like a herd of starved, listless lions, roused into animation by the arrival of feeding time...All subsequent performances of 'Spider-Man' should include at least one such moment." Brantley posits that only in the accidents would audience members find a viable reason to pay the steep admission price, that "only when things go wrong in this production does it feel remotely right — if, by right, one means entertaining. So keep the fear factor an active part of the show, guys, and stock the Foxwoods gift shops with souvenir crash helmets and T-shirts that say "I saw 'Spider-Man' and lived" (Brantley, "Good Vs. Evil"). Perhaps the most influential and respected theatre critic of the past 20 years proposed not only to embrace the accidents, but that *thanatourism should be the show*.

While there were a great many comic book fans, families and superhero enthusiasts who lined up regularly to see the show, there were also fans like me who went with the knowledge and lingering awareness that an accident might happen. For those, like me this other part of the experience was as much a part of the show as the characters, costumes or music. This other dimension corresponds well with what Andrew Sofer calls "Dark Matter." Sofer quantifies the invisible dimension of theatre that is not physically present but felt in a tangible way during a performance. Dark matter is embodied by a "nonluminous mass that cannot be directly detected by observation," and though it cannot be observed, it has a gravity in the theatrical framework. (Sofer, *Invisibility* 3). In Sofer's concept this could include "offstage spaces and actions, absent characters, the narrated past, hallucination, blindness, obscenity, godhead, and so on. No less than physical actors and objects, such invisible presences matter very much indeed, even if spectators, characters, and performers cannot put their hands on them" (Sofer, *Invisibility* 3). I

argue that dark matter exemplifies the thanotouristic appeal of *Spider-Man*. Critics pointed to the reality that audiences were attending *Spider-Man*, video camera in hand, with the (mostly) unseen but ever-present danger of violence exerting its gravitational draw. If an accident happens or not really doesn't matter because the invisible other dimension will always be there. Similar to a visit to a Civil War battlefield or the grassy knoll where President Kennedy was assassinated, audience members carry with them in that visit the dark matter of the history of the event or place. Through Sofer's concept the essence of the unseen, but constant, split focus caused by the violent accidents in *Spider-Man: Turn off the Dark* can be read in a phenomenological way.

My experience, of course, was not identical to every audience member's experience, nor do I claim it to be. But as Sofer posits that Phenomenology embraces the shared experience, "by those who possess the same empirical equipment." Dark matter accounts for a pre-established interpretive strategy that audiences hold in common. While Sofer admits that individual audience members will have different responses to specific moments, he does assume that a common response is reasonable (Sofer, *Invisibility* 6).

My evening with Spidey had come to a close. Curtain call came, the packed house applauded the sweat drenched actors during their bows and I joined my fellow spectators in thanking the cast for a fun night. For my part, the applause was as split as my focus during the show, acknowledging the athletic performances and the actor's survival. By the time the final curtain fell for *Spider-Man: Turn Off the Dark* on January 4, 2014 the accidents and technical issues were infrequent and less interesting to the likes of Michael Reidel. The novelty of accidental danger had waned and the astronomical costs to keep the most expensive show in Broadway history running no longer were sustained by potential thrill and danger.

In the next chapter I visit the sites of performances which produce realistic illusions of physical violence using prop weapons. The critique of the concepts of accident, intentionality, stage combat and the object of the prop weapon will lead my analysis. The prop weapon in all of my examples serves as an important object in the representation and believability of illusory physical violence.

CHAPTER FOUR

VIOLENCE IMITATED, VIOLENCE REALIZED: STAGED COMBAT AND THE TRAUMATIC EVENT

“To be traumatized is precisely to be possessed by and image or event.” (Caruth 4-5)

On December 6, 2008, actor Daniel Hoevels was playing the role of Sir Edward Mortimer in the Thalia Theatre Company’s production of Friedrich Schiller’s *Mary Stuart* at Vienna’s Burgtheater. In Schiller’s play the fictional Mortimer serves as the overly passionate proposed savior to the captive queen of the Scots. In the end his plan to forcibly break Mary out of prison fails, and as the castle is being raided by Queen Elizabeth’s guards Mortimer extends one final passionate act:

MORTIMER.

Beloved queen! I could not set thee free;

Yet take a lesson from me how to die.

Mary, thou holy one, O! Pray for me!

And take me to thy heavenly home on high.

[Stabs himself, and falls into the arms of the guard.]

Mary Stuart – Act IV, Sc. 4

As the tension in the scene rises, the audience prepares for the inevitable sword fight between Mortimer and the rush of guards, but instead Mortimer stabs himself, further compounding his failures in saving his most prized Mary.

As a dramaturgical action, the stabbing is a powerful and meaningful end to Mortimer’s passion filled purpose in the plot of *Mary Stuart*. From a logistical viewpoint the action required in the script leaves some important staged violence to plan. There is a lot to consider and interpret in staging Mortimer’s final act. He stabs himself. This seemingly simple stage direction is in reality a highly complex bit of stage combat that the Talia Theater Ensemble’s production

had to navigate. Where will he stab himself? Will there be blood? How long will it take for him to die? What type of weapon will be used? We get a clue later in the act when Queen Elizabeth finds out about Mortimer's death:

OFFICER.

He drew a dagger, and before the guards
Could hinder his intention, plunged the steel
Into his heart, and fell a lifeless corpse.

Mary Stuart - Act IV, Sc. 6

Mortimer "plunged the steel into his heart, and fell a lifeless corpse." This report by the officer of the guard gives us a clearer clue as to how the death was witnessed by the guards in the previous scene. Mortimer plunges steel into his heart, deadening the organ most dedicated to his true queen, Mary.

For many, stage combat implies a fight between two or more actors, but solo acts of staged violence are also considered stage combat. In fact, any staged violence must be choreographed as staged combat. The stabbing which Mortimer commits is referred to as a "stunt" in the stage combat lexicon. Stage combat expert Dale Girard classifies a stunt as "an unusual, dexterous or difficult action or series of actions, requiring skill and pin point timing, performed by an individual artist" (Girard 204). As with all stage combat, stunts require coordination by a highly trained professional to ensure the actor and audience are safe during the illusion of violence.

In this chapter I shift my critique of violent conventions toward the illusion of violent physical confrontations in live stage plays, and specifically the use and failure of a weapon in that illusion. I use four separate instances of live performance events where a prop weapon, meant to further a realistic illusion of combat, caused actual injury to an actor on stage. The first account offers a murky idea of how aware the audience was to the real injury. The second event

happens without the audience recognizing the injury at all. And the final pair of events reveals an audience greatly aware of the accident. I re-introduce Jody Ender's concepts on intentionality in order to clarify just how the accidents changed the theatrical contract. Calling on a range of current stage combat experts, I provide an introduction to the work of the fight director in creating choreography for representing physical violence on stage. I also analyze the prop weapon as an object and how it may function or fail within the context of the stage play. I offer a brief overview on the critical discourse regarding stage combat in theatre history and discuss how prop weapons communicate different things to different audiences. I also contrast the representation of physical violence to contemporary plays that approach representing cultural or social structures of violence. Physical violent conflict, or the stage fight, and how the conventions and objects used in its representation are the focus of this chapter.

"A stage fight can and should be the highlight of a scene or the climax of the production," argues Girard. "It should bring the audience to the edge of its seat or leave them in stunned silence, have them rolling in the aisles or cheering for more, all in perfect safety for everyone involved" (Girard 2). Stage combat is always a highly choreographed stage action. The rigidity of that paradigm situates stage combat as a sort of technology for creating physical violence on stage, in that it is a system for completing a task. Stage combat training and choreography is codified, administered and certified for live theatre events in the United States predominantly by the Society of American Fight Directors (SAFD).³⁵ Other combat societies around the world include Fight Directors Canada, the British Academy of Stage and Screen Combat (BASSC), the British Academy of Dramatic Combat, the Society of Australian Fight Directors, Stage Combat

³⁵ The founder of the SAFD, David Boushey, operates the International Stunt School, which focuses primarily on film combat and stunt person training (<http://www.stuntschool.com/>). Kahana's Stunt School in Florida is another large film stunt person training school (<http://kahanastuntschool.com/>). Other independent groups also offer classes and workshops.

Germany, and the Nordic Stage Fight Society. These organizations do not offer any legal licensing in their states or countries but rather ensure that certified combat personnel are proficient and competent, through mandated training and skill proficiency tests, in safely choreographing and teaching stage combat fights and stunts. Often fight choreographers will be associated and certified with multiple organizations.

The SAFD is the longest standing combat organization in the United States, and most of the literature about stage combat has been created by members and Fight Masters of the SAFD (SAFD.org). Authors and SAFD fight masters (save Hobbs), J.D. Martinez, Dale Girard, J. Allen Suddeth, and William Hobbs are due a great deal of credit for their contributions to the codification of combat/stunt techniques and safety procedures in their texts. For all stage combat and stunt training organizations, like the SAFD, safety is paramount to their mission. “The concept of stage-combat safety,” asserts Suddeth in *Fight Direction for the Theatre*, “is all encompassing....The performers themselves are the most random safety element, since performances are subject to change” (Suddeth 2). Suddeth’s reference to the ephemeral nature of live performance is a key recognition and separates staged combat and stunts for film/television from those which take place live in front of an audience. Live audiences must trust that the illusory action on stage is safe for the performers as well as themselves. Jonathan Howell, stage combat expert, explains that there is an understanding between the actor and audience “that whatever happens on stage is make-believe – one reason the audience is willing to suspend its disbelief...Most people feel uneasy when they sense that another human being is in real danger” (Howell 20). In other words, trust is paramount in both the relationship between the actor-combatants and between the audience and actors, “the audience trusts the performers to let them enjoy the show in peace” (Howell 20).

This trust was shattered during the December 2008 performance of *Mary Stuart* when Daniel Hoevels, portraying Mortimer, actually stabbed himself in the neck during his previously mentioned suicide scene. Though the action is scripted as a knife to the heart, as is often the case with staged combat, the director altered the death specifics based on their interpretation. As originally choreographed, Hoevels was to use a dulled prop knife when he “cuts his own throat,” but on this night a real, non-dulled knife made it into the actors hands.

In news reports that immediately followed, the event was depicted as having caused great injury to the actor. Alan Hall reported, “As actor Daniel Hoevels slumped to the stage, blood gushing from his neck, the audience broke into a rapturous ovation” (A. Hall). The audience recognized the visceral nature of the bloody scene and responded in an extraordinarily excited way. “A little deeper and he would have been through the artery and drowning in his own blood,” Dr. Wolfgang Lenz, who examined the actor, said” (A. Hall). A photo of Hoevels holding a knife in one hand and his bloody neck in the other was included in articles in the days after the incident. The audience, by early accounts, witnessed a close call with death. Though it does not seem that the audience recognized that there was a real injury, Kevan Christie noted in his report, “it was only when Hoevels failed to get up to take a bow in Austria's national theatre, the Burgtheater in Vienna, that they realised something had gone wrong” (Christie). Reports of the incident were widespread, prompting speculations regarding how something so deadly could happen during a stage play. A real knife was in place of a prop knife? How could something like this happen in a major professional theatre? An accident or something more devious?

Initial reports raised the possibility that the knife replacement was all part of a dastardly elaborate murder plot. “Hoevels, who is well known as an actor in German-speaking countries, has generated a certain amount of jealousy because he often lands lead roles”. The early

speculation of foul play led police to begin an investigation into the event, and reportedly to go as far as to collect DNA evidence from the cast and crew (“Bad Blod”).

Reports like the ones cited above created a salacious speculation and a narrative about the event that communicated an important element to this study; the audience responded to the real blood in an extraordinarily excited ways. Using Jody Enders terminology, the implied declared intention of the Hoevels was that he (playing the character of Mortimer) was intending to stab himself with the knife. He completed this action and the audience recognized both the intent and the achieved action responding in a way, though exaggerated by the media, consistent with the framework of the theatrical convention.

The spectacular report of this jealousy inspired murder plot circulated the globe until the Thalia Theatre Company revealed in a statement, several days into this maelstrom of gossip column fodder, that simple human error was to blame for the accident. In fact, the police did very little investigation and that bloody photo of Hoevels grasping his throat was a stock photo from a much earlier production as outlined in the article below. The photo (See fig. 1 below) was not even from an entirely different play. The photo communicated a knife stabbing to the throat, but certainly not within the context of the accident itself. The photo told a much more graphic and dire story than was detailed by the Thalia statement. According to the statement, “a female prop manager had bought a knife for use on stage, and forgotten to blunt it” (Berlin). In reality Hoevels was not even seriously injured, as was reported, “On the advice of a doctor Hoevels went to hospital, received two stitches and was released immediately, then went to a party” (Berlin).



Fig. 1. “Real Drama in the Burgtheater”; Times.com (scanned from the Austrian daily, *Oesterreich*); 10 Dec. 2008; Web; 12 June 2016.

Hoevels would even reappear the following night wearing a simple Band-Aid to cover the stiches. In the end it seems the audience did not respond as was reported and the police did not collect DNA evidence in investigating an elaborate murder plot. While the “truth” of the accident proved thankfully mundane, I want to focus on the reality of a dangerous stage combat mishap – and on the audience’s mistake in taking a real accidental injury for an illusory suicide.

In order to fully analyze the event, let us first look at how a stunt like this is supposed to happen according to stage combat experts. Stage combat expert J. Allen Suddeth writes, “The stage set and ‘trappings’, such as costumes, swords, lights, and props, once correctly conceived, must remain safe through the run of the show” (Suddeth 2). Ultimately, the props technician failed this production when the prop knife was replaced by a real knife. Almost every stage combat text that discusses knife stunts demands a dulled or blunted knife be used in order to eliminate cutting or stabbing when contacted with an actor (Howell 153). Alternatively, a ‘blood-knife’ could have easily been used in this stunt. A ‘blood knife’ is a dulled knife that has a thin

surgical tube attached to the edge of the blade and is fed with stage blood from a small squeeze bulb. Suddeth recommends that in a knife stunt with blood that two knives be used, a real dulled knife and a blood knife that can be substituted before the blood effect takes place “...remember! A blood knife is made to create the illusion of cutting” (Suddeth 248).³⁶ The dulled knife and blood knife are props used by the actors, but with the illusion of deadly intent.

Andrew Sofer provides a theoretical and historical study on stage props in his 2003 monograph *The Stage Life of Props*. Sofer offers a chapter on the prop-gun as it applies to three different theatre texts. Sofer’s analysis adheres to a “Production Analysis” in his work. That is, textual clues rather than performance reception create the foundation for his study. Props are objects that are handled or manipulated by an actor onstage, and because they are presented textually in large part through stage directions. Sofer argues that the stage prop’s importance in the material fabric of the play is often ignored. Props become endowed with meaning and power when they are manipulated by an actor with what Enders calls actual intent. Sofer focuses his study on the mobility of stage props, “A prop can be more rigorously defined as a discrete, material, inanimate object that is visibly manipulated by and actor in the course of performance” (11). Sofer analyzes the ways in which the prop gun affects the temporal reality of the play in Modern times. In *Hedda Gabbler* the prop gun serves as the “fateful prop” from the Well-Made play providing a temporal end to both the play and Hedda. In Samuel Beckett’s *Happy Days*, the prop gun, along with all other props in the play, gets de-familiarized because they fail to live up to their functional expectations. The gun’s futility becomes its function. Lastly, Sofer analyzes

³⁶ In an April 2016 production of *Sweeney Todd, The Demon Barber of Fleet Street* two students were injured at a New Zealand high school when a razor with duct tape covering it was used. Sweeney famously cuts the throats of his victims before his neighbor, Mrs. Lovitt, cooks them into meat pies (DiBlasio).

Maria Irene Fornés' *Fefu and Her Friends*, where he concludes that the prop gun becomes symbolic of masculine power and a symbolic masculine object within a feminine space. Fefu's concluding use of the gun destabilizes traditional male-dominated dramaturgy. In all three plays, it is the prop guns' movement and usage or inability to be used that embodies that object with life and power.

The other part of establishing a stage prop as a living object is the audience's willingness to accept it as the object intended. Sofer extends the Prague School's semiotic concept of dynamism of the theatrical sign to suggest that the prop's semiotic life unfolds not as a static symbol whose meaning can be gleaned "all at once" but as an unstable temporal contract between actor and spectator (Sofer, *Stage Life* 20). Sofer defines this contract as the understanding that any given audience will carry with it its own cultural understanding of that object. He argues, however, that due to the unidirectional nature of stage time audiences may not be able to recognize in-depth cultural or political significance during the course of the actual play event. "We must remember that for actual spectators, objects (like plays) move in unidirectional stage time," he writes, "There are no mental rewind, fast-forward and pause buttons in the theater as there are in the study" (Sofer, *Stage Life* 18). Sofer's study does not focus on stage accidents per se, nor does he entertain the possibility of a gun revealing its primal essence and actually killing or injuring someone. At most, Sofer allows that, while props gain their identity through the actor's use of them, the objects may also retain a sense of autonomy when they operate contrary to the performer's intent. Crucially for Sofer, however, if a prop is truly independent of an actor's intent, it fails to operate as a prop (Sofer, *Stage Life* 24). So a prop gun that fires accidentally during a stage play may cease to be a prop within Sofer's axiom, but it still is a gun. In these moments the very nature of the representational contract, the convention of the stage

weapon, is disrupted. As Sofer states, “Dissonant props thrust their own material strangeness at the audience” (Sofer, *Stage Life* 25).

This knife stunt, as with all of stage combat, is an illusion, an illusion of violence. “Theatre is ‘magic,’” writes Howell. “Magic is ‘illusion’. Theatrical fighting is an ‘illusion’” (Howell 9). Real weapons are also very rarely used in staged combat, instead dulled stage weapons act as a stand in or representation for the real weapon. The weapon itself should be understood as a representation of the real, and not an actual knife. Sofer argues that props are always representations of a thing, and not the thing itself. “In the art of stage combat and theatrical dagger play, the dagger of the stage is merely a representation of the weapon of the past,” explains Girard. “The needs of actual combat versus the needs of theatrical swordplay are completely contradictory” (Girard 349-50). This distinction between the real and the represented is important in establishing the convention of violence. With every punch, sword fight, hair pull, hanging and stabbing, stage combat creates a convention for the illusion of violence. As with all conventions this convention relies on a set of rules that allow the audience to suspend their disbelief and believe the representation within the structure of the play.

Firearms have a long history of injury and danger in live theatrical performance. In 2010, during the London revival of the Stephen Sondheim and James Lapine musical *Passion* at the highly-acclaimed Donmar Warehouse, actor David Birrell, playing the role of Colonel Ricci, was seriously injured. Near the end of the play his character engages in a duel with the protagonist of the show, Giorgio. The pair took aim and fired and Birrell’s weapon misfired hitting him in the eye with shrapnel. As reported by Kate Loveys on the Dailymail.co.uk news site, Birrell was able to escape the stage without letting the audience know that he was seriously injured. The Donmar suspended performances for three days after the incident to investigate (Loveys).

Passion tells the story of Captain Giorgio Bachetti, an Italian military hero, and his complicated and eventual love with his superior's niece, Fosca. Fosca, who becomes obsessed with Giorgio, suffers from violent convulsions and fainting spells. Fosca falls ill and Giorgio is told she is dying; he is convinced to go see her. Fosca convinces a reluctant Giorgio to write a fantastical letter stating that he loves her. Giorgio does so thinking that it will ease her fatal pain. The Colonel finds the fantastical letter Giorgio wrote to the sick Fosca and challenges him to a duel. The night before the duel Giorgio goes to Fosca and tells her that he loves her and they have a passionate night together. The following morning, during the duel, a soldier carries out a case containing the two revolvers. The soldier is the arbiter of the duel and opens the case as both men choose their weapon. The soldier then instructs the men to take ten paces. As the soldier reaches ten in his count the Colonel and Giorgio both turn and fire, after a brief moment the Colonel falls to the ground wounded. Though apparently unscathed from the gunshot Giorgio lets out a cry reminiscent of Fosca's hysterical screams as the scene fades to black. In the final scene, months have passed since the duel and Fosca has died and Giorgio is being treated for a nervous illness similar to that of Fosca (Lapine).

In the London revival, when David Birrell lifted his replica Colt 1851 Navy revolver pistol from the duel case, the object came to life as a stage prop. The prop gun's life in the musical is short lived in that it is lifted from the case, carried ten paces and fired. In this brief span the audience must recognize the object as a prop and accept that the prop will fulfill its function. When Birrell pulled his trigger, however, the prop gun reached its most profound purpose. When the weapon misfired, according to Sofer's paradigm, the object ceased to live as a prop and instead became the natural object – a real gun. Audience members present at the performance may or may not have recognized the accident; however, as the event became a

textual artifact, the memory of that weapon's essence-baring mishap becomes "ghosted" for future performances involving the prop gun. Sofer posits that, while props live a unidirectional life during the play event, "at the same time, props are retrospective: in Marvin Carlson's apt expression, they are 'ghosted' by their previous stage incarnations, and hence by a theatrical past they both embody and critique" (Sofer, *Stage Life* viii). Audience members to future productions encountered a fractured image of the prop gun as it was lifted from the case and came to life on stage. On the one hand the prop gun fulfilled its function as the dueling pistol, but on the other hand, the gun's retained its primal objectness based on its historical failure.

The story of the accident at the Donmar did not end with the restoration of the play's run. The investigation into the accident revealed that Birrell's weapon misfired during the performance due to an obstruction in the pistol or to a faulty blank. Due to the nature of the misfire it was not possible for investigators to recreate exactly the event or to determine which of the two defects caused the accident.³⁷ In either case the Donmar was liable for the injury. As was reported by the Telegraph.co.uk, Birrell was blinded by the accident, unable to return to his role for the remainder of the run of the show and sued the Donmar for £250,000 ("Blinded"). The suit claimed Birrell was "at a disadvantage on the labour market as a result of both his functional and cosmetic disability" ("Blinded"). The Donmar denied negligence and requested the supplier of the prop gun, History in the Making, Ltd. to contribute to the damages. Though the prop suppliers denied liability, a "substantial" settlement was reached with Birrell in 2013; as was reported by Louise Jury of the Standard.co.uk (Jury).

³⁷ Prop guns have claimed the lives of other actors due to misfire or reckless use. In 1984 up and coming actor John Erik Hexum died after accidentally shooting himself with a blank-loaded gun ("Actor Wounds Himself on Set of TV Series"). Brandon Lee, son of Bruce Lee, died when a prop gun misfired on set of his film *The Crow* in 1993 (Robey).

Assisting Birrell in his litigation was his acting union, British Actors Equity. Professional actors rely on their unions to help establish employment regulations to ensure fair treatment and pay. The equivalent in the U.S. is Actors Equity Association (AEA). Equity creates and administers the employment rules and safety regulations for theatre companies and actors working under their contract, including stage combat. Under Rule 62 in Equity's Rules and Regulations for Safe and Sanitary Places of Employment it is mandated that a Stunt Coordinator be hired to teach any stunts conducted by actors in a play, and that the fights be staged by an on-site qualified professional. Equity does not specify who or what certifies a fight choreographer as qualified. Equity also mandates that all equipment used in any stage fight be checked before each performance (Association 107). Equity also mandates that firearms be demonstrated by a "qualified individual" and that individual shall offer instruction on how to safely use the weapon to all actors and stage personnel that will come into contact with the object (Association 106). Professional actors (and audiences) have this set of protections against accidental harm or violence, but amateur or non-union performers have no protection outside of their good wits and the hope that their director knows enough to hire a professional to choreograph whatever violence will be represented in the play.³⁸

As the examples above indicate, representations of physical violence require a systemic, repeatable protocol in order to ensure that the violence is safe for the actors and aides in telling the story of the play. This safety first approach hasn't always been the standard operating procedure for stage fights. Stage and film fight choreographer William Hobbs notes, "Until comparatively recently, in the early 1960's, it was the custom in theatres and drama schools for a fencing master or 'A Master of Fence' as he was more grandly called, to be employed to teach

³⁸ The recent Chicago Reader report on the Profiles Theatre exposes an extreme version of what non-union actors encounter (Levitt).

stage fights. His knowledge and experience of the theatre and actors was to say the least, in most cases, limited" (Hobbs 22). Choreographing modern stage violence is a complicated task. It may include common-sense tasks like showing an actor how to fall down safely, but more times than not the violence required is a far more complex apparatus than can be conceived by the average theatre professional. SAFD Fight Master and Director, Drew Frasier was asked about the complexities involved in the coordination of combat in a 2010 interview with Christopher Duval:

I did a production of *The Hostage*, and there's a scene where they come in and they shoot the place all up, take the guy hostage, and the director said, 'OK, we can have them come and they could shoot, and we could have the bottles, you know, they can be breaking and blowing up, and the mirror could go. It would be awesome,' and I said, "That's a really great idea. That would take the entire budget for the set, let alone the props." You couldn't even tech that for the money that we had. They were so disappointed. They didn't get it. They just didn't have a clue. (qtd. in Duval 23)

The cost, complexities and safety precautions are steeped in a level of detail that just eludes even some of the most seasoned theatre directors. What complicates matters more is the reality that the role of "Fight Director" is an ever-changing one. SAFD Fight Master Mark D. Guinn described the constant changing role of the fight director. "At the basic level it is the individual responsible for collaborating with the director and actors to create a scene of action. However, as the fight choreographer, I have more often than not been charged with or assigned other responsibilities..." Guinn explains that, especially in non-union venues, the fight director has to pick up other duties that will affect the planned combat onstage like specialty costume pieces, prop weapons, specialty scenic pieces, actor coaching and other tasks (Guinn).

The actual choreography of physical violence, as discussed above, will not always include weapons and may involve complex intimate violent acts. Stage combat, as defined by the SAFD, "covers acts of conflict, danger and/or violence performed for entertainment" (SAFD.org). Safety is always the first objective of any stage combat routine. Fight directors plan

and notate the physical action much the way a choreographer would plan a dance piece. This choreography is then taught to the cast during fight rehearsals. Actors learn everything in slow motion and gradually speed up the action under the guidance of the fight director. The fight director also is an artist who uses systemic techniques and safety protocols to tell a violent story. Ideally, fight directors engage the director and cast early in the rehearsal process as a collaborator in telling a story that includes physical violence. “I ask questions of both the director and actors”, explains Frasier, “Is this what’s going on? Is he really angry? Is he just frustrated? Does he punch? Does he hit her with an open hand? Does he ever hit her? Does he know she is having an affair?” (qtd. in Duval 22). By engaging with the actors and directors early in the process the fight director is able to create a physical choreography that tells the story of the violence in the most realistic and compelling way. The most effective and realistic stage violence takes place when actors are allowed to pursue their objectives within the framework of the safety protocols of staged combat (Guinn). Weaponry is also planned for and maintained in a systemic safety driven way. Real weapons and ammunition are never used in stage combat. However, in order to provide a realistic illusion, fight choreographer Angie Jepson points out, “A safe stage combat weapon is made of steel, but with a blunted edge.” Additionally, because they are used in a very different way, bladed weapons are typically stronger than the real thing holding a capacity to be very dangerous (qtd. in Seligson).

Actors Equity Association mandates that actors shall not be required to perform in inherently dangerous conditions (Association 105). Within the last decade, the SAFD has grown to be a real go-to organization for experts in the choreography of stage combat in the major professional theatres of the United States, keeping actors and audience members safe. Stage combat expert Kara Wooten documents, the SAFD was founded in 1977 and sought out to create

an organization structured similarly to the Society of British Fight Directors in England. Founders David Boushey, Rod Colbin, Erik Fredricksen, Byron Jennings, and Joseph Martinez quickly established an organization and within two years had established a testing protocol for certifying actors in safe stage combat techniques (Wooten 18). The certification program was expanded in 1987 when the SAFD made the important addition of certifying teachers to teach stage combat all throughout the country. Today the SAFD has grown to over 900 active members and certifies actors, advanced actors, teachers and fight directors at its annual national workshops as well as regional workshops throughout the country (SAFD.org).

The long history of stage combat lends itself to both the use of weapons to represent that violence and to those weapons accidentally causing real injury while in front of an audience. While the history of combative spectacles could include Roman Coliseum spectacles or Medieval Jousting competitions, for the sake of this chapter I will focus on a brief overview of the use of weapons in western representational theatre history.³⁹ Charles Edelman chronicles the use of bladed weapons within the history of staged combat. Edelman identifies Philip Sidney's *Defense of Poesie* from 1583 as being the first published critique of stage weaponry. In his critique of *Gorboducke* and similar plays that refuse to adhere to poetic standards of maintaining a single location and believable action, Sidney argues how ridiculous it appears that when a battle between two armies is represented on stage that only four men with swords take the stage to represent a full army (Edelman). Sword fights and duels were common in Spain and England

³⁹ Much has been written about epochs in theatre history where violent acts occurred off stage in accordance with rules of decorum. From Aristotle we are led to believe that, in general, tragic poets used words rather than images to communicate violence, and during the Neoclassical era Italy and France made strict artistic decrees about depicting violence onstage. See Gerald Else's Translation, *Aristotle Poetics*. University of Michigan Press. 1967. See Jean Chapelain's *The Sentiments of the French Academy on the Tragicomedy le Cid* (1638), in *Dramatic Theory and Criticism: Greeks. To Grotowski*. Ed. By Bernard F. Dukore. New York: Holt, Rinehart and Winston, 1974.

during the seventeenth century. 1550-1625 was the “Golden Age of Swordplay,” as stage sword fighting expert Dale Girard discusses. Audiences in Spain and England were well experienced in duels, fencing and sword fights. Often the theatres in London would be used for fencing competitions (Girard 10).

In his comments regarding representations of war, Friedrich Schlegel writes in his 1800 manifesto *Gespräch über die Poesie (Conversations about Poetry)*, “Shakespeare and several Spanish poets have contrived to derive such great beauties from the immediate representation of war, that I cannot bring myself to wish they had abstained from it” (qtd. in Edelman 3). Schlegel concludes that while realistic sword fights are enjoyable, they would not be if they were too realistic. Schlegel is of course referencing stage sword fights during his lifetime and not those on the Elizabethan stage, which would have connected with a cultural awareness in a very different way.

The use of weapons expanded greatly in the nineteenth century, where the growth of professional theatre, particularly in London, led to the popularity in reviving Shakespeare’s plays. This of course meant staging the many sword fights in those scripts. Additionally, spectacle driven producers looked at ways to incorporate new technologies into the old sword fights. Famed Lyceum Theatre Manager/Actor Henry Irving created a shocking effect when he electrified the swords of Valentine and Faust in his 1885 production of *Faust*. Percy Hetherington Fitzgerald recalls that Irving was able to provide a supernatural effect during his production, writing that “the blue electric light flashed with weird effect as the swords of Valentine and Faust crossed. But here again there was an electric wire and ‘contact,’ and a current ‘switched on” (Fitzgerald, *Henry Irving: A Record of Twenty Years at the Lyceum* 224). Michael Smith further elaborates on this effect in his study of Victorian theatre spectacles,

explaining, “Two iron plates were screwed into the floor of the stage, to which two wires from the 50-cell Grove battery were attached. Faust and Valentine each wore a metal sole in the right boot” (M. R. Booth 110). During the staged duel both actors had to precisely land their boot on the plate at the right time in order to send the 90 volt electric current through their bodies and into the swords as they clashed. “An eerie blue fire flowed from small saw-teeth on the sword blades when they clashed” (M. R. Booth 110).

Plays in the modern era run the full gamut of weaponry and degree of realism employed in representing staged combat. Other stunt performances can also lead to unexpected injury but may not involve a prop weapon. Physical comedians have for years engaged in dangerous stunts, like pratfalls, slaps and pies in the face. Famed comedian Jerry Lewis made a name for himself with his over-the-top versions of these potentially painful physical acts. One such incident left the actor in a lifetime of pain. In an exposé with *People Magazine* Joe Abrell interviewed Lewis about his pain pill addiction and attempted suicide. As part of the interview Lewis recalled a particular incident of physical comedy that drove him to his addiction. During a 1965 performance in Las Vegas, Lewis attempted a double cartwheel pratfall off of a piano to end his act. As was planned he landed on his back, but as the audience cheered and laughed Lewis lay in great pain. He was eventually able to get off of stage, but when visiting the doctor the next day it was discovered that he had chipped a bone in his spinal column. As a result of the injury he experienced impaired vision, partial disability in his left arm and hip, a serious arthritic condition and a lifetime of debilitating pain in his back (Abrell).

Physical comedy like that performed by Lewis was common and popular in part because there was a possibility for injury or violence. Film Critic Max Winter writes about a crucial attraction and pleasure of slapstick comedy with his critique of famed silent film comedian

Harold Lloyd, describing, “[H]is face and his body seem to be working at cross purposes. His swinging legs and arms seem to be telling you to laugh, while his face reminds you just enough of what your own expression might be in such a situation to make you... well... scared” (Winter). In a sort of split focus, the audience is both laughing at the absurdity of the physical situation but titillated by the potential for violence. Winter speculates that this type of comedy is no longer possible in our contemporary film landscape. Richard Brody, film critic for *The New Yorker*, extends Winter’s sentiment, writing that “a new Harold Lloyd is unthinkable because physical comedy depends on the proximity and possibility of death, which no longer seems acceptable to viewers who are completely aware of the prevalence of stunt doubles and digital effects” (Brody). Part of why this type of physical slapstick comedy is not as prevalent, Brody posits, is that audiences have changed. The daily life of the average American is sedentary and lacks physical dangerous work (Brody). Today the average audience member sits behind a desk at a computer instead of hanging off of the Hoover Dam during its construction. The physical danger represented is no longer part of the cultural zeitgeist. Lucy Nevitt comments on the stakes of comic violence, challenging us to “think about the violence in cartoons, where the impact is immediate and huge but short-lived.” Nevitt posits that because the action/reaction dynamic is so distorted in slapstick comedy the illusion of violence doesn’t register in the same way. “There is a contract with the audience here,” she argues, “we can laugh because there are no consequences and therefore no need for empathy or analysis” (Nevitt 22). The failure of convention in slapstick comedy can result in serious injury, and while the illusion of violence is part of the draw, I would argue that an audience to staged combat violence is exposed to the illusion of violence in a different way. Most specifically, when a physical comedian injures themselves during a pratfall it is, while unfortunate, an expected potential outcome. The injury does not radically alter the

theatrical framework because it is part of the framework's potential. Unexpected violence from the convention of stage combat works differently.

When the convention fails during staged combat and the illusion of violence becomes real it physically injures the actors on stage and also violently ruptures the theatrical contract with the audience. In her analysis of stage combat Leslie Pasternack provides three possible results to a failure in violence represented during a combat scene between two combatants (attacker and victim), all of which fracturing the theatrical contract. First, real violence will cause real pain to the victim that will cause a "split" in the victim's focus. This split focus or dilation can cause a loss of intentionality and if the audience recognizes this lost intention to represent, as was the case in *Spider-Man*, the gaslight tragedies in Victorian England and the soon-to-be-discussed historical reenactments. Second, upon realizing that they have actually injured their partner they too will experience a split focus. The attacker "will wonder if the victim has been hurt, perhaps feel guilt or a lack of control, and will feel pressed to think forward to later actions in the same scene which might need to be improvised to prevent further injury." The third result of the real violence affects the aware audience. In the event of recognizable injury the audience will "be wrenched from its concern for the character to a concern for the actor," thereby nullifying the theatrical framework. (Pasternack 9-10).

Josette Féral offers helpful insight into moments of extreme violence onstage. In her article "From Event to Extreme Reality: The Aesthetic of Shock," Féral analyzes moments where purposeful violence is presented to an audience in such an extreme way that it creates a rupture within the theatrical framework. Extreme violence, she maintains, "suspends the representation in order to allow the factual, and thus the present, to emerge onstage." The framework shifts from illusory to reality which, "modifies their initial contract, once implicit, surrounding the

representation” (Féral, 54). Enders, in explaining J.L. Austin, describes this shift as the performance framework ending and a performative framework beginning. In moments of extreme violence, or real, accidental violence the shift from illusory intent to actual intent transforms the event from a piece of theatre (illusory in nature) to a performative (the doing of things) event. Enders argues against this simplistic shift, however, noting that intentionality complicates the acts onstage and in the audience (Enders, *Murder*.)

In both the Hoevels stabbing and the Birrell gun misfire, it is probable that the audience never recognized that an accident had occurred. These instances, unlike the *Spider-Man* and gaslight accidents, create a complicated problem in their effect on the theatrical framework and even the argument that the convention fails. If an audience accepts, within the conventional framework of the performance, that a dueling actor falls to the stage floor after being shot by a prop weapon without an awareness of accident or misfire, then the achievement of that action seems to be a successful example of the convention of violence. However, Sofer and Enders offer complications to that series of events. Sofer would argue that the moment the prop gun misfired, or behaved contrary to the intention of the performer, it no longer carried the same representational life. It becomes the object itself. And similarly, Enders holds that there is more to the performance contract than just the audience’s reception, there is also the intent of the actors. When a prop gun misfires, unknown to the audience or not, the declared intentions of the actor are failed by the actual intentions achieved. Meaning, that even though the actor’s character meant to pull the trigger, creating a violent illusion, they did not intend real violence and the failure of intent nullifies the theatrical framework.

I turn now to two events of stage combat that not only rupture the theatrical framework, but entirely stop the show when prop weapons create real violence. In the 2015 historical

reenactment of *The Night of the Bandits* as part of a festival in the southern Italian city of Potenza, actors Agostino Carullo and Donato Gianfredi took their places at the execution scene where they were about to carry out the execution by gunshot. The prop rifle they were using exploded near their faces. Allan Hall, reporting for *The Mirror*, added that a police investigation had been launched to decipher if murder or sabotage were involved with the deaths. The devastation during the event was not limited to the actors onstage as Itv.com reported. When the explosion happened shrapnel went everywhere, even injuring a five year old boy in the audience. The scene devolved into panic and confusion as the audience scrambled to get their bearings (“Two actors killed”).

The live reenactment performance in Potenza depicts the nineteenth-century reign of the “Brigandage.” Mafia historian Salvatore Lupo notes that these outlaw bands of robbers roamed the cities and roadsides of Southern Italy kidnapping travelers and terrorized local farmers and townsfolk. In a similar way Old West outlaws dominated the western part of the U.S. during the same time and became a notorious mythic Figure, these bandits hold a complicated place in Italian history as they also are seen as a developmental phase of the establishment of the mafia in southern Italy (Lupo).

Similarly, as Ed Mazza reported in the *Huffington Post*, during an old west historical reenactment, “Two people were shot in Tombstone, Arizona, during a gunfight” (Mazza). During a reenactment of a vigilante shootout in Tombstone, actor Tom Carter arrived late for the performance, and his gun was not properly checked. Carter entered the performance with six real bullets in his revolver and fired five times into the supposedly fictional gunfight, hitting actor Ken Curtis with one of the bullets. Curtis was not fatally wounded and the show was immediately stopped leaving the audience confused and shocked (Mazza). Both of these

reenactment accidents involved weapons presented to the audience as fictional and historical items, but very violently revealed their true function, stopping the show in both accounts. In the tragic reenactment events the intention of the performer was to fire a prop weapon creating a convention of violence. The intent declared and perceived was one of illusory action. Just as with the Hoevels and Birrell accidents the achieved intent of the actors was contrary to their implied intent, but in these examples the implied declared intention (which allows the audience to suspend their disbelief) also is violated when the show is stopped due to the tragic injuries of both actors and audience.

I propose that in moments like the tragic deaths of Italian actors Agostino Carullo and Donato Gianfredi and the shootout at Tombstone a non-representational event occurs and in this moment both the actor and audience experience a theatrical trauma from the event.⁴⁰ The contractual arrangement necessitated by the theatrical framework causing the audience to suspend their disbelief is shattered by the accidental violence. In Féral's terms, "the tacit contract . . . suddenly disintegrate(s) and the spectators find themselves forcibly propelled into a reality that seems to extend beyond the frame of the stage" (Féral 54). These moments complicate the communicative ability of the theatrical framework.

It is important to contextualize the event taking place and the trauma at work during Hoevels' incident. According to reports by the Thalia theatre staff, many audience members weren't aware that Hoevels' had really injured himself until after the show, while other reports intimated that audience members were in shock as the blood ran from his throat. Audiences to

⁴⁰ In the case of the *Night of the Bandits* actors died and audience members were seriously injured. I in no way intend to compare the traumatic rupture in the theatrical contract with the horrific physical and mental trauma that those people experienced and will continue to experience from that horrific accident. The same holds true for the Tombstone actor who was accidentally shot during the performance.

David Birrell's gunshot wound did not comprehend an accident when it occurred. In the case of our historical actors in Italy and Arizona the audience was absolutely jolted out of the illusion of the event when the stage combat convention failed. This ruptured framework may have been experienced by only a fraction of the audience; however, I argue that in all instances of the failure of the technology of stage combat the framework is also disrupted when the intent of the character is shattered by an unintentional act. Staged violence that ends in real violence is documented and reported with alarming frequency, whether it is a Cirque du Soleil performer plunging to her death or a masked Spider-man breaking his back on stage. And in these moments the pre-determined language paradigm loses its relevance and reference leaving the audience alienated and, within the theatrical context, traumatized.

In her monograph, *The Body in Pain*, Elaine Scarry posits that when pain is experienced, language becomes impossible. As she describes it, the witnessing of another's pain causes a reversion to pre-language or the destruction of language (6). The witnessing of torture or the pain of the other renders language and the communicative act impossible. In a contrasting, yet still relevant vein Marla Carlson argues that the witnessing of pain does not destroy the possibility of language. Witnessing pain requires a language that is used so little that when it is called upon to communicate between victim and audience it has been rendered unrecognizable and absurd (M. Carlson 18). The audience's reception of the violent convention can be seen to disrupt the language of the theatre. In essence, the established apparatus of attending the theatre would be disturbed leaving a brief time of chaos where meaning and convention lack a communicative ability. In instances, like Clara Webster, Sarah Guillot-Guyard, Christopher Tierney, Ken Curtis, Agostino Carullo and Donato Gianfredi audiences recognize real pain in the actor, and are forced

involuntarily to shift their empathetic gaze to a witness of real pain. The object of real pain reveals in primal self.

All of these accidents operate contrary to the purpose of stage combat. The intent of stage combat is to communicate physical violence in a way that tells a story and exposes the audience to the empathetic nature of the violence on stage. In her text *Theatre and Violence* Lucy Nevitt offers an explanation of what an audience member would experience in viewing a successful stage combat fight:

The explosion of violence is sudden; although it has been set up by an escalating verbal argument it still takes me by surprise. It is fast, a change in pace that shifts my perspective and alters the nature of my engagement. As the violent action moves across the stage, I turn my head to follow it. Maybe I shift forward in my seat. Perhaps my heart beats a little faster, and as the victim struggles for breath I might feel my own airways constrict slightly in an imaginative echo of his experience. Or maybe, responding to the aggressor, I feel in my own hands the imagined sensation of squeezing a throat: an unsettling moment of identification. As the victim escapes the suffocating grip of his antagonist I feel relief, a relief that is emphasized and extended as, in breathless pause that follows, I become aware of the surge of adrenaline my own body has just experienced in this moment of engagement between spectator and performance. (44-5)

Nevitt highlights the best-case scenario for witnessing stage combat. Nevitt notes the empathetic attachment and inherent physical reaction to watching illusory violence within a theatrical framework, which is only possible through the safety of the theatrical framework. Only in the illusory nature of theatrical violence does the audience imagine themselves in the position of combatants. The audience feels for them because they feel with them.

If a best-case scenario offers such exhilaration driven through empathy, then a worst case stage combat scenario radically alters that experience when the accident occurs. What might witnessing a failed stage combat event feel like? Let's imagine a classic Shakespearean sword fight gone wrong. Tybalt draws his sword, accepting Mercutio's challenge, and they fight (I know this unfortunate fight well. Romeo, in an attempt to stop the fight unintentionally aids in

Mercutio's death).⁴¹ The rage and passion is tangible in Tybalt as he thrusts his steel sword toward Mercutio's chest. Mercutio parry's the tip of Tybalt's sword away from his heart, as the sound of the steel grinding through the parry echoes in the theatre. Watching the action, I believe that the characters intend to do harm. The sword play is rhythmic, building in force and pace. I feel the rhythm shifting my hand or clenching my teeth as I sense it leading to the death of Mercutio. Suddenly, Romeo steps in to stop Mercutio and Tybalt, screaming "Hold, Tybalt!" Tybalt thrusts toward Romeo, but Romeo has lost his balance and the tip of the sword (meant for Mercutio's underarm in my scenario) stabs him in the leg. I freeze. The actors freeze only for an instant to assess if the injury is something that can be covered. I lose all awareness about the fiction of the play and shift to the edge of my seat in preparation for what may come next. Did he pierce the leg? How will the actors cover? Do I pull out my phone and call 911? Do I try to go to the stage to somehow help? The actor playing Romeo instinctually screams and grabs his leg. I see blood on his hand. He drops his sword and falls to the ground. Do I call 911? All of the tension that had been built up has shifted into panic and fear. Romeo stands again (he's not badly injured) and repeats his line. In an attempt to put the plot right, Mercutio raises his sword high and screams "Tybalt!" Tybalt realized the improvised cue from Mercutio and places his sword under Mercutio's arm with a thrust, and just like that the action carries on.

The failed, though imagined, scenario of the technology of stage combat mirrors Nevitt's adrenaline and tension filled example...until it goes wrong. The empathy driven excitement and enjoyment was shattered with Romeo's injury, replaced with fear and panic and an instinct to intervene. For the rest of the play I will recognize the actor playing Romeo as an injured actor trying to make it through the show. As Cathy Caruth writes, "...the spectacle of failed

⁴¹ See *Romeo and Juliet* (III.i) by William Shakespeare.

technology can become the spectacle of a failed environment as well” (Caruth 195). Every scene with sword play will put me on edge, hoping that the cast hasn’t lost so much focus that they incur another mistake or injury. For the remainder of the play I no longer set aside my disbelief in any way that allows me to accept the declared implied intentions that establish the world of the play. Instead I question every declared intention onstage. Romeo’s teenage angst-filled love seems immature and Juliet’s final dagger to the heart reads as ridiculous. My focus has been split as I am forced to not only attempt to re-engage with the story, but also remain locked to the empirical world where I know Romeo is bleeding.

In the previous chapters on gaslight spectacles/conventions in the nineteenth century and the convention of stage flight in *Spider-Man: Turn off the Dark*, one of my main arguments was that the advanced technologies used led to a culture of normal accidents. The technologies were expected to fail in part because they were so complex and that failure was a part of the cultural instinct. Gaslight technology evolved and industrialized faster than the theatrical establishment could manage resulting in horrific burnings of performers and theatre structures. The advanced aerial rigging and control system employed in flying performers in *Spider-Man* coupled with the dramaturgical failures led to a type of “Spidenfreude,” to borrow Scott Brown’s catchy term. The accidents in this chapter don’t rely on an advanced industrial or digital technology. In contrast the accidents contained in this chapter are not subject to the same cultural expectations for failure. Instead this chapter exposes human driven, and weapons based illusions of violence that unexpectedly end in accident. I argue that the shifting intentionality of these incidents connect them to the previous chapter’s arguments, and though the three chapters span a wide range of times and events, I hold that their similar intent to represent violence and danger unite them.

In this chapter I have offered four examples of real violence born from the failure of a violent theatrical convention. All four of these events employed a prop weapon in creating the illusion of violence on stage, and all for events ended with the failure of that technology. Props, and particularly stage weapons, take on a life of their own within the theatrical framework, but retain their primal objectness. Intentionality is a clarifying concept for stage accidents. I have identified that both the perceived intention and the actual achieved action must be accounted for in critiquing the stage accident. For those instances where the convention failed there was a trauma experienced, physical for the performers and experiential for the audience. Creating the illusion of violence requires an audience to engage in the dramatized emotional rush and thrill that comes with exposure to successful illusory violence; however, when accidents happen, the theatrical framework fails in a unique way.

CHAPTER FIVE

CONCLUSION: LOOKING BACK AND MOVING FOREWORD

Susan Sontag writes about the viewing of violent photographs and how those images affect the viewers in *Regarding the Pain of Others*. Sontag notes that there is something innate in our interest as humans in viewing others' pain. She recalls the first written account she came across regarding the viewing of mutilated bodies in Plato's *The Republic, Book IV*. In the story of Leontius, son of Aglaion, Leontius approaches some dead bodies of criminals recently executed. Though he wanted to look away, he could not resist the urge to go look at the bodies. Leontius covered his eyes, trying to shield them from his desire, but ultimately resigned to his eyes' desire, saying, "[T]here you are, curse you, feast yourselves on this lovely sight" (qtd. in Sontag 97).

The representation of violence is as old as theatre itself, so too are the accidental violent events done during those illusory moments. In this study I have focused on the technologies involved in creating theatrical conventions of violence and on how those conventions fail. Central to this project is a clear definition of convention. As I have outlined, conventions are the set of rules shared between the actor and audience that allow the audience to engage in the illusory implied declared intent of the actors. Without this common language for the theatrical event, empathy for the characters' action becomes problematic. Conventions allow audiences to view the pain and dangerous spectacles of the onstage action as real, relatable and significant.

I have introduced accident theory, and in particular Charles Perrow's notion of "normal accident" as a tool to position these accidents as systemic by nature and not simply fluke mishaps. The modern notion of the accident as a result of an industrial technology escaping the

bounds of human control provides relevance to my events. The worksite accident became an inevitable price for the progress of capitalist industry. The acceptance of the inevitability of workplace accidents led industry to neglect or even prioritize profit over safety. Organizations like Actors Equity and OSHA help to hold accountable profit-driven corporations and industries by continually revisiting safety standards and worksite conditions. Technologies are systemic, and by identifying these events as failures of technology I am able to analyze and critique the accident as part of a systemic event, of which human error may be a part.

A full critique of violence in the real world is far beyond the scope of this study. I have provided a brief overview of a few of the key figures in the discussion of violence, but the focus of this study is the illusion of physical violence and violent or dangerous spectacles within the theatrical framework. Additionally, I argue that violence to the performer and theatrical contract is a result of the events detailed in this project. The term *violent* is an apt one for the failure of the theatrical convention because the audience's empathetic investment has been damaged hindering their trust in reinvesting with the onstage action in an empathetic way.

"Violence is surely a touch of the worst order," writes Judith Butler, "a way a primary human vulnerability to other humans is exposed in its most terrifying way, a way in which we are given over, without control, to the will of another, a way in which life itself can be expunged by the willful action of another" (Butler 28-29). Butler questions American policy, the value of life and violence in a post-9/11 world in her book, *Precarious Life: the Powers of Mourning and Violence*. Illusions of violence and danger also link audience members in a precariously vulnerable theatrical framework. The language of theatre, which performers and audience rely upon to communicate the conventions of violence, carries with it the potential for real violence.

In this project I have focused on physical violence or danger represented through theatrical conventions, how they can fail and what that failure means for the theatrical framework. However, post-9/11 plays have greatly expanded the umbrella of the types of violence represented on stage. Russell Vandenbroucke recently wrote about some of the different forms of violence being explored in recent American plays. While bloody physical violence is still vitally present in the plays of Sarah Kane and Mark Ravenhill, new plays are also exploring non-physical violence and how it is represented on stage. Vandenbroucke applies sociological concepts of structural and cultural violence to modern plays by traditionally minority playwrights. "Violence," he writes, "is often theatrical: fights are choreographed, punches pulled, swords and knives blunted, pistols discharged with blank ammunition, and wounds ooze with stage blood" (Vandenbroucke 108). The violence represented in the stage combat choreography found in the Donmar Warehouse's *Passion* and Thalia Theatre Company's *Mary Stuart* predate a school shooting at a Columbine High School, the mass shooting at Sandy Hook Elementary or Domestic Terror at an Orlando Nightclub. Contemporary representations of violence must recognize those events and the effect they hold on the cultural instincts toward violence.

Vandenbroucke identifies structural violence as a violence that is endemic to social inequalities built into society, and cultural violence as violence that is legitimized or normalized through the cultural hegemony. While direct violence represented on stage is usually sudden, rage filled, individualistic in nature and builds a high tension in the audience, structural and cultural violence are continual and lack a solitary aggressor. In Ayad Akbar's *Disgraced* Vandenbroucke identifies a play that includes a direct violent act brought about by the structural violence of domestic violence:

Near its climax, at the end of a drunken dinner party, a Pakistani-American lawyer raised Muslim learns that a protégé is being promoted over him; his partners believe him

to be anti-Semitic; he is no longer being assigned important cases; and his wife has slept with one of their dinner guests. Once their company scurries away, he bashes her face repeatedly. (112).

Instead of continuing the expected repetitive nature of domestic abuse Vandenbroucke notes that Aktar presents an alternative path for the abuser, who is abandoned as a failure, given no opportunity for a second chance.

Vandebroucke's analysis of *Ruined*, by Lynn Nottage, offers an example of cultural violence. *Ruined* is set in the Democratic Republic of the Congo and illuminates the culture of rape as an instrument of war. Here the violence is systemic to the culture in this war torn part of Africa. Near the end of the play, as conflict approaches Mama Nadi's bar, the soldiers from both factions of the war turn to rape, revealing, as Vandenbroucke states, "[T]here are no good guys; all factions rape" (Vandenbroucke 112). While as Vandenbroucke admits cultural and structural violence are not new or even the dominant representation of violence in Western realist theatre, they do represent the complex array of violence to be attended to. One of the stakes for this study is to promote a continuance of the critical discourse on stage accidents, which will allow for a broader terminology and a multitude of critical lenses to emerge in an effort to approach the complex forms of contemporary violence evolving on stage today.

Another of the key stakes for this study is in furthering a discussion on how technologies are employed in creating violent theatrical conventions. In addition to looking ahead, we might also look back for more ways to engage with the theatre accident. In 2014 The Sam Wanamaker Playhouse at the Globe Theatre in London launched a series of Jacobean era plays, operas and concerts lit by candlelight. Audiences are transported back to a pre-modern era in attending a show in this intimate replica theatre space. Theatre critic Ben Hirschler describes responses to the dozens of beeswax candles used in footlights and candelabras during a production of *The*

Duchess of Malfi as “stunning” and “gorgeous” (qtd. in Hirschler). Spectators to a concert in the series experienced a side effect reminiscent of chapter two’s gaslight complications. Music critic and blogger Kirk McElhern noted, “I was sweating throughout the performance, even though there was air conditioning on.” The heat affected the musician’s string instrument as well as his ability to credibly play. “It was so hot,” McElhern reports, “that one person in the audience fainted as he was trying to leave, about 45 minutes into the performance.” McElhern noted that the fallen man had to be carried out by staff and audience members (McElhern). Though heat was an inevitable issue, safety engineers constructed an elaborate fan system to manage the heat and smoke. Reporter Veronica Horwell noted that there is a “megafan” in the ceiling that drafts all smoke and heat out of the space. There is also a “smoke detection system that knows the difference between candle smoke and a problem” (Horwell).

While there were no elaborate special effects created with the candles for the *Duchess of Malfi* production, Hirschler points out, jokingly, that the original Globe theatre burned down when it caught fire during a performance of *Henry VIII* (Hirschler). Former research fellow at the Sam Wanamaker Playhouse Neil Vallelly explains that when the playhouse opened in 2014 public workshops were held where scholars, technicians and actors would experiment with lighting practices and discussed theatrical lighting during the early pre-modern era. When theatre moved from an outdoor activity to an indoor activity the nature of light and seeing changed as illusion became a premium and the visual field of the spectator could be manipulated in a more spectacular way (Vallelly). During performances candles are raised and lowered to lighten or darken the theatre space and sometimes lowered as low as waist height of the onstage actors (see fig. 1). Actors serve as quasi-lighting designers as they carry torches or candles, branches,

holding them near their faces to create more focused light (see fig. 2). The flame becomes a character in the play.



Fig. 1. Candelabras lowered during the opera *L'Ormino* at the Sam Wanamaker Playhouse;
Photo: © Stephen Cummiskey; *BBC.co.uk*; Web; 7 June 2016.



Fig. 2. Handheld candlelight from *'Tis Pity She's a Whore* at the Sam Wanamaker Playhouse; Photograph: Elliott Franks; *Theguardian.com*; 29 Oct. 2014; Web; 7 June 2016.

Lighting for each performance is experimental, as there are no conventional standards for candlelight. “Everything about the Wanamaker is experimental, and the candles are downright edgy...the steady burn of the chandeliers dissolves the actor-audience fourth wall” (Horwell). Critic Michael Longhurst noted of the 2014 production of *‘Tis Pity She’s a Whore* that the candlelight takes time to get used to and that the change in candle position and light level created endless possibilities for candlelight (Longhurst).

Directors and actors create their own lighting techniques for special effects. Because there are no contemporary conventions for lighting a play with candle light, the technicians have to re-imagine technologies from centuries ago through experimentation (see fig. 3). In trying to find a solution to extinguishing a candle mid-scene a Playhouse technician proposes, “[W]e could use a fishing line” (qtd. in Hemming). Fishing line is, of course, a modern object, but the coming together of historic and current challenges directors and technician to re-invent the wheel, so to speak. And in doing so, even the primitive candle is demanding systems and technologies as it becomes a convention at the playhouse.

While the resurgence of gaslight as an illumination convention seems impractical, I wonder if it crossed anyone’s minds as they watched the candles flicker. Did they walk past Sarah Smith’s plaque in Postman’s park earlier in the day? “Nobody can hog the limelight if there isn’t any” (Horwell). Unless a Victorian Melodrama is revisited in the coming seasons.



Fig. 3. Technicians experimenting with Candelabra at the Sam Wanamaker Playhouse; Photo by James Royall; www.FT.com; 20 Dec. 2013; Web; 7 June 2016.

Productions staged in candlelight at the Sam Wanamaker Playhouse hope to reimagine performance within a recreated context of a historical theatrical convention. I contend that revisiting historical accidents and conventional failure will offer a broader understanding of the cultural and theatrical environments in which they existed and equip scholars, critics and practitioners with a vocabulary and critical lens for those events.

As I have discussed, technology played an unquestionable role in the violent accidents I have outlined. Advanced theatre technologies have historically impacted the development of theatrical illusion, and more specifically the illusion of violence. Technologies also have limits. This was evidenced in the tragic death of Sarah Guillot-Guyard, Clara Webster and with the 1999 death of WWF performer Owen Hart. As reported on CNN.com, during a live sold-out event, titled “Over the Edge,” broadcast to millions via pay-per-view in Kansas City’s Kemper Area, wrestler Owen Hart prepared to make his spectacular entrance as the Blue Blazer, his stage persona (“Wrestler Killed”). Hart’s Widow, Martha Hart detailed the stunt. In an effort to

continually push the envelope Hart was scripted to descend from the rafters of the area in a rappelling-type stunt which he had done previously. The WWF had hired a rigging consultant to plan and execute the stunt. In the previous show there was some fumbling when disconnecting Hart's harness from the pick line, so the rigger added a quick-release shackle (not designed for overhead rigging) to allow Hart to pull a release cord in order to be free of the rappelling line (Hart and Francis 109).

As Hart waited for his cue a video montage played on the area screens and for the TV viewers depicting Hart's good-guy-turned-bad-guy persona. The audience booed as the video played in the arena. Hart's cue came and he stepped off the rail to make his descent he somehow came unclipped from the line and fell over fifty feet to the canvas ring. Believing it was part of the act, the audience booed as he fell. Due to the video montage the TV audience didn't see the fall; however, the live crowd did ("Wrestler Killed"). As described by wrestling author David Shoemaker, "Owen was playing the heel, a pariah, loudly extolling integrity and moral rectitude, so the jeers were part of the routine...when he was lowered from the rafters, arms flailing, the crowd laughed in unison" (Shoemaker 315). The WWF was well known for pushing the envelope with dangers, violent and over the top spectacles argued *New York Times* columnist Robert Lipsyte. Lipsyte writes that "wrestling was pushed into more violence by technology" (Lipsyte). According to Shoemaker, "[I]t would have been a conceivable punch line to send the beleaguered superhero – a mannequin dressed to look like him – crashing down from the rafters into the ring. Such attention-grabbing stunts were common in those days" (Shoemaker 315). The culture of the WWF primed the audience to be ready to accept over-the-top spectacles as an intentional part of the performance event. A rapidly falling mass was perceived as a well-planned routine.

The confusion in the audience was horrific as thousands of adults and children reacted to the event. "We thought it was a doll at first," said fifteen year old audience member Robert McCome as reported on CNN.com. "We thought they were just playing with us. We were really shocked when we found out that it was no joke" (qtd. in "Wrestler Killed"). When real paramedics rushed to the ring the Kemper Arena audience fell silence and watched as the medical team worked to resuscitate Hart for fifteen minutes. Meanwhile, television viewers were shown a wide shot of the arena audience omitting a view of the ring, where Hart's body lay. Martha Hart writes that the television camera soon turned to the WWF commentator who attempted to end any illusory intent that the confused at home viewers may still have:

The Blue Blazer, as we know is Owen Hart, was going to make a very spectacular superhero-like entrance from the rafters and something went terribly wrong here. This is a very serious situation here. This is not a part of the entertainment here tonight. This is as real as real can be here... (Hart and Francis 115).

Hart died, and in the confusion of the event the show continued, returning to its elaborate stunts and illusions of violence.

The violent representational nature of this horrific event positions it with the theatrical accidents I have discussed in detail in this project. As wrestling author Scott Keith writes, "[M]ost sickeningly, HHH and Rock engaged in a 'casket match,' complete with pre-taped video of Rock emerging from the casket covered in blood, and later in the night a guy named The Undertaker won the WWF World title" (Keith 98). The images and narrative set-ups were all geared to draw in an audience primed for violence with the invitation to "feast yourselves on this lovely sight" (qtd. in Sontag 97). In this truncated example of real-life violence the failure of convention plays out on a pop-culture stage. As with our theatrical examples, the implied declared intention of violent spectacles in professional wrestling grounds all action as believable within the framework of the event. Owen Hart did not intend to fall to his death in Kansas City,

and when the technology failed so too did the intentionality of the spectacle. Few in the live audience could guess the severity of Hart's injuries, but they were forced to leave the illusory world and re-engage with the empirical world as the medical staff carted off his body. I offer this additional example not to sensationalize my project, but rather to expand the scope with which future projects critiquing violent conventions may operate.

In my chapter on gaslight spectacles and the tragic burnings of performers I highlight the cultural instincts about the technology of gaslight. The industrial nature of gaslight necessitated a new infrastructure that laid the foundation for other modern technological advancements. Gaslight also played a key role in establishing the visual culture of the modern era. Gaslight transformed nightlife, factory productivity and radically altered the theatrical landscape. Accidental fires caused by gaslight soon became an expected byproduct of the technology. The theatrical possibilities gaslight provided during this burgeoning visual culture's clamor for spectacle promoted the technology from basic lighting device to essential special effect element. Crinoline clad ballet girls paid a tragic price for this advancement. Regulations developed slowly, mired in outdated theatrical oversight and a resistance to safety measures that could shift liability to theatre managers. Caught between applying unrealistic chemicals to flameproof their dresses (making them unusable) and risk losing their job, and going on stage to face the gas jets unprotected, ballet girls became a vulnerable yet acceptable price for the spectacle of gaslight.

Sensation scenes made essential by the popularity of Melodrama provided Victorian audiences with a complicated experience. Gaslight fire was used to represent elaborate conflagration effects, as in *The Poor of London*. Yet the technology revealed its primal essence when fatally burning ballerinas or contributing to deadly theatre fires. Audiences were forced into a dilated state as they attended spectacle driven theatre, with one eye on the fire effect, one

eye on the empirical essence of fire and both eyes on their subjective selves within a newly formed picture of the world.

In chapter three of this study I detailed my visit to a performance of the Broadway musical *Spider-Man: Turn off the Dark* in 2012. I chronicled *Spider-Man's* complicated past which included the longest preview process in Broadway history, the multiple injuries to actors during performance, the press's blood-in-the-water coverage, iconic director Julie Taymor being fired and an advanced technology used to create representation of spectacular super-hero stage flight. I argue that the high-speed, multidirectional flight and the winch-driven, computer-automated control of the aerial effects constituted an advanced technology. Using Charles Perrow's notion of "normal accidents" I examined the accidents in the show and offer a complication that in referring to the events as accidents they achieved an expectation of inevitability.

In contrasting other inevitable accidents in Broadway shows like vocal fatigue in *Rent* and physical wear and tear in *Bring in Da Noise, Bring in Da Funk*, I distinguish the events of *Spider-Man* as unique in that they were the result of a failed convention meant to concretize the very thing it nullified. Finally, I argue that *Spider-Man's* troubled history and the press' coverage of the accidents created a sort of "dark matter" or essence, borrowing from Andrew Sofer, that drove many audience members (myself included) to engage in a form of thanatourism hoping to witness one of the famed glitches. Audiences to *Spider-Man* experienced dilation due to this "other" presence. This dilation is similar to what gaslight audience experienced in that they were both aware of the "normal accidents" that resulted in the failure of the advanced technology. In contrast, however, *Spider-Man's* financial turnaround can be attributed in many ways to the expectation of those accidents. There is no such parallel that I found in the Victorian era.

The stage combat accidents I have chronicled, do not share this thanotouristic element with *Spider-Man*, but rather illuminate how intentionality during a violent accident changes the theatrical framework. Similar to the other chapters my analysis of stage combat accidents is limited to events where an illusion of violence was intentionally created through the convention of armed stage combat. I provided an overview of the technology of stage combat as well as a brief overview of the largest stage combat organization in the U.S., the Society of American Fight Directors (SAFD).

In examining the nature of the prop weapon through Andrew Sofer's contention that props only come to life through their movement and obedience to actor intent, I have outlined how a prop, acting contrary to an actor's intent nullifies that object as a representation revealing it as an empirical object. In applying Jody Enders' axiom of intentionality to the accidents I have argued that regardless of the audience's reception of the event, the shift in the actor's intent when their prop weapon failed its function ended the theatrical contract. As Enders simply states, "there can be no theatre by accident" (Enders 37).

As with any in-depth research, only the tip of the iceberg is visible. The primary critique for this project is the failed representation of physical violence or spectacular danger. In future projects I intend to further research and critique additional Victorian era spectacles using gaslight, and to examine how electricity was used in early twentieth century spectacles. I also plan to further research and articulate the nature of theatrical regulation in Victorian London addressing the political and legal context of both "legitimate" theatre and theatrical entertainments, and how that regulatory apparatus affected theatre workers. Finally, I will continue cultivating critical approaches to the art of stage combat both from a historiographical

perspective as well as examining current complex representations of violence both physical and otherwise.

Sarah Guillot-Guyard, Clara Webster, Sarah Smith, The Gale Sisters, Emma Livry, Brandon Rubendall, Kevin Aubin, Christopher Tierney, Richard Kobak, Daniel Curry, Daniel Hoevels, David Birrell, Raphael Schumacher, John Erik Hexum, Brandon Lee, Agostino Carullo, Donato Gianfredi, Kevin Curtis and Owen Hart were all real people who were seriously injured or fatally wounded. Historical theatre accidents have a habit of becoming oddities that become anecdotes. In this study I have used terms like violence and trauma to critique illusory violence, but their violence was real. It is my ultimate hope that the gravity of the violence encountered by these performers is not brushed aside because it was “accidental.” In examining these events my sincere intent that additional scholars might give an extra look to accidents and conventions of violence, and engage them in a critical way.

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Jeremy is also active in Children's theatre, and spent two summers in Anchorage, Alaska working with the Alaska Theatre for Young People. He recently collaborated on creating a national drama curriculum for 3-6 year olds combining theatre games and activities geared toward aiding developmental benchmarks. Jeremy previously held positions at the University of Louisiana at Monroe, The Evergreen State College and with the Zachary Community Schools.