

ABSTRACT

Perpetuating Dialogue through Science and Art:
A Director's Approach to Shelagh Stephenson's *An Experiment With An Air Pump*

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In her play, *An Experiment With An Air Pump*, British playwright Shelagh Stephenson questions the nature of progress through the vehicles of science and art. Within the framework of an unapologetically theatrical presentation, the play depicts two historical time periods and two sets of characters. The created counterpoint challenges science and gender-related archetypes and exposes social prejudices without prescribing "correct" outcomes. This thesis documents and examines, from a director's perspective, the process of production of *An Experiment With An Air Pump* staged at Baylor University in November 2016. Discussions of the playwright, dramaturgical analysis, and directorial conceptualization were incorporated by the director as she collaborated with designers and actors in the creation of a compelling piece of theatre.

Perpetuating Dialogue through Science and Art: A Director's Approach to Shelagh
Stephenson's *An Experiment With An Air Pump*

by

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CHAPTER ONE

The Playwright and the Play

Introduction

Shelagh Stephenson's *An Experiment With An Air Pump*¹ has been referred to as "a witty social satire,"² "a science play,"³ "a history play,"⁴ "a medical detective story,"⁵ "a tragic comedy,"⁶ but, as most critics agree, these descriptions only partially explain Stephenson's text. Instead, this play is summarized by most as "ambitious." Within the play dialectics of art, gender, class, history, religion, and moral responsibility intersect, collide, and challenge one another; the text examines the true nature of progress through the vehicle of science. Considering both the written text and its performance at Baylor

¹ The playwright's capitalization of the title will be used throughout this article while the exact, albeit often incorrect, capitalization used in other articles and reviews will be used in notes and the bibliography to accurately cite the source.

² Kenneth Jones and Robert Simonson, "MTC Officially Starts *An Experiment With an Air Pump* Oct. 31," *Playbill*, October 31, 1999, accessed February 6, 2017, <http://www.playbill.com/article/mtc-officially-starts-an-experiment-with-an-air-pump-oct-31-com-85142>.

³ Kirsten Shepherd-Barr, *Science on Stage: From Doctor Faustus to Copenhagen* (Princeton, NJ: Princeton University Press, 2006), 111.

⁴ Peter Billingham, "Shelagh Stephenson," in *The Methuen Drama Guide to Contemporary British Playwrights*, ed. Martin Middeke, Peter Paul Schnierer, and Aleks Sierz (London: Methuen Drama, 2011), 483.

⁵ Kelley Swain, "*An Experiment with an Air Pump*: Medical Ethics Staged," review of *An Experiment With An Air Pump*, directed by Liisa Smith, Giant Olive Theatre Company, Lion and Unicorn Theatre, London, *CultureLab Blog*, October 28, 2011, accessed February 6, 2017, <https://www.newscientist.com/blogs/culturelab/2011/10/experimenting-with-medical-ethics-on-stage.html>.

⁶ Bill Gorman, review of *An Experiment With An Air Pump*, directed by B.J. Jones, Northlight Theatre, Skokie, IL, *Aisle Say Chicago*, accessed February 6, 2017, <http://www.aislesay.com/CHI-AIRPUMP.html>.

University, this thesis explores the directorial process in the creation of a unified, entertaining, and artistic presentation of Stephenson's work through the use of theorists such as Bertolt Brecht, cultural feminist theory, and Kristen Shepherd-Barr's work on the science play genre. This initial chapter will demonstrate the place *An Experiment With An Air Pump* holds in relation to the playwright's other artistic endeavors through a careful consideration of her body of work, writing career, and thematic interests.

Stephenson is primarily known as an award-winning television, film, and radio author. Anyone familiar with her work for the British Broadcasting Corporation (BBC), including season three of Masterpiece Theatre's *Downton Abbey*, recognizes her as a writer of witty, clever, and satisfying dialogue. Her self-proclaimed "fascination" with "scientific exploration and intellectual obsession"⁷ presented in her filmic texts also marks her theatrical body of work. Her plays express social concerns in the vein of Bertolt Brecht, presenting moral dilemmas and societal inconsistencies without prescribing "correct" outcomes. Instead of concrete/absolutist answers, both Brecht and Stephenson provoke questions and hypotheses, in true scientific manner, for audience observation and analysis. As her second stage play, *An Experiment With An Air Pump* reflects this approach in narrative, character, and thematic content.

A Career in Television, Film, Radio, and Theatre

Born in Northumberland as the middle child in a low-income family, Stephenson's first encounter with theatre was a play her mother took her to for her thirteenth birthday. The play so influenced Stephenson that she became determined to pursue a career in theatre and earned a degree in Drama from Manchester University in

⁷ Shelagh Stephenson, "Introduction," in *Plays: I* (New York: Bloomsbury, 2003), ix

1978. After graduation, Stephenson aspired to become like her hero, feminist playwright Caryl Churchill. Stephenson “used to invite her to...birthday parties (she was a friend of a friend) in the hope [Stephenson] might become her, by sheer proximity. Or Osmosis. Or something.”⁸ Though Stephenson had not officially met Churchill, Churchill’s plays and unconventional methods for story-telling were of particular interest to the young artist, later inspiring a turn to playwriting.

At the beginning of her career, however, Stephenson worked as an actress in television and film. In 1981, her role on *Coronation Street*, a major British soap opera produced by the BBC, gained her subsequent minor roles in film and television as well as a full season with the Royal Shakespeare Company. Throughout the next eight years, Stephenson appeared in several English films and television programs including *Rumpole's Return*, *Sapphire & Steel*, *The Gentle Touch*, *Boon*, *Paradise Postponed*, *Big Deal*, and the BBC series *The Adventures of Sherlock Holmes*. Yet, acting did not offer Stephenson the opportunity to create narrative or provide commentary as she wanted.

By the end of the decade, Stephenson turned away from acting to focus on writing, creating several original plays for BBC Radio. These early radio plays established a longtime partnership with the BBC and set a pattern for her career as a writer of socially-concerned drama. Among these early plays were *Darling Peidi* (first broadcast in 1993), based on the real-life murder trial of Edith Thompson, convicted and executed for murder without conclusive evidence; *The Anatomical Venus* (1994), a story about a troubled relationship between old friends; and *Bonjour Tritesse* (1995), a

⁸ Shelagh Stephenson, and The Quarter Club, “Shelagh Stephenson: Writer and Playwright Talks Courage to TQC,” interview with Shelagh Stephenson, *The Quarter Club*, accessed February 6, 2017, <http://thequarterclub.org/interviews/we-caught-up-with-shelagh-about-caryl-churchill-masterchef-selfies/>.

dramatization of Francoise Sagan's novel following the conflict between a teenage girl and her father's new mistress. Stephenson then wrote the award-winning radio drama *Five Kinds of Silence* (1996), about a woman, her two daughters, and the man who sexually abuses them after his own abusive childhood. This work demonstrated a maturation of style and boldness of content not seen in her previous radio plays, earning her the Writer's Guild Award for Best Original Play, the Mental Health Media Award for Best Radio Play, and the Society of Authors Sony Award for Best Radio Play all in 1997.

Shortly after success in radio, Stephenson made her debut in writing for the stage. Her first stage play, *The Memory of Water* (1996), depicted the reunion of three middle-aged sisters after the death of their mother. Written after the death of her own mother, Stephenson's play showed realistic characters steeped in sibling rivalry as the three women attempted to reconcile their conflicting memories of childhood. Scattered throughout an otherwise linear progression were periodic flashbacks, serving to illustrate each sister's version of the past. The play was produced at the Hampstead Theatre in London under the direction of Terry Johnson before transferring to the West End, where it was awarded the Laurence Olivier Award for Best Comedy. The following year, the production toured throughout the United Kingdom under Johnson's direction while also receiving an American premiere at the New York City Manhattan Theatre Club. The young playwright was praised by critics as "clearly a dramatist to watch"⁹ and the play became one of "Hampstead's most enduring hits of the 1990s," according to the current

⁹ Charles Spencer, *Theatre Record* 16, no. 15 (1996): 928.

artistic director of the theatre, Edward Hall.¹⁰ The commercial success of the play prompted a film adaptation, also written by Stephenson. The film was produced under the title *Before You Go* (2002) by her now husband, actor and director Eoin O'Callaghan. Recognition for *The Memory of Water* earned her the Peggy Ramsay Award in 1997 to produce her second play, *An Experiment With An Air Pump* (1998), directed by Matthew Lloyd at The Royal Exchange Theatre in Manchester the following year.

Similarly to her first play, *Air Pump* depicts familial conflict within a non-linear chronology. Unlike *Memory*, however, this play draws broader societal correlations. In 1799, a prominent English scientist, Joseph Fenwick, and his two live-in associates look forward to the quickly approaching new century. For Fenwick, scientific and political progress are just around the corner. His wife, daughters, and servant girl anticipate social progress will soon follow. The play then shifts to 1999, where Ellen, the great-granddaughter of an unidentified member of the Fenwick household, is a geneticist on the brink of a ground-breaking discovery. She struggles with a loss of love for her work while her husband, Tom, struggles with the possible ramifications of her research. The ensuing interpersonal conflict in both eras drives the narrative. The play debuted in Manchester with subsequent productions in London and New York and earned several award nominations (discussed later in this chapter).

Mixed critical reception in Britain resulted in significant revisions of the production text before the American premiere in 1999. In the original version, Susannah Fenwick, married to the mature philosopher-scientist Joseph Fenwick in the earlier time

¹⁰ Edward Hall, “Edward Hall Introduces Old Money,” Hampstead Theatre, November 21, 2012, accessed February 6, 2017, <https://www.hampsteadtheatre.com/news/2012/11/edward-hall-introduces-old-money/>.

period, is highly melodramatic while Ellen, appearing in the later time period, is cold and calculated. Revisions humanized both characters by shortening longer monologues and lengthening others. In addition, Stephenson reduced scientific jargon used by Ellen, the female scientist in the later era, and added a history of personal infertility. This change offered an emotional motivation for her pre-embryonic research and emphasized the difficulties of Ellen and Tom's marriage, adding overall complexity to the character of Ellen. This change also provided a personal reason for Tom, Ellen's husband, to take issue with his wife's research. In the original version, Ellen's attraction to a new job offer was based on monetary gain and power with no personal motivation for her hesitation in taking the job other than her husband's objections. These modifications clarified the dramatic action and significantly improved reception for the New York production.

Shortly after the premiere of *An Experiment With An Air Pump*, Stephenson began writing for theatre, film, and radio concurrently, even adapting several of her works to be performed in multiple mediums. The stage adaptation of her award-winning radio play, *Five Kinds of Silence*, debuted in London while *Air Pump* was playing in New York (2000). Another stage play, *Ancient Lights* (2000), was written for the Hampstead Theatre in London. In 2002, *An Experiment With An Air Pump* was adapted for BBC radio; also that same year, *Mappa Mundi* (2002) was produced at the Royal National Theatre in London. The following year, *The Affairs of Men* (2003), a film mini-series, was commissioned by the British film company, Four Boys Films, followed shortly by two radio plays for BBC Radio, *Life's a Dream* (2004), and *Through a Glass Darkly* (2004). Stephenson prepared *Enlightenment* (2005), a stage play to debut at the Abbey Theatre in Dublin, Ireland, *Nemesis* (2005), a radio play, and *Not a Love Story* (2005), a

television film for Channel 4, all at the same time. The next year, another radio play, *The Anatomical Venus*, was adapted for film (2006), and *Fallout* (2006), a stage play, received a staged reading at the Manhattan Theatre Club. Two years later her stage play, *The Long Road*, (2008), was written in conjunction with Synergy Theatre Project and the Forgiveness Project, for Soho Theatre in London. Since then, another stage play, *A Northern Odyssey* (2010), was performed as a rehearsed reading at Live Theatre in Newcastle upon Tyne, and later received a fully realized production. The positive reception of the production inspired a commission by the theatre for a trilogy of plays set in Newcastle to be written by Stephenson in the near future.

However, for the next three years, Stephenson moved away from playwriting in favor of writing for television, and film, with occasional credits in radio. In 2009, Stephenson rewrote the screenplay for the Carnival Four/BBC Films film *Enid* starring Helena Bonham Carter. While Stephenson was uncredited for her work on the film, it received several nominations from the British Academy of Film and Television Arts (BAFTA), reminding BBC producers of Stephenson's skill. After another radio play for BBC, *The People's Princess* (2010), Stephenson was asked to co-write an episode for season one of the award-winning BBC Masterpiece Theatre series *Downton Abbey* with Julian Fellowes. She was then commissioned to co-write all of season three. Although the season went on to win numerous awards and nominations, Stephenson received almost no recognition, and has since not produced much writing in any capacity or medium. Her most recent work for radio, *Baby Blue* (2013), was written for BBC shortly after her work on *Downton Abbey*.

After almost six years of absence from theatre, Stephenson returned with plans to complete a trilogy of plays for Live Theatre. Stephenson's newest play, *Harriet Martineau Dreams of Dancing* (2016), was produced this past November at Live Theatre under the direction of Max Roberts. According to the playwright, this play is a prequel to her previous work, *A Northern Odyssey* (2010), also produced under Roberts' direction. Both *Harriet Martineau* and *A Northern Odyssey* are two parts of a trilogy of fictionalized historical plays spanning three centuries and exploring feminist themes. A third play to complete the series is currently in the early stages of development.¹¹

Patterns of Science, Social Commentary, and Humor

An examination of Stephenson's body of work illustrates specific content and style patterns. Stephenson's early work is marked by what the playwright describes as "scientific exploration and intellectual obsession."¹² For Stephenson, science and human nature intersect, with neither offering simple solutions to the larger problems of society. Her first play, *The Memory of Water* (1996), features a female neurologist struggling with her role in her family after her father's death while *Five Kinds of Silence* (2000) explores Continuity Hypothesis Theory in sexual abuse. Tad in *Ancient Lights* (2000) is "fascinated by pathology,"¹³ which becomes a grotesque metaphor for the making of identity, Jack in *Mappa Mundi* (2002) is comforted by a New Age physics book on his death bed, using scientific principles to make sense of his approaching death, and *Fallout*

¹¹Live Theatre, "Shelagh Stephenson," Live Theatre, accessed, March 2, 2017, <http://www.live.org.uk/artist/shelagh-stephenson>.

¹² Stephenson, "Introduction," ix.

¹³ Ibid.

(2004) is a play about the ethics of scientific progress surrounding the invention of the atomic bomb.¹⁴ Finally, *Enlightenment* (2005) utilizes a new scientific invention to discuss the science of probability. The invention serves as a metaphor for a guilt-stricken mother uncertain of ever locating her son again after his untimely disappearance.

Although scientific characters and ideas are prominent in her early work, social commentary, especially around women's issues, remains the most pervasive feature of the entirety of her work. Her first stage play departure from science-related content, *The Long Road* (2008), still maintained what reviewer Charles Spencer called "intellectual rigour,"¹⁵ yet, social rehabilitation was at its core. The play examined a mother's struggle to forgive a young woman guilty of killing her son at knife-point during a violent, drug-induced rage. Based on interviews of victims' families and the accused, Stephenson sought to present a moral dilemma challenging the audience to form their own opinions. Scholar Gyllian Raby compares this tendency in Stephenson's writing to the great social dramatist Henrik Ibsen, whose controversial works were strongly concerned with the role of women in a changing society.¹⁶ While Stephenson divulged in an interview with Robin Usher, she is "very wary of becoming 'a women's writer,'"¹⁷ strong female roles appear

¹⁴ This work was never fully produced, but was given a staged reading at Manhattan Theatre Club and was adapted for radio the following year under the title *Nemesis*.

¹⁵ Charles Spencer, "The Long Road: a heartbreakin journey to forgiveness," review of *The Long Road*, directed by Esther Baker, Soho Theatre, London, *The Telegraph*, May 21, 2008, accessed August 13, 2016, <http://www.telegraph.co.uk/journalists/charles-spencer/3673547/The-Long-Road-a-heartbreaking-journey-to-forgiveness.html>.

¹⁶ Gyllian Raby, "From Pre-Luddites to the Human Genome Project: Smashing Frames in Shelagh Stephenson's *An Experiment with an Air Pump*," in *Images and Imagery: Frames, Borders, Limits*, ed. Leslie Boldt-Irons, Corrado Federici, and Ernesto Virgulti (New York: Peter Lang Inc., 2005), 137.

¹⁷ Shelagh Stephenson, and Robin Usher, "Shelagh and Her Sisters," interview with Shelagh Stephenson, *The Age.Com.Au*, May 26, 2004, accessed February 6, 2017, <http://www.theage.com.au/articles/2004/05/25/1085442127029.html>.

in her writing frequently with an obvious feminist agenda. From the playwright's perspective, narratives and topics that are female-centric also provide broader correlations for society, not simply an audience identified as women.

Stephenson's works address these sometimes weighty and socially significant topics with wit and comedy, making them accessible to a broad audience. Since the beginning of her career, Stephenson has been known as "an acute and funny writer"¹⁸ with "an ironic sense of comedy,"¹⁹ dubbed the "mistress of comic anguish."²⁰ Even Stephenson's gruesome play, *Five Kinds of Silence*, exploring generational sexual abuse, was received as a "grim yet occasionally funny drama."²¹ The playwright admits "I've got this tragic flaw that makes everything come out funny."²² The wielding of energetic, intelligent, and humorous dialogue and characters undoubtedly contributes to the momentum of even Stephenson's most serious narratives. As the playwright urges, "when they work, the plays should, with a bit of luck, produce extremes of laughter and pathos, intellectual debate and emotional resonance, hard on each other's heels."²³ Humor is just as essential to the playwright's work as intellectual exchange and social concern.

¹⁸ Robert Butler, "Theatre: Sometimes, bigger really is better," review of *The Memory of Water*, directed by Terry Johnson, Hampstead Theatre, London, *The Independent*, January 16, 1999, accessed February 8, 2017, <http://www.independent.co.uk/arts-entertainment/theatre-sometimes-bigger-really-is-better-1074448.html>.

¹⁹ Raby, 137.

²⁰ Susan Croft, "Shelagh Stephenson," in *She Also Writes Plays: An International Guide to Women Playwrights from the 10th to the 21st Century* (London: Faber and Faber, 2001), 245.

²¹ Kate Bassett, review of *Five Kinds of Silence*, directed by Ian Brown, Lyric Theatre Hammersmith, London, *Daily Telegraph*, May 6, 2000, repr., *Theatre Record* 20, no. 11 (June 2007): 672.

²² Stephenson, "Shelagh and Her Sisters."

²³ Stephenson, "Introduction," x.

As her second play, *An Experiment With An Air Pump* (1998) is no exception to Stephenson's pattern. Scientist, pseudo-scientist, and self-proclaimed artist characters engage in a theatrical and sometimes comic dialogue across time periods while the narrative chronicles a woman's journey from object to subject. The most striking combination of science, commentary, and wit is depicted in the character of Isobel, the disfigured servant girl. Isobel is tragically fetishized by science, yet is a source of comedy, wielding clever remarks, relating the story of an unattractive past suitor "with a face like a goat,"²⁴ and comically dressed as a sheep in the play-within-the-play. Through this character, the playwright engages dialectics of the ethics of scientific experimentation, social prejudices based on class and gender, and the irony of a deformed servant girl with a sense of humor. The thoughtful combination of these elements provides relief before a dark and tragic ending—a balance undoubtedly contributing to the continued production of the play.

Production History

An Experiment With An Air Pump received its world premiere on February 12, 1998 at the Royal Exchange Theatre in Manchester, England, under the direction of Matthew Lloyd with set and costume design by Julian McGowan and lighting design by Peter Mumford. The script's eleven roles were originated by Dearbhla Molloy (Susannah/Ellen), David Horovitch (Fenwick/Tom), Louise Yates (Harriet/Kate), Sarah Howe (Maria), Tom Smith (Roget), Tom Mannion (Armstrong/Phil), and Pauline Lockhart (Isobel). With her success from *The Memory of Water* still circulating and

²⁴ Shelagh Stephenson, *An Experiment With An Air Pump*, in *Plays: I* (New York: Bloomsbury, 2003), 190.

support from the Peggy Ramsay Foundation a year prior to the premiere, the path leading to this opening was uneventful. In October of the same year, the play transferred to the Hampstead Theatre (in London) where *The Memory of Water* previously premiered. The casting and production team remained the same with the exception of Dearbhla Molloy, who was replaced by Barbara Flynn in the lead role. The London production was nominated for the 1998 TMA Award for Best Supporting Actress (Pauline Lockhart, who played Isobel).

Following the same pattern as the performances at the Hampstead Theatre, *An Experiment With An Air Pump* made its American debut Off-Broadway at the Manhattan Theatre Club as *The Memory of Water* had the year before. After several postponements during previews due to actor Daniel Gerroll's health, *Air Pump* received its New York premiere on October 31, 1999 with a completely different production team and cast. Under the direction of Doug Hughes, the set was designed by John Lee Beatty, the lights were designed by Brian MacDevitt, the costumes were designed by Catherine Zuber, and David Van Tieghem provided original music and sound design. The roles were played by Linda Emond (Susannah/Ellen), Daniel Gerroll (Fenwick/Tom), Ana Reeder (Harriet/Kate), Clea Lewis (Maria), Christopher Duva (Roget), Jason Butler Harner (Armstrong/Phil), and Seana Kofoed (Isobel). In addition, the script was revised due to critical reception of the British performances. The American premiere was nominated for several awards including the 2000 Drama Desk Award for Outstanding Featured Actress in a Play (Seana Kofoed), and the 2000 Outer Critics Circle Award nominations for Outstanding Off Broadway Play, Outstanding Featured Actor in a Play (Daniel Gerroll), and Outstanding Scenic Design (John Lee Beatty).

The play has been performed globally in professional, community, and academic institutions over the past sixteen years, including performances immediately following the New York premiere at the Dallas Theater Center in Texas and the Northlight Theatre in Illinois, and a staged reading at the Hampstead Theatre in October 2009 with both David Horovitch and Barbara Flynn reprising their roles.

Critical Reception

As previously mentioned, the debut performances of *Air Pump* widely differed in audience response. The play was received harshly in Britain and more favorably by New York audiences. Overwhelmingly, British audiences were critical of Susannah and Ellen in their respective eras, accusing Susannah of melodrama and Ellen of heady intellectualism without much action or emotion. Susannah was archetypal and “perennial,”²⁵ or incessant, while Ellen was “insufficiently developed,”²⁶ and a “deadly bore.”²⁷ Beyond uninteresting characters, the play was hailed as excessively “ambitious...teeming with humour, eloquence, and above all, ideas,”²⁸ to the detriment of the narrative. Critics in Manchester argued “the ideas are doing all the walking,”²⁹ while audiences in London lamented Stephenson obviously had “more than one point to

²⁵ *Financial Times*, “The Pitfalls of Progress,” review of *An Experiment With An Air Pump*, directed by Matthew Lloyd, Hampstead Theatre, London, *Financial Times*, October 19, 1998.

²⁶ Jeffrey Wainwright, “What’s the Big Idea?” review of *An Experiment With An Air Pump*, directed by Matthew Lloyd, The Royal Exchange, Manchester, *Independent* [London], February 19, 1998: 7.

²⁷ “The Pitfalls of Progress.”

²⁸ Wainwright.

²⁹ *Ibid.*

make,”³⁰ “struggl[ing] to control a jungle of plot-lines and parallels.”³¹ These responses resulted in small but significant revisions of the production text before the American premiere in 2000 to clarify dramatic action and address character simplicity. American audiences post-revision recognized more clearly the feminist concerns of the play. The “corrected version,”³² as the playwright describes, was notably received as a “feminist revisiting of history and gendered power relations.”³³ In addition the female characters more clearly “personify the evolution of women in society generally and the world of science specifically,”³⁴ according to reviewers.

In spite of the added clarity, however, American critics still observed a feeling of being overwhelmed by the intersection of social issues. Reviewer Charles Isherwood described the narrative as “packed with debates,”³⁵ Peter Marks found himself “wondering at some point how exactly Ms. Stephenson is going to tie all her themes together,”³⁶ and Elyse Sommer reflected “Ms. Stephenson heaps our plate with so many ideas that we’re apt to at times feel like witnesses to a debate and need a doggie bag to carry home for further thought and discussion.”³⁷ Again, as in Britain, the play was

³⁰ “The Pitfalls of Progress.”

³¹ Ibid.

³² Stephenson, “Introduction,” ix.

³³ Billingham, 471.

³⁴ Elyse Sommer, review of *An Experiment With An Air Pump*, *CurtainUp Review*, 1999, accessed July 14, 2016, <http://www.curtainup.com/experimentwithanairpump.html>.

³⁵ Charles Isherwood, review of *An Experiment With An Air Pump*, directed by Doug Hughes, Manhattan Theater Club, City Center Stage, New York, *Variety*, October 31, 1999, accessed February 6, 2017, <http://variety.com/1999/film/reviews/an-experiment-with-an-air-pump-1200459975/>.

³⁶ Peter Marks, “Cutting Ethical Corners in the Name of Science, Then and Now,” review of *An Experiment With An Air Pump*, directed by Doug Hughes, Manhattan Theater Club, City Center Stage, New York, *New York Times*, November 1, 1999.

described as “strenuously ambitious,”³⁸ but unlike before, the work as a whole was “much more accessible and involving.”³⁹ Though the ideas were many, they were “engrossing,”⁴⁰ and “radiantly clear”⁴¹ and the characters were “vibrant,”⁴² experiencing significant “tragedies and epiphanies,”⁴³ as opposed to melodrama and coldness.

However, no amount of revision could bring forth Stephenson’s work from the shadow of Tom Stoppard’s *Arcadia* (1993) for both British and American audiences. Also considered a member of the “science play” genre, Stoppard’s play is also set in two time periods, performed in the same space, and was produced only a few years beforehand, in 1993. *Air Pump* is often referred to as “an homage”⁴⁴ to Stoppard’s piece, considered to be no more than “Arcadia Jr.”⁴⁵ One British reviewer identified this supposed mimicry as the cause for Stephenson’s underdeveloped “literary paper dolls,”⁴⁶ also accounting for the overwhelming “cornucopia of philosophic and social issues.”⁴⁷

³⁷ Sommer.

³⁸ Isherwood.

³⁹ Sommer.

⁴⁰ Marks.

⁴¹ Irene Backalenick, review of *An Experiment With An Air Pump*, directed by Doug Hughes, Manhattan Theatre Club, at City Center Stage, New York, *Back Stage*, November 5, 1999: 36, accessed September 15, 2016, <http://go.galegroup.com/ps/i.do?id=GALE%7CA57764580&v=2.1&u=txshracd2488&it=r&p=GRGM&sw=w&asid=089be7a6480f5ba7abfa832f4c41cc44>.

⁴² Ibid.

⁴³ Marks.

⁴⁴ Jayne Blanchard, “Science, Passion at Play,” *Washington Times*, December 7, 2006.

⁴⁵ Marks.

⁴⁶ Isherwood.

⁴⁷ Sommer.

Another British reviewer argued “Stephenson needs to cultivate her own voice, not someone else’s. England doesn’t need another Stoppard.”⁴⁸ Yet, the continued production and separate study of both works nullifies accusations of mimicry. Conversely, what is regarded as profoundly memorable and central to Stephenson’s text is not found in Stoppard’s—the permeation of a historical work of art in various forms throughout the play, as well as a feminist perspective. While comparisons with Stoppard’s work are common, including a thoughtful scholarly article by theatre historian Tomas Kacer,⁴⁹ an unfavorable response criticizing Stephenson’s lack of originality is in the minority.

Regardless of which version of the script was used, both critics and scholars alike responded profoundly to Joseph Wright’s painting staged as the frontispiece of the play. Almost every review and article considered for this study included a description of the play as seen through Wright’s depiction of science and humanity captured in his self-proclaimed “conversation piece.” Peter Marks of *The New York Times* observes, “like the tableau [the painting] depicts, the play is a portrait of the uncertainty in an increasingly sophisticated technological age—two such ages, in fact—and how the challenges are born variously by those depicted: the young, the mature, the idealistic, the cynical, the romantic.”⁵⁰ Marks connects a visual age of “uncertainty” with the historical representation of Boyle’s experiment. This convention, although not exclusive to Stephenson by any means, seems particularly effective in a postmodern age. Scholars like Gyllian Raby link the painting to “the play’s larger deconstruction of history as

⁴⁸ Isherwood.

⁴⁹ Thomas Kacer, “‘I am Britannia, The Spirit of Our Age’: Time Shifting as a Study of the Idea of Progress in Tom Stoppard’s *Arcadia* and Shelagh Stephenson’s *An Experiment with an Air Pump*,” *BRNO Studies in English* 33 (2007): 157-167.

⁵⁰ Marks.

[Susannah] bursts frames of conventional audience expectation,...expos[ing] the Enlightenment dream of Science as an artificial conceptual framework that separates science from nature, public from private, and thought from feelings [sic].”⁵¹ The concept of art emerging from, perpetuating, and challenging the societies from which and to which it speaks is no novelty to artists and historians, but manifesting a direct visual correlation in living form perpetuates a different kind of “conversation piece” that transcends both time and conventionality.

Synopsis

The action of *Air Pump* is divided between two time periods with one overarching narrative. A common setting and dual protagonists, Susannah Fenwick and Ellen, played by the same actress, tie both time periods together. In 1799, Susannah Fenwick is the neglected wife of scientist Joseph Fenwick, seeking intellectual and social equality within her own household. In 1999, Ellen, a scientist, struggles with the decision to take a new employment opportunity in a controversial area of research. A subplot set in 1799 and resurfacing in 1999 features a Scottish slave girl, Isobel, and her scientist admirer Armstrong. Another subplot also set in 1799 features the Fenwicks’ eldest daughter Maria and her absent fiancé, Edward. Maria’s narrative appears largely during transitions between time periods, but is consistent with the action of the earlier time period. All three plotlines will be traced here under the subheadings “Prologue,” “Act I,” and “Act II,” delineated first by formal act divisions, and further analyzed by time period in the order in which they appear in the text. This structure perpetuates an intentional counterpoint

⁵¹ Raby, 137.

between eras fundamental to the overarching ideas of the play and is of central importance to this discussion.

Prologue

The play begins with Ellen admiring a life-size version of Joseph Wright's painting *An Experiment on a Bird in the Air Pump*. Ellen describes her visceral reactions to the painting as dressers begin to robe her in the costume of her 1799 counterpart, Susannah. During the transformation, the actress continues to directly address the audience, never verbally acknowledging the drastic costume change occurring. During the change, the other actors take their place in a living tableau of the painting. Suddenly, the lights change and the action shifts to 1799 with an eruption of anxiety, frustration, and eagerness; it is the moment depicted in and just after Wright's dramatic painting. Joseph Fenwick, the scientist at the center of the painting, releases air into the glass chamber and the bird lives.

Act One

Act one takes place shortly after the events of the prologue in 1799. Fenwick and his associates are busy at work while Susannah plays cards by herself in the corner, occasionally interjecting her opinions and comments into the ongoing conversation. However, Susannah remains unacknowledged by her husband for the majority of the scene. During the scene, she flirts with Fenwick's associates, challenges Fenwick's opinions, and even stages a play penned by her daughter, Harriet, in hopes of provoking her husband. Yet, much to Susannah's chagrin, nothing is able to distract him from his work except the intellectual Scottish servant, Isobel. Deformed since birth, Isobel was

abandoned by her family, but taken in by the Fenwicks. As Isobel engages the scientist and his apprentices in conversation, Susannah retreats from the room with Fenwick following close behind. Alone with Isobel, both Armstrong and Roget, young scientists and guests of the Fenwicks, show marked interest in the peculiar servant girl, though Isobel is skeptical of their attention. As the scene ends, Maria enters reading a letter from her fiancé, Edward, currently stationed in India with the British military. What is expected to be an affectionate letter from a lover is soon revealed to be a grotesque account of the discomforts of India, and the admirable swooning of a visiting lady. Maria gives no verbal response, but seems satisfied that the letter expresses a distaste for his surroundings in her absence.

When the next scene begins, the setting is the same, but two hundred years later. In 1999, Ellen, a descendent of the Fenwick family, is preparing to sell the inherited family estate. She has also been offered an opportunity to work with her colleague, Kate, and further her innovative pre-embryonic genetic research for great social and financial gain. Unfortunately, advancing her career could mean the end of her marriage. Ellen's husband, Tom, is a retired English teacher in the midst of an "ethical crisis" with his wife's research involving rejected fetuses leftover from in vitro fertilization.⁵² All decisions must be finalized by New Year's Eve. A debate ensues between the couple as well as with Phil, a quirky electrician working for a potential commercial buyer for the house, and Kate, Ellen's colleague and fellow scientist. Dialogue between Ellen, Kate, and Phil in the first 1999 scene explores the morality of science, the complexities and oddities of humanity, and even extraterrestrial life. At the end of the scene, Tom emerges

⁵² Stephenson, *Air Pump*, 171.

from outside, visibly shaken after discovering an unexplainable box of bones buried under an old kitchen cabinet. The scene ends and Maria appears, reading another “love letter” from her fiancé in 1799. This letter describes Edward’s various physical ailments, the unbearable heat, and the savage beasts of a foreign land far from home. Again, Maria gives no verbal response, but seems at least satisfied she remains in his thoughts.

In scene three, the time is still 1799. Isobel polishes silver in the Fenwick dining room as Roget awkwardly attempts to make conversation. Isobel rejects his friendly advances as Susannah and Fenwick enter. Fenwick waxes eloquent about societal progress and he again intentionally excludes Susannah from the conversation in spite of her attempts to interject. It is only when Susannah blatantly speaks in opposition to his utopic upheaval of the monarchy that he addresses her in exasperation. Humiliated, Susannah excuses herself from the room and the conversation between the men continues, revealing Fenwick’s humanitarian motivation for his work and Roget’s lack of direction in that regard. After the men leave, Isobel enters followed by a persistent Armstrong. Though she is skeptical of Armstrong’s romantic interest, she accepts a book of Shakespeare’s sonnets from him as a gift and the action freezes in 1799. While Isobel and Armstrong are in tableau on one part of the stage, the time turns to 1999 on another part of the stage where Ellen is attempting to diffuse Tom’s disturbance over the discovered box of bones and to obtain his support for the future of her career. In response, Tom appeals to Ellen’s humanity, reminding her of her six failed pregnancies and observing how science has changed her. Ellen responds in a defensive manner, accusing Tom of hypocrisy. As the conversation comes to a frustrating end, Tom turns his attention back to the discovered box of bones and relates a tiny gold chain was found

with the body. Still frozen in tableau until now, Isobel and Armstrong continue their conversation as Tom and Ellen exit. Isobel allows Armstrong to kiss her and promises to meet with him the next day. The act closes with Isobel alone onstage enraptured by a sonnet marked for her in the book Armstrong gave her.

Act Two

Act two begins with Maria in her shepherdess costume for her sister's play, reading a third letter from Edward. As Maria reads the letter, she soon realizes the content is saturated with references to another woman and Edward is considering extending his stay in India. Furthermore, an inaccurate reference to Maria's eye color leads Maria to question Edward's affection. As Harriet and Isobel enter to prepare for another rehearsal of Harriet's play, Maria excuses herself from the room, followed by a disgruntled Harriet. The rest of the 1799 characters enter and take their seats for the final dress rehearsal of Harriet's play. Harriet and Maria reenter, but even throughout the performance, it is clear a disagreement has occurred between the sisters and tension builds. Susannah navigates her daughters' differences throughout the performance, attempting to maintain dramatic interest and guide Harriet in her creative process. However, the tension with Maria and the criticism from her mother is too much for Harriet to bear. After a particularly frustrating halt in the performance, Harriet throws down her script, lashes out at the audience, and declares she has no desire to be a poet, but instead wants to follow in her father's footsteps. Harriet rushes from the room with Susannah and Maria following. As Fenwick and Roget excuse themselves, Armstrong and Isobel are left behind. Armstrong confesses his passionate love for Isobel before

joining Fenwick and Roget, leaving Isobel to ruminate over her growing feelings for Armstrong.

The transition to 1999 occurs as Tom and Phil appear in the same room, two hundred years into the future. Their discussion revolves around the unidentified body found in act one. Phil lights a candle and both men sit in silence honoring the remains of the dead girl. As Phil shares his concern over the future of Ellen's research, Kate and Ellen enter. Tom again urges Ellen to consider the danger of science without ethical qualms, using the unmarked box of bones as an example of careless medical research. Ellen rejects Tom's perspective and the lights fade to 1799. Armstrong and Roget appear in the cellar of the Fenwick household, playing badminton and debating the ethics of grave-digging for scientific research. While Armstrong reveals his pursuit of scientific progress no matter the cost, Roget is wary of the affect such methods have on humanity. At the end of this scene, Maria appears with a letter to Edward, finally rebuking him for his neglect and challenging him to defend his actions.

In the following scene, in 1799, the Fenwicks are seated around the dinner table while Isobel clears away plates from the evening meal. When Fenwick asks Isobel to join them at the table, an intoxicated Susannah points out the double standard in his treatment of the servants. Her confrontation is interrupted by Harriet's presentation of a chimney hat she fashioned through experimentation that produces steam. Fenwick is proud of his daughter's innovation but disturbed by his wife's continued impropriety, dismissing everyone from the room to rebuke Susannah. Now that Susannah has finally gained his attention, she confronts Fenwick for his neglect of her. Fenwick reveals his attraction to her ultimately stemmed from her beauty and little else, misunderstanding Susannah's

desire for inclusion in his intellectual affairs. Susannah decidedly persists on a more active role, but before Fenwick can respond, the other characters reenter and Harriet and Maria engage in a physical brawl. Fenwick and Susannah separate them and Fenwick supports his wife's reprimand of Harriet. The four of them exit to resolve the altercation, leaving Isobel and Armstrong to discuss their secret love affair. Now alone, Isobel confirms she may be falling in love with Armstrong. In exchange, he gives her a gift to open later, later revealed as a small gold chain. The two begin kissing passionately, but their foreplay is interrupted with the entrance of a very skeptical Roget. Isobel excuses herself and Roget confronts Armstrong regarding his intentions with the deformed servant girl. Without realizing that Isobel is eavesdropping nearby, Armstrong divulges his self-serving agenda to seduce Isobel in order to get a closer look at her back. At this, Roget hurls a string of derogatory insults at Armstrong, by which Armstrong is truly confused. Both men exit as Maria writes her final reply to Edward, wishing for his violent demise and demanding that he never write to her again.

The action shifts to the later time period and Tom congratulates Ellen on finally making a decision to take the new job. Tom and Ellen finally recognize their commonalities. Kate enters mid-conversation and engages, once again, in a friendly debate with Tom as Phil enters briefly for a New Year's Eve toast before exiting. At that, Ellen, Kate, and Tom freeze in tableau and Isobel appears. She reads a note of heart-brokenness while clutching the gold necklace Armstrong gave her.

As the lights come up on the following scene, it is later that evening in 1799 and Isobel's lifeless body hangs from a rope around her neck in Fenwick's lab. Maria enters the room, followed closely by Armstrong at the sound of Maria's screams. After

removing Isobel from the rope, Maria rushes out to find help. Alone with a quickly fading Isobel, Armstrong covers Isobel's mouth and nose, suffocating her with his hands. As her feet flutter with the last signs of life, he locates the suicide note, crumples it up and places it in his pocket. Just then, Fenwick, Susannah, Roget, Harriet, and Maria enter bewildered at the site of Isobel lying dead on the floor. Everyone but Roget and Armstrong exit with Isobel's body. Alone, Roget confronts Armstrong for his involvement in Isobel's demise. Armstrong resists accusations, but admits Isobel's death is convenient for research. Roget punches Armstrong in the stomach and the scene changes to the same evening in 1999. Tom and Ellen stand alone in the same room as the 1799 previous scene. Now the room is empty, with everything packed and prepared for moving away. Tom romanticizes their opportunity for a new start, and Ellen reciprocates his support as they joke about the future of the Fenwick house. As Tom again turns the conversation to the box of bones, they both conclude neither of them will ever know exactly what happened.

An ongoing mixture of rioting and celebrating is heard from the streets outside and the action moves back into 1799. Fenwick and Susannah enter, joining Roget, Maria, and Harriet around Isobel's body on New Year's Eve. Fenwick reveals his hopes for the new century have darkened and he is no longer optimistic. The lights change again and the closing image of the play is revealed, mimicking the opening tableau of Wright's painting, but this time including Susannah and with Isobel's body replacing the bird and air pump at the center of the painting. The family is visually united as chimes usher in the New Year and Fenwick solemnly toasts an uncertain future. With this closing, all three

time periods are again intertwined, with 1799 present onstage, 1999 recalled in the image of the toast, and the audience engaged with the actors, looking toward the future.

Conclusion

Stephenson's text does not offer a prescription of what is exactly right and wrong, but provokes, in true scientific manner, questioning and hypothesizing. Stephenson's characters pursue science and art as a means of "understand[ing] the world" or "chang[ing] the world,"⁵³ while the playwright proposes and challenges the possibility of finding answers at all. As fellow science play writer Timberlake Wertenbaker argues, "the whole point of being an artist is to look beyond the received ideas and to question them."⁵⁴ It is, perhaps, this noble pursuit that continues to interest contemporary audiences searching for solutions to ongoing political and social unrest. The following pages are meant to chronicle the process of bringing Shelagh Stephenson's *An Experiment With An Air Pump* to Baylor's Jones Theatre, from early analysis through final evaluation. The following chapters will provide the theoretical understanding and directorial approach to designers and performers.

⁵³ Stephenson, *Air Pump*, 182.

⁵⁴ Timberlake Wertenbaker, and John Louis DiGaetani, *A Search for a Postmodern Theater: Interviews with Contemporary Playwrights* (New York: Greenwood Press, 1991), 273.

CHAPTER TWO

Analyzing the Play

Introduction

The continued production of *An Experiment With An Air Pump* in spite of middling reviews is a credit to the quality of the work. The play sustains dramatic interest through a masterful collision of representational and presentational elements which engage and interrupt the audience. In both form and content, the play acts as a dialogue on various social and philosophical perspectives across time. No single stance is offered as the way forward. Instead, as theatre scholar Claudia Barnett argues, “the play is not about either/or but about both; about how seeming opposites coexist and how meaning is generated every time they collide.”¹ The playwright perpetuates meaning in the space between viewpoints. This chapter explores this collision through the dramaturgical principles inherent in Shelagh Stephenson’s text. The resulting analysis provides a basis for the directorial interpretation that went into staging the work. Prior to application of critical theories, however, the chapter details an examination of the dramatic composition of the text in structure, character, and theme. The following several pages explore these elements and draw connections to core ideas of the play.

¹ Claudia Barnett, “A Moral Dialectic: Shelagh Stephenson’s *An Experiment with an Air Pump*,” *Modern Drama* 49, no. 2 (Summer 2006): 209, accessed September 5, 2016, <http://muse.jhu.edu.ezproxy.baylor.edu/article/201089/pdf>.

Dramatic Structure

Stephenson divides her narrative across two eras and two sets of characters using an episodic structure. Although the script contains formal act and scene divisions, the interruptions in the action through changing of the time periods create isolated segments which progress toward a series of climaxes. The alternating of time periods prevents the linkage of scenes through causation. Instead, each segment is completely separate from the segment preceding it, resulting in an episodic, as opposed to climactic, structure. According to dramatist Bertolt Brecht, the primary goal of this structure is to prevent hypnotic “forcing of empathy.”² This offers the audience complete freedom to think analytically about what is before them. The result is a non-illusory vehicle for story-telling with emphasis on commentary as opposed to emotional attachment.

Stephenson utilizes this structure to allow multiple stories to be considered side by side. Although the inciting incidents for each story are unclear, the playwright provides unmistakable dramatic climaxes. Dramaturgically, Ellen’s decision to take the job occurs during the same scene (act two, scene three) in which Susannah confronts Fenwick, Maria rejects Edward, and Isobel admits her love for Armstrong. All of these incidents occur in consecutive episodes within the same scene. Isobel’s decision to commit suicide occurs shortly after this (act two, scene four). This convergence highlights the counterpoint between the three plotlines, made obvious through the arrangement of episodes. This also prevents undivided emotional commitment to any one of these scenarios. By interrupting the action just as each one of these climactic moments

² Bertolt Brecht, “Notes on Stanislavsky,” *Tulane Drama Review* 9, no. 2 (Winter 1964): 156, accessed, February 5, 2017, <http://www.jstor.org/stable/1125107>.

occur, the audience is free to observe and draw conclusions instead of obligated to empathize.

Though not connected through causation, subsequent episodes are connected through a shared timeline. The play takes place over the course of three days set two hundred years apart. Act one occurs on December 30, 1799 and 1999, and act two occurs on New Year's Eve into New Year's Day in both centuries. Although separated by two hundred years, all scenes take place in the same locale “on the threshold of a new century.”³ Consequently, characters in both eras are very aware of the potential for progress, making predictions and looking forward to what the new year holds. The setting provides a framework for comparison through this episodic structure. As the play comes to a close, the audience is aware of a lack of universal improvement, although progress has been made.

The interconnectedness of Stephenson’s episodic structure is further manifested visually in what scholar Natalie Crohn Schmitt describes as “spatial” structure.⁴ In *Actors and Onlookers: Theater and Twentieth-Century Scientific Views of Nature*, Schmitt outlines this approach to dramatic text through a scientific lens. According to Schmitt, dramatists of the twentieth-century readily embrace the uncertainty of “experimentation” and resist an “Aristotelian theater aesthetic,” in which art imitates nature in a highly regulated manner.⁵ Consequently, like an experiment presented for observation, emphasis

³ Shelagh Stephenson, *An Experiment With An Air Pump*, in *Plays: I* (New York: Bloomsbury, 2003), 153.

⁴ Natalie Crohn Schmitt, *Actors and Onlookers: Theater and Twentieth-Century Scientific Views of Nature* (Evanston, IL: Northwestern University Press, 1990), 118.

⁵ Ibid, 2.

in story-telling shifts from cause-and-effect, as in a traditional climactic structure, to the time and space in which an isolated incident occurs akin to the controlled environment of an experiment. In spatial structure, “the moments are significant in themselves.”⁶

According to Schmitt, a performance utilizing spatial structure is composed of “a series of extended moments” that provide dramatic interest regardless of their place in the overarching narrative.⁷ The objective is to promote observation over causality, highlighting the active role of the audience member.

Stephenson utilizes spatial structure through intentional overlap in staging between the two time periods. In act two, scene three, scenes from both eras occur consecutively in the dining room. Fenwick and Susannah discuss their relationship in 1799 and Tom and Ellen discuss their relationship in 1999. To draw visual allusions between characters, the playwright specifies that Fenwick and Ellen, and Tom and Susannah sit in the same seats at the table. There is no motivation to sit in the same chair except to draw parallels for the audience. In two other places in the text, the playwright calls for the simultaneous depiction of both time periods through the use of *tableaux vivante*. In act one, scene three, Isobel and Armstrong freeze in tableau while Ellen and Tom continue with their scene. The image of Isobel enjoying a book of Shakespeare’s sonnets while Armstrong looks on is contrasted with Tom’s challenging of Ellen’s research. In act two, scene three, Isobel reads her suicide note while Tom, Ellen, and Kate freeze in tableau. While Isobel expresses her anguish at the hands of science, the 1999 characters celebrate the prospect of new scientific advances due to Ellen’s research.

⁶ Ibid, 118.

⁷ Ibid.

These isolated moments depict otherwise unrelated incidents, and provide conflicting images of science and the ramifications of experimentation. The visual parallels created expose the non-realistic convergence of time periods and also create commentary through counterpoint. By stringing together extended moments across two centuries, Stephenson's text functions like a series of images intertwined and dialoguing with each other in spite of chronology, yet connected through shared space.

The first dialogic image of the play, Joseph Wright's iconic *An Experiment on a Bird in the Air Pump*, seen in figure A.1, depicts a microcosm of society, beginning the discussion and framing the narrative with a philosophical and visual counterpoint. The painting depicts a group of people huddled around a scientist by candlelight, eager for the results of the air pump experiment. The moment of Wright's painting depicts the turning point of the experiment—either the scientist releases oxygen into the glass dome and lets the bird live, or he withholds oxygen and lets the bird die. While stepping into the role of Susannah during the prologue, Ellen explains the various attitudes of the prominent characters:

This painting described the world to me. The two small girls on the right are terrified he's going to kill their pet dove. The young scientist on the left is captivated, fascinated, his watch primed, he doesn't care whether the dove dies or not...The two young lovers next to him don't give a damn about any of it. But the elderly man in the chair is worried about what it all means...He bears the weight of all the old certainties and he knows they're slipping away from him and his kind.⁸

The characters depicted in the painting are found at a turning point between science and their own humanity, but are also philosophically in conflict with one another. As the actors step into their corresponding roles in a living replica of the painting, the

⁸ Stephenson, *Air Pump*, 139-140.

conflict of the artwork is directly translated to Stephenson's play. According to theatre scholar Claudia Barnett, in this extended moment of juxtaposition, "the past allegorizes the present, the first scene allegorizes the last, and the painting allegorizes the play."⁹ In addition to dramatic content, the opening image establishes a pattern of dramatic and thematic counterpoint to be continued throughout the play.

Stephenson's use of episodic and spatial structures provides the framework for dramatic action. Though disjointed in the use of episodes, the action remains unified visually in the double-casting of the protagonists, Ellen and Susannah. At the beginning of the play, Stephenson invites the audience to observe both characters simultaneously in a transformative onstage costume change from Ellen to Susannah. While this is the only exposed costume change called for in the script, the intentional choice to defy theatrical illusion highlights the significance of these characters who, in tandem, act as the protagonist. While Ellen's journey is significantly shorter than Susannah's simply due to the number of pages dedicated to each time period, without Ellen's narrative, Susannah's battle for equality is incomplete. Without Susannah, Ellen's agency is lessened in significance. When considered together, however, the total narrative plants itself firmly within historical and social discourse. As the protagonist, Susannah/Ellen pursues equality and agency resulting in the total dramatic action of progress from a feminist perspective.¹⁰ In watching the same actress play both characters, the moments of action in each time period are made more significant because of the correlations to the other character.

⁹ Barnett, 219.

¹⁰ For purposes of this discussion, these two characters will be referred to jointly as Susannah/Ellen.

The secondary storylines featuring Isobel and Maria provide counterpoint to the protagonist's journey. Isobel's story intersects with both time periods symbolically as a living experiment in the earlier time period and a tangible reminder of the cost of such work in the later. Isobel also serves as a counterpoint to Susannah's situation, choosing to end her life instead of confront her oppressor, as Susannah does. In the structure of the script, Maria's journey largely serves as a transition between episodes. Significantly, however, her character development is evidence of societal improvement. By rejecting Edward in the early signs of neglect, Maria will not needlessly endure an unbalanced marriage as her mother did. This decision demonstrates greater agency is available for the next generation.

Character Analysis

Additional doubling and counterpoints further complicate character analysis. Just as Susannah and Ellen are played by the same actor, Fenwick and Tom, Armstrong and Phil, and Harriet and Kate are also portrayed in the same manner, but do not complete one unified character progression. The other primary characters, Fenwick, Tom, Isobel, and Maria, influence the primary conflict, and exhibit individual transformation. The secondary characters, Armstrong, Phil, Harriet, Kate, and Roget, are vital to the overarching narrative, but exhibit no personal change. Specifically, in Stephenson's play, these characters are also framed by their role in the philosophical and social dialogue created through counterpoint. Each character's dramatic journey and dramaturgical significance will be examined here. An analysis of the frontispiece of the play, Joseph Wright's painting, as a basis for character, and the feminist commentary created by the play will be addressed later in the chapter.

Primary Characters

Susannah Fenwick. Susannah is the protagonist seeking equality. When the play begins, Susannah is irritated by her situation, but settles for occasional interjections in conversation. By the time the play ends, she has undergone a complete alteration, offended by her husband's neglect. After a display of Fenwick's continued favor toward the servant girl over her, Susannah's disgust over the trivial role she plays in her own household drives a drunken confrontation. Susannah is no longer willing to tolerate her situation and enacts change. Her final confrontation of Fenwick's behavior demonstrates a progression from mild dissent to accusations of neglect and hypocrisy in her quest for equality.

As the protagonist, Susannah's pursuit is central to the narrative and structure of the play. Her journey also establishes a pattern of philosophical and social counterpoint. In the earlier time period, Susannah represents one side of a central dialogue between art and science. Susannah argues, as an artist, she is better attuned to passion and humanity. The gendering and humanity of each area is challenged when Ellen, played by the same actress, appears as a successful scientist in the later era facing an ethical crisis. Though Susannah is able to begin the process towards agency, true social equality still requires financial, educational, and political opportunity not yet available to her in the eighteenth century. As the historical counterpart to Ellen, her journey demonstrates the slow process of gender parity.

Ellen. Ellen is also the protagonist pursuing agency. At the beginning of the play, Ellen's energy for science and patience for Tom's traditionalism is waning. Her attempt

to include her husband in the decision to take a new job is rejected, forcing her to make the decision on her own. This independence allows her to re-examine her motivations for research and accept the job offer. In this moment of transformation agency is restored as well as her passion for science. The decision to take the new position is motivated by self-discovery, not guilt or greed, as her husband feared. As a result, her relationship with Tom is strengthened and her confidence renewed.

Played by the same actor as Susannah, Ellen's role as an independent, successful scientist challenges the nature and gender of science. Though Ellen rejects sentimentality, her passion eventually drives the decision to continue her research. According to Susannah, scientists are cold and unfeeling, but Ellen exhibits emotional attachment to science and exploration. Her presence in the play frustrates a simplistic binary in this regard. By including a female scientist, the playwright challenges the gendering of science as strictly male. This also complicates a simplistic gender binary. Her journey highlights the complexity gender parity brings two hundred years later.

Joseph Fenwick. Fenwick is a mature philosopher-scientist desiring to play an active role in generations to come, but blind to his shortcomings. At the beginning of the play, Fenwick ignores his wife in favor of utopic scientific discovery. After being confronted by Susannah for his hypocrisy in act two, scene three, Fenwick turns his attention to the affairs of his own household, defending his wife's rebuke of their daughters only a few lines later. By the end of the play, his previous optimism for the future of society is shaken by Isobel's suicide. This tragedy provides an example of the ramifications of neglect within his own household and the uncertainty of the future.

Although he holds democracy in high esteem, he is neglectful of its consistent application within his own household. Husband to Susannah, father to Harriet and Maria, mentor to Armstrong and Roget, and master to Isobel, he is in the position of the most power in the earlier era. Like the scientist in the painting, power also means he holds the fate of the weak and marginalized in his hands. Fenwick's power emphasizes Susannah's lack of agency. He is the all-powerful scientist who must learn benevolence. His journey impacts the primary conflict as an agent capable of change.

Tom. Unlike his 1799 counterpart, Tom is perplexed at the progress of science and seeks, instead, to revive ideas of the past. A conservative, “dinosaur” of an English lecturer, Tom is motivated by the metaphysical forces of intuition and sentimentalism. His continued consideration of the box of bones he discovered demonstrates his urgency to preserve the “arc of things,”¹¹ connecting the past with the present in light of the future. He also finds his wife’s material for research “unsettling” and her lack of issue with it confusing.¹² Yet, in the end, Tom supports his wife’s decision to continue her research, seeing how much this work inspires her. In act one, Tom opposes his wife’s possible new job and refuses to take part in making a decision with her due to his “ethical crisis.”¹³ Yet, by the end of the play, Tom has not only removed himself as an obstacle, but has resolved to leave the past behind in favor of a new future with his wife.

Tom’s journey reinforces the thematic tension between science and art presented in the play. As a retired English lecturer, Tom holds the same art-driven sentiments as

¹¹ Stephenson, *Air Pump*, 225.

¹² Ibid, 188.

¹³ Ibid, 171.

Susannah. According to Tom, the humanities provide a deeper, metaphysical understanding of the sanctity of human life in contrast to the big business culture of modern science. In comparison, Fenwick thrives on the power of science and remains hopeful for progress, while Tom questions the supposed freedom that comes from greater knowledge. If Fenwick suffers tunnel vision by holding his gaze firmly on the future, Tom is consumed with those marginalized by science, romanticizing the ethics of history. Tom is the morally sensitive artist who must come to terms with the pervasiveness of science. Though Tom is not in direct opposition to Ellen's objective, conflict occurs between their viewpoints. The doubling of Fenwick and Tom further challenges the gendering of both disciplines, providing counterpoint to Susannah and Ellen respectively.

Isobel Bridie. Isobel journeys from self-denial to self-loathing. At the beginning of the play, Isobel rejects herself as an object of desire. Although willing to share information about her Scottish heritage, she does not like to talk about herself specifically, nor does she trust when Fenwick's associate, Armstrong, makes flirtatious advances towards her. A change in attitude occurs when she accepts Armstrong's love, which causes her to reciprocate his feigned affection and begin to dream of something beyond her lowly existence. After overhearing Armstrong's malicious intentions, her newly discovered hopes are extinguished along with her will to live.

Isobel has no character double, but is symbolically doubled by the bird in the air pump experiment. Isobel's last name, "Bridie," emphasizes her replacement of the bird in the final tableau of the play—the involuntary subject of science. Like the bird, Isobel is ultimately disposable. Her journey is largely cautionary within the dialogue of the play. The bird, and Isobel, represent those marginalized and mistreated in the name of

progress, providing larger correlations for the role of science in society. Her connection to Susannah has previously been discussed, while her role in the feminist commentary generated by the play will be discussed later.

Maria Fenwick. Maria journeys from passive naiveté to self-awareness. At the beginning of the play, Maria is young and virginal, simply desiring to fulfill expectations as befits a lady of her age and situation. According to her twin sister, Harriet, Maria is “most expert at sulking,” and exhibits delicate sensibilities, especially in the case of her father’s recent experiments with animals.¹⁴ As “the mild, perhaps even silly, half of the heavenly twins,” Maria describes herself as “very much in Harriet’s poetic shadow,” with few prospects other than marriage.¹⁵ She embraces this role initially, proudly declaring her superiority as “the quiet one...which is why [she has] a fiancé, and Harriet has not.”¹⁶ As the play progresses, however, Maria recognizes the one-sided nature of her relationship with Edward. Her final written reproaches of her fiancé reveal a change of attitude and heightened self-awareness. In the end, she chooses self-respect over marriage.

Like Isobel, Maria also has no character double in the later time period, but appears as a transitional symbol of conventional femininity. The playwright specifies that Maria appears in her shepherdess costume until after the letter she reads at the beginning of act two, in which she discovers Edward’s neglect. The playwright also specifies Maria’s first three letters be underscored by pastoral music, supporting the idyllic

¹⁴ Ibid, 195.

¹⁵ Ibid, 208.

¹⁶ Ibid, 154.

imagery. Her concern and care of Edward, her pet dove named for her fiancé and used for the air pump experiment, further emphasizes the feminine imagery of tender devotion and caretaking. Prior to self-awareness, Maria's visual and aural themes serve as counterpoint to the grotesquery of the letters from Edward. Maria continues almost oblivious to the content until finally recognizing the inconsistencies in Edward's description of her eyes. The physical brawl that ensues after this moment of recognition with her sister in act two, scene three, and her threats of violence toward Edward in her final letter challenge the validity of her previous passivity. Just as the harsh reality of shepherding is in conflict with the romantic depictions of the pastoral, so Maria's feigned passivity proves superficial. Maria's associated imagery demonstrates feminine ideals are performed, not inherent. The feminist commentary created through counterpoint with her twin sister, Harriet, will be discussed later in this chapter.

Secondary Characters

Thomas Armstrong. Armstrong directly impacts Isobel's storyline in 1799, yet demonstrates no personal change. As described by Fenwick, Armstrong is “a clear eye, sharp brain, ruthless logician...but cold of heart.”¹⁷ With absolutely no moral qualms, Armstrong “seek[s] out potential cadavers before they’re even dead,”¹⁸ believing “discovery is neutral,”¹⁹ and necessary for the sake of science. Armstrong claims to have “never had a moral qualm” in his life and believes his relentless quest for truth will earn

¹⁷ Ibid, 182.

¹⁸ Ibid, 206.

¹⁹ Ibid, 207.

him great success in his field for the progress of mankind.²⁰ Science and morality are completely separate from his perspective. As counterpoint to Fenwick and Roget, Armstrong provides variation among the scientist characters in the earlier time period. While Fenwick seeks widespread democracy through science and Roget is undecided, Armstrong's objective is defined and one-fold throughout the play: to get a closer look at Fenwick's hunchbacked servant girl, Isobel, with no regard for her wellbeing. He exhibits no signs of remorse, even when confronted by Roget for his sinister intentions.

In the most diverse pairing of Stephenson's script, the actor who plays Armstrong also plays the morally sensitive handyman, Phil. The doubling of Armstrong and Phil provides high contrast in characterization, drawing attention to the actor beneath the characters being played. Other than the pleasure of dramatic irony, this doubling serves no apparent dramaturgical purpose. Armstrong also shares similar approaches to science with Kate in the later time period, with the exception of murder. Kate shows the influence of moral concerns in a postmodern world. These counterpoints draw connections between controversial scientific practices in both eras. Scientific and societal advances over two hundred years do not necessarily eradicate ambiguities.

Roget. Roget reveals Isobel's narrative and also draws attention to Susannah's situation by acknowledging Fenwick's harsh rebuke of his wife. At the beginning of the play, Roget removes himself from ethical debate, but rebukes Armstrong for his manipulation of Isobel. More significantly, he provides a unique voice within the play. His physical frailty and "delicate sensibilities"²¹ place him in direct counterpoint with

²⁰ Ibid.

²¹ Ibid.

Armstrong and ally him thematically with Isobel while his hesitation with unmediated scientific inquiry provides counterpoint to Fenwick. Roget is not cold or power-hungry, but he is methodical and observant. Unlike his fellow scientists, Roget uses his analytical skills to deduce Armstrong's scheming and Susannah's frustration with Fenwick instead of make scientific discoveries. His inclusion in the play provides perspective within the field of science.

The conflict of historical figure with fictional representation further provides variation. Though educated as a physician, the historical figure Peter Mark Roget is known for his skill with words as the author of *Roget's Thesaurus*. Though he only appears as a scientist in Stephenson's play, the tension between fiction and history presented combines scientific and artistic attributes in the same character. His moral sensitivity and fascination with synonyms is more akin to the character of Tom as an English professor than Ellen or Kate as progressive scientists in the later time period. This counterpoint demonstrates science, morality, and art are not mutually exclusive.

Harriet Fenwick. Harriet directly impacts the changes of her father, Fenwick, and her twin sister, Maria. In spite of her natural curiosity, she cannot be a scientist because of her sex. Instead, Harriet is forced by her mother, Susannah, to use her talents in a gender-appropriate area of expertise. Her primary objective, however, is to gain her father's respect and eventually be a scientist. She finally accomplishes this in part through the invention of a hat that puffs steam towards the end of the second act. Her rivalry with her twin sister is driven mostly by frustration at her sister's resignation to more traditional roles of femininity. In contrast to Maria, Harriet rejects marriage as her only option. Harriet's attitude toward marriage challenges Maria's perspective and their

violent altercation motivates Maria's decision to rebuke Edward's lackluster affection. Fenwick's change toward Susannah is then revealed as a result of the argument. While Harriet supports these other primary characters, her attitude and perspective remain unchanged for the duration of the play. The doubling of Harriet, secretly an aspiring scientist, with a successful scientist, Kate, emphasizes the historical limitations placed on Harriet by society.

Kate. Kate's opposition to Phil and Tom's traditionalism provides the basis of debate for Tom and Ellen's conflict. Although Kate is fifteen years younger than Ellen, her executive level position in a big corporation attests to her ambition. Her morally neutral philosophical approach to science further challenges Ellen to consider the financial and scientific gains of continuing research in spite of Tom's ethical crisis. Conversations with Kate lead Ellen to self-reflection and a final decision to take the job independent of Tom's reservations. By the end of the play, no fundamental change has occurred on Kate's part. Similarities with Armstrong in the earlier time period challenge the gendering of scientific ambition and highlight those marginalized by science in each era. The actress who plays Kate also plays Harriet.

Phil. Phil is an eclectic handyman who challenges Ellen's views of science and Tom's spirituality. Unlike Armstrong, Phil is not a scientist, but instead is skeptical of the value of Ellen's work, warning against the dangers of commodifying the human gene to eradicate "undesirable" conditions. He anticipates the scientist's next step, questioning the power of science to manipulate humanity for selfish gain. In contrast to his 1799 counterpart, Phil is more fascinated by scientific myth, such as *The X-Files*,

extraterrestrial activity, and spontaneous combustion, all of which occur outside of logic. He is also deeply spiritual, leading Tom in a prayer of respect for the deceased. His attitude toward science remains skeptical through the end of the play in consideration of the larger future ramifications for humanity.

Theoretical Approach

Through discussion of dramatic structure, and character development, three major thematic patterns emerge: the nature of science, the significance of art, and the historical limitations of gender. These themes engage in dialogue throughout the text and perpetuate meaning through collision, intersection, and thematic juxtaposition. While science provokes discussions of societal progress, art is a vehicle for historical dialogue. Both provide larger correlations for society. As a “science play,” the text relies on the pairing of science and art. Stephenson utilizes this partnership to challenge the genre and further comment on the gendering of science and art. These themes will be considered in conjunction with the theoretical writings of Kirsten Shepherd-Barr, and Bertolt Brecht, as well as various feminist theorists.

The Science Play Genre

In *Science on Stage*, a study covering four centuries of science plays, theatre scholar Kirsten Shepherd-Barr identifies four primary characteristics of the science play genre. According to Shepherd-Barr, plays in this genre tend to exhibit “a casting of the scientist as hero or villain (or sometimes both), a direct engagement with ‘real’ scientific ideas, a complex ethical discussion, and an interdependence of form and content that

often relies on performance to convey the science.”²² All four of these signifiers of the genre are major components of Stephenson’s play with additional complications in content and form.

At the center of the science play genre and Stephenson’s narrative is the depiction of the scientist as hero or villain. Shepherd-Barr’s analysis of Stephenson’s earlier version of the play argues all of the scientists depicted “are incarnations of Faustus at his worst.”²³ However, Shepherd-Barr’s simplistic hero/villain binary is not sufficient for Stephenson’s complicated variations in the corrected version of the script. Instead, a more complex character analysis of the scientist character is found in Roslynn B. Haynes’ study, *From Faust to Strangelove*. Haynes surveys the patterns of the scientist trope in Western literature categorizing scientist characters into six archetypes: the evil alchemist, who is driven to maniacal extremes by selfish gain no matter the cost; the foolish virtuoso, who is socially and morally unaware of the implications of his work; the unfeeling genius who is emotionally dead and resistant to interpersonal relationships in the name of science; the relentless adventurer who engages unexplored and dangerous material in search of the unknown and is admired for this endeavor; the helpless inventor who creates, but outside his means and is often unable to control his creation over time; and the “scientist as idealist,” who pursues a utopic society in which all aspects of science work to support humanity.²⁴ Haynes argues the evil alchemist and foolish virtuoso are most commonly depicted as purely sinister, while the genius, the adventurer, the

²² Kirsten Shepherd-Barr, *Science on Stage: From Doctor Faustus to Copenhagen* (Princeton, NJ: Princeton University Press, 2006), 2.

²³ Ibid, 123.

²⁴ Roslynn D. Haynes, *From Faust to Strangelove: Representations of the Scientist in Western Literature* (Baltimore: Johns Hopkins University Press, 1994), 3-4.

innovator, and the “scientist as idealist” can be portrayed as more psychologically complex. In addition, the adventurer, innovator, and idealist are most commonly depicted as genuinely motivated by the greater good.

Stephenson’s revised text complicates Shepherd-Barr’s hero/villain binary by portraying both with added variation including many of Haynes’ scientist archetypes. Through science, Fenwick envisions future widespread “dissemination of knowledge”²⁵ and the opportunity to “change the conditions under which people live.”²⁶ Also through science, Armstrong pursues conquest for his own selfish gain, intentionally leaving “ethics...to the philosophers and priests.”²⁷ Fenwick as the hero is consistent with Haynes’ “the scientist as idealist” at the beginning of the play, progressing more toward the foolish virtuoso after Isobel’s suicide, uncertain of the implications of his work. Armstrong, on the other hand, is the “arrogant and godless” villain akin to the evil alchemist.²⁸ While Kate also boasts few moral qualms, her definitive ethical boundaries set her apart from Armstrong. More prominently, Kate wants to “tear [the world] apart and see what it’s made of,”²⁹ pursuing the unknown as Haynes’ relentless adventurer. Ellen’s identity as a scientist is more complex, existing somewhere between hero and villain, but fulfilling a mixture of Haynes’ archetypes. Her research is life-saving according to Kate, and therefore, heroic, but life-diminishing according to Tom, and therefore potentially villainous. Phil suggests Ellen is unaware of the ramifications of her

²⁵ Stephenson, *Air Pump*, 179.

²⁶ Ibid, 182.

²⁷ Ibid, 207.

²⁸ Ibid, 66.

²⁹ Ibid, 224.

research, more akin to the foolish virtuoso or helpless inventor than a scientist capable of idealistic achievements. In the end, Ellen takes the new position with Kate's company because her "heart told [her] to," and maintains there are boundaries to protect humanity from science, but does not pose any idealistic visions for the future.³⁰ Her idealism is more complex than Haynes' "scientist as idealist." By diversifying the scientist as hero and villain, the playwright meets Shepherd-Barr's first criteria for the science play genre, but also resists conventionality.

Exploration of scientific ideas such as Robert Boyle's air pump experiment, the Anatomy Act of 1832, and the Human Genome Project (HGP) serve as major items of discussion and devices of story-telling. The air pump experiment performed during the prologue serves as major metaphorical and symbolic material, while the Anatomy Act and the HGP are explored more directly through debate. The debate surrounding the Anatomy Act largely appears in the earlier era with Armstrong's attendance of dissection demonstrations and Roget's objection to the unethical means of cadaver procurement for these demonstrations. The act legalized the dissection of unclaimed bodies with no questionable practices required. This is significant as a major motivator for Armstrong's murder of Isobel for the use of her body as medical research. Discussion of the act again appears in the later era with the discovery of the box of discarded bones left over from such "medical research" done before the Anatomy Act.³¹ In the later era, Ellen's research is made possible through The Human Genome Project (HGP) and is predicted by Fenwick in the eighteenth century. According to Fenwick, in just two hundred years,

³⁰ Ibid, 223.

³¹ Ibid, 205.

science will completely map out the mysteries of human life. Since 1990, HGP has charted the genes in the human genome, and predicted the results of genetic composition. While the later era does not boast as much progress as envisioned by Fenwick, the comparison of progress between the two eras is highlighted by the use of scientific ideas.

Moral dilemmas naturally arise from the controversial research methods discussed in each time period. Ellen's observations of Wright's painting summarize the ethical conflict present in Stephenson's narrative as "the ethics of dabbling with life and death."³² In the earlier time period, Roget and Armstrong debate the ethics of using illegally obtained corpses for experimentation. Armstrong openly engages in body-snatching to obtain corpses for dissection, encouraging his cohort, Roget, to take part in the "good cause" for the advancement of science. Roget's response exhibits a moral dilemma. He admits that he is "torn...fascinated by the thing itself but slightly uneasy at the methods used to procure the bodies."³³ Armstrong's further obtainment of Isobel's body through emotional manipulation is also debated as an extension of his research until the end of the play by Roget and Armstrong.

Ethical crises in the later era are centralized by the biological material and ethical ramifications of Ellen's research. Reminded of Ellen's previous six failed pregnancies, Tom is unable to separate the unborn fetuses from Ellen's pre-embryonic experimentation, leaving him conflicted about her upcoming job decision. Both Tom and Phil struggle with the ramifications of scientific research utilizing material with even minimal potential for life. Tom warns, "Kate's firm exists to make money above and

³² Ibid, 140.

³³ Ibid, 206.

beyond anything else...I mean, where's it all leading? If you can eventually determine the genetic code of any given fetus, all I know is that's going to lead to trouble."³⁴ Tom is concerned that science for high monetary gain threatens the sanctity of life. Similarly, Phil argues "if they can map your genes before you're born, they'll soon be wanting a little plastic card with your DNA details on it. And if it says anything dodgy, it'll be like you're credit blacked...I bet your wife hasn't thought about that, has she?"³⁵ While Phil's concerns are extreme, the ethics of big business interfering with science resurfaces to a lesser degree in other conversations, yet the concern remains essentially the same. The moral dilemmas created by science throughout the play perpetuate conflict and dramatic interest, directly impacting the overall narrative.

In both of these cases, the ethics of dabbling with life are thematically weighed against the importance of scientific progress. As theatre scholar Tomas Kacer argues, "progress is a concept inseparable from science and therefore the plays which deal with scientific issues have to reflect upon it."³⁶ Like two "bookends of modern science," Shepherd-Barr argues the scientific advances introduced in the earlier time period of Stephenson's work logically

should launch a whole new age of progress and social improvement, but...the great hope of science to help society, to be humane and progressive, to work toward social improvement, has become utterly corrupted by the enticements of industry, big business luring the best scientists away from pure, unattached research into nefarious exploitative purposes.³⁷

³⁴ Ibid, 188.

³⁵ Ibid, 204.

³⁶ Thomas Kacer, "'I am Britannia, The Spirit of Our Age': Time Shifting as a Study of the Idea of Progress in Tom Stoppard's *Arcadia* and Shelagh Stephenson's *An Experiment with an Air Pump*," *BRNO Studies in English* 33 (2007): 159.

³⁷ Shepherd-Barr, 123.

What ensues is more aligned with the second law of thermodynamics (entropy increases over time), than the utopic “New Jerusalem” of the new century about which Fenwick waxes poetic.³⁸ By exploring scientific ideas in two time periods concurrently, Stephenson demonstrates scientific progress does not necessarily mean universal improvement.

Not only do science plays utilize scientist characters, examine scientific content, and present science-related moral dilemmas, but, as Shepherd-Barr argues, they tend to “call on the audience’s imagination more than is usually done in the theater.”³⁹ With spectacle-driven content often utilizing non-realistic theatrical convention, science plays tend to be as much about theatrics as they are about science. Stephenson’s play is no exception to this tendency of the genre. Quick jumps in time with actors appearing in multiple roles draw attention to the mechanics of performance. Other conventions written into the text, such as direct address and the play-within-a-play invite the audience to engage with the performance as a theatrical presentation. Shepherd-Barr attributes the theatrical bent as characteristic of the genre due to the nature of science itself, calling for observation, and dependent on spectacle for the purpose of drawing informed conclusions.

Stephenson’s “interdependence of form and content”⁴⁰ exhibits a discussion of methodology framed in a theatrical representation of the scientific method. The play questions the ethics of scientific and social methodologies. The narrative follows the

³⁸ Stephenson, *Air Pump*, 144.

³⁹ Shepherd-Barr, 4.

⁴⁰ Shepherd-Barr, 2.

progression of the scientific method. The playwright first asks what cost is too great for the progress of mankind, and then presents information from various perspectives in both eras. A hypothesis is constructed regarding the necessary protection of humanity. This hypothesis is tested in three storylines. The playwright makes adjustments to the experiment with replications varying factors such as time period and character, but presenting similar data in each storyline. The results of each test are collected by the last scene of the play and presented to the audience to draw their own conclusions. Direct address throughout emphasizes the presentation as an ongoing experiment for observation and analysis. Actor doubling and quick shifts in time period aid in providing clear comparisons. In this manner, the play acts as both a scientific and theatrical experiment, requiring performance “to convey the science”⁴¹ of the experiment.

Complicating Science with Art

Stephenson complicates Shepherd-Barr’s characterization of the science play by counterpointing the power of science with art’s ability to construct narrative. According to British theater scholar Glynne Wickham, art and science are two completely separate entities that “no longer...talk the same language.”⁴² Wickham observes that the “tyranny of science”⁴³ opposes “what is single and unified in nature,” and instead “plunges mankind into an unparalleled chaos of suffering, destruction, and new-barbarism.”⁴⁴ The

⁴¹ Ibid.

⁴² Glynne Wickham, *Drama in a World of Science and Three Other Lectures* (London: Routledge and Kegan Paul, 1962), 52-53.

⁴³ Ibid, 53.

⁴⁴ Ibid, 47.

solution, however, is found in counterpoint. According to Wickham, what is needed is to “provide the arts man with a lively introduction to scientific thinking and the scientist with as lively a reflection of his own human condition.”⁴⁵ By combining art and science, Stephenson creates what Glynne Wickham describes as “a forum for the examination and discussion of the human condition.”⁴⁶ Art grounds the power of scientific thinking in the essence of humanity. The resulting perspective produces balance. In order to establish an ongoing debate between science and art, Stephenson pairs each component of the science play genre with art. Similar to the ideas set out by Shepherd-Barr, Stephenson’s artist and art-inspired characters, reference to and use of “real art,” identification of moral discrepancies through art, and story-telling through art challenge the science-play genre and provoke discussion between the two areas.

While science inspires some of the characters in Stephenson’s play, Joseph Wright’s painting serves as a basis for all of the character types. As Susannah/Ellen explains, Wright’s characters depicted in the frontispiece of the play demonstrate various philosophical perspectives of both eras. Like the philosopher-scientist at the center of the painting, Fenwick gazes into the future. Fenwick has an active role in history-making as he holds the fate of his family in his hands. The bird pictured in Wright’s painting as the specimen of the experiment is representative especially of Isobel Bridie, at the mercy of science, awaiting her fate. The man seen comforting the young girl to the right of the mature scientist is manifested in Stephenson’s play as the sensitive scientist, Roget. The two young girls he comforts are the Fenwick twins, Maria and Harriet. Maria, seen here

⁴⁵ Ibid, 56.

⁴⁶ Ibid, 52.

as the elder of the two young girls, is the image of feminine innocence, looking away from the possible atrocities before her. Maria's romantic ideals for her marriage to Edward allow her to imagine herself as one half of the distracted lovers on the opposite side of the table in the painting. The younger child, fearful, but relentlessly curious is manifested in Maria's sister, Harriet. Behind the girls, by the window in the painting stands the pseudo-scientist, Phil, halfway between science and the mysterious night sky outside the window. In the painting, he remains outside the circle of observers, skeptical of the impact of science on humanity. On either side of the table in the foreground is a man representing Tom, lost in thought and perplexed over the progress at hand, and an impatient scientist with absolutely no moral qualms. Stephenson manifests this impatience in both eras in Armstrong and Kate, eager for the future potential of science even at the sacrifice of the bird in the air pump. As the only character not pictured in the painting, the audience experiences the art piece and, consequently, the rest of the play, through Susannah/Ellen's interpretation as fellow observers of the performance.

Over fifty references to “real” art in the text challenge the dominion of the more prominent scientific field. According to Shepherd-Barr, “there’s no question which of the two cultures has the moral high ground in this play.”⁴⁷ Poetic figures such as John Milton, William Shakespeare, Robert Southey, George Eliot, John Webster, and the Wakefield Master (as well as Roget) are referenced while other theatre-specific terms appear most frequently in coordination with the play-within-a-play rehearsed during act one, scene one and act two, scene one. In addition, the ongoing philosophical debate regarding the “complementarity,” or complementary tension, between science and art

⁴⁷ Shepherd-Barr, 124.

provokes further questioning of the functions of art within a scientific framework.

According to Fenwick, ideally science and art “form a complementarity, not a state of siege.”⁴⁸ However, Fenwick’s dismissal of Susannah’s limited arts-based education exhibits historical bias. Fenwick is only able to achieve “complementarity” in word and not behavior. Unlike Fenwick and Susannah, however, Tom and Ellen ultimately determine the two are “not that much different after all. Art and science, waves and particles, it’s all the same thing.”⁴⁹ Art can be used to forward science, science can be used to challenge art, and both provide balance to the other area.

As a counterpoint to science, art provides moral and spiritual sensitivity. Susannah rebukes Fenwick for gender and class-based neglect. Tom challenges Ellen and Kate’s motivations for commercial research with discarded pre-embryos. Roget questions Armstrong’s illegal procurement of bodies for research, and also his emotional manipulation in the name of science. These characters challenge the field of science without agency to enact change themselves. By identifying the moral discrepancies, these artist voices provide cautionary opposition to the otherwise undisputed actions of the scientist characters. The counterpoint created demonstrates how balance is achieved by grounding the transformative power of science in the humanity of art.

Complicating Science with Gender

While Shepherd-Barr observes the science play is typically concerned with the relationship of science-to society, Stephenson’s work is specifically concerned with science and gender. The text challenges conventional femininity through the framing

⁴⁸ Stephenson, *Air Pump*, 212.

⁴⁹ Ibid, 223.

device of Brechtian historicization, or “making-oneself-observed.”⁵⁰ Using this technique, performers “play the incidents as historical ones” instead of playing the incidents as though they are synonymous with reality.⁵¹ The counterpoint created between reality and performance makes even familiar archetypes “seem remarkable to us,” calling for renewed observation and perpetuating commentary in the process.⁵² In Stephenson’s text, three time periods serve as a lens for feminist analysis: the fictional representation of the distant past, 1799, the performance of the remembered past, 1999, and the reality of the present, 2016, occurring at the time of the performance. By juxtaposing the roles of women in the earlier time period with those in the later time period, Brechtian historicization argues each “is subject to criticism from the immediately following period’s point of view.”⁵³ Furthermore, audience members are provoked to become “an active critic of [their own] society,”⁵⁴ with more than two hundred years of perspective.

Through the lens of the 1990s, science challenges traditional femininity. As scientist Karen Throsby observes, it is in this decade that in vitro fertilization (IVF)—the process of fertilization outside the female body—became “the core technology upon which ...new and controversial reproductive and genetic technologies are based,” raising

⁵⁰ Bertolt Brecht, *Brecht on Theatre*, ed. and trans. John Willett (New York: Hill and Wang, 1992), 58.

⁵¹ Ibid, 140.

⁵² Ibid.

⁵³ Ibid.

⁵⁴ Bertolt Brecht, “A Model for Epic Theater,” in *Directors on Directing*, ed. Toby Cole and Helen Krich Chinoy (Indianapolis: Bobbs-Merrill Co., 1963), 240.

questions of personhood and identity.⁵⁵ While IVF was first implemented in the 1980s, the 1990s saw developments in the genetic and natural sciences as a result of reproductive technologies such as the Human Genome Project and the successful cloning of Dolly, the sheep. According to Throsby, science became a highly personal issue, inserting itself into even the smallest particle of human life, and challenging specifically a woman's biological role in the creation of it.

Through the lens of the 1790s, science excludes traditional femininity. In 1799, science was exclusively male. Harriet has "lost her mind"⁵⁶ because she wants to pursue science, and Susannah and Maria are too "silly"⁵⁷ and sensitive to stomach any serious scientific demonstrations. The young scientist, Armstrong, insists on the importance of "keep[ing] infants away from the fireplace and women away from science."⁵⁸ Instead, women, including Harriet, must pursue something more suited to their nature, such as poetry, in preparation for domestic life. Not only is science too grotesque for the delicacy of femininity, but science distracts from womanly responsibilities. Separate public and private roles require separate, gender-specific educations, prompting the gendering of both science and art within the historical period. Attitudes leading to the Romantic notions of beauty further excluded women from playing an active role in scientific progress even if limited formal education for women was socially acceptable by the end of the century. Susannah's education in art does not earn her intellectual equality with her

⁵⁵ Karen Throsby, *When IVF Fails: Feminism, Infertility and the Negotiation of Normality* (London: Palgrave Macmillan, 2004), 191.

⁵⁶ Stephenson, *Air Pump*, 199.

⁵⁷ Ibid, 208.

⁵⁸ Ibid, 141.

husband's innovation in science and even within her own home, she is treated as though intellectually inferior.

Through the lens of the present, the playwright symbolizes the individual female characters of both time periods as sites of struggle within their historical contexts. As feminist theatre scholar Elin Diamond argues,

if feminist theory sees the body as culturally mapped and gendered, Brechtian *historicization* insists that this body is not a fixed essence but a site of struggle and change. If feminist theory is concerned with the multiple and complex signs of a woman's life—her desires and politics, her class, ethnicity, or race—what I want to call her *historicity*, Brechtian theory gives us a way to put that historicity into view—in the theater [emphasis Diamond].⁵⁹

The journey of the combined protagonist in *Air Pump* is about becoming an active agent of history in the making—changing and understanding the world as opposed to simply populating the world. Theatre provides a unique observation of this “site of struggle,” as demonstrated in Stephenson’s text. The presence of each image presented side by side displays, as one reviewer notes, “the evolution of women in society generally and the world of science specifically.”⁶⁰ It is through Brechtian historicization, the act of inviting observation, that the playwright provides this commentary.

In 1799, Susannah is the neglected middle-class woman, excluded from the ground-breaking revolutions of her time. Instead, she must wait for her husband to take action for improvement to her situation. As Sue-Ellen Case observes “female characters, when they do have a psychological complex base, are usually frustrated and unfulfilled—like the Electra on whom their complex is based, they wait for the male to take the

⁵⁹ Elin Diamond, *Unmaking Mimesis: Essays on Feminism and Theater* (New York: Routledge, 1997), 52.

⁶⁰ Elyse Sommer, review of *An Experiment with an Air Pump*, *CurtainUp Review*, 1999, accessed July 14, 2016, <http://www.curtainup.com/experimentwithanairpump.html>.

subject positon of action.”⁶¹ While Susannah does pursue a specific objective, her success is dependent on Fenwick’s attention, a result of what Case describes as the “dominance of the self as male.”⁶² In 1799, Fenwick is the subject and Susannah is the object. According to Case, this is consistent with the romantic notion that “woman appear in order to be looked upon rather than to do the looking. In that sense, ‘woman’ is constituted as ‘Other.’”⁶³ As Case argues, “the result is that women become fixed in the position of object of the gaze, rather than as the subject directing it.”⁶⁴ During a climactic exchange of dialogue, Susannah laments “I loathe the role I have taken on, but you forced me to it...I want to be your equal, not a fawning, yapping lap dog.”⁶⁵ After this confrontation, we see Fenwick has changed, rebuking his unruly daughter for talking back to her mother. The final scene portrays Susannah by Fenwick’s side as they both mourn over Isobel’s lifeless body. This closing tableau including Susannah demonstrates a future of coexistence manifested in the previous 1999 episode (within the same scene) two hundred years in the future. While Ellen is in a position to play an active role in her future, Susannah is unable to change her circumstances without the action of her husband.

Maria and Harriet represent two sides of a generation in transition with two different approaches to conventional femininity. While Maria initially complies with

⁶¹ Sue-Ellen Case, “Towards a New Poetics,” in *Feminism and Theatre* (New York: Routledge, 1988), 122.

⁶² Ibid.

⁶³ Ibid, 120.

⁶⁴ Ibid.

⁶⁵ Stephenson, *Air Pump*, 216-217.

traditional gender expectations, Harriet progressively rebels. Their sibling rivalry is based on the conflict between these two approaches. Both women are marginalized by gender; Maria in society generally and Harriet in science specifically. Maria's traditionalism is viewed as preferable to Harriet's rebellion. However, it is Harriet who undermines the gendering of science through her chimney hat invention, and also Harriet who pinpoints Maria's naiveté in her relationship with Edward. Harriet's ambition ignites Maria's pursuit of agency and aids both women in progress.

Like the sibling rivalry evident between Harriet and Maria, both the past and the future of femininity struggle to find a way forward in the present. The symbolic relationship of the Fenwick twins is highlighted in Harriet's "hymn to progress,"⁶⁶ the play-within-the-play, as Maria and Harriet play their archetypes meeting in the 1799 present. The play stages a fictitious meeting where "Arcadia meets Britannia," in a clash of the past and the future.⁶⁷ Maria plays Arcadia, an ideal of traditional pastoral paintings portraying a romanticized, idyllic life, as seen in figure A.2. In opposition to tradition, Harriet plays Britannia, a mythical figurehead from British history representing national power and conquest, seen in figure A.3. Harriet, as Britannia, surveys the land where Maria, as Arcadia, resides passively with her flock. Instead of war, a call to action ensues: "the future's ours....Great minds conspire to cast an Eden here from Iron, and steam bends nature to our will."⁶⁸ Britannia invites Arcadia to join the conquest for industry, taking a participatory role in the future of society. Progress is built on the

⁶⁶ Ibid, 150.

⁶⁷ Ibid, 151.

⁶⁸ Ibid, 198.

foundation of the history, while tradition is flawed in light of the future. A feminist reading of the play-within-the-play concludes both are allies in social progress.

Isobel is the dehumanized and marginalized fringe of society, representing those “othered” by more than just gender but also class, ethnic background, and physical appearance. Isobel has never known love and, instead, experiences life as a specimen for observation because of her intellect and physical deformity. Even in 1999, the box of bones is unmarked and the narrative unknown, hidden under the floorboards and “crammed into a hole any old how.”⁶⁹ As scholar Claudia Barnett argues of the servant girl’s plight, “Isobel is someone history forgot, but she is also history itself, emerging not in a textbook but from under the floorboards. Her importance is less as a character than as a condition: She is the invisible female made manifest.”⁷⁰ As a victim of science at the hands of Armstrong in 1799 and nothing more than a spiritual relic or symbol of marginalization in 1999, Isobel is a victim of something beyond gender. She is marginalized by the false promise of something beyond her station. By including Isobel’s story along with Susannah/Ellen, and Maria, Stephenson demonstrates a concern not only for women, but those individuals on the fringe of society forgotten and/or mistreated in the name of progress.

In 1999, Ellen and Kate are governed by something beyond historical images of femininity, instead they exude agency and self-possession. Ellen’s attempt at partnership with Tom demonstrates she is not guilty of “singlehandedly destroying the family unit,” as she is accused, and her decision to take the job demonstrates she is also not at the

⁶⁹ Ibid, 202.

⁷⁰ Barnett, 218.

mercy of her husband.⁷¹ Instead, she is capable of autonomy, creating a new image of struggle having to make decisions about the future of humanity in an age of transition. Although the “othering” of women in science is significantly less for Ellen, her powerful role in science is considered to be in conflict with her own biology. As Tom argues, her sensitivity to experimenting on “discarded” embryos should be higher because of her personal experience with pregnancy. Kate, however, is the childless, husbandless, fearless new generation of female scientists opposed only by those steeped in tradition and the past. Her similarities to Armstrong, with the exception of murder for the sake of science, challenge normative gender hierarchies in the future of both science and society.

Conclusion

Considerations for dramatic action, characters, and thematic material through dramatic and theoretical analysis lead to the play’s major idea: true progress is an ongoing dialogue. Dialogue is patterned in the play by the collision of various dialectics (i.e.—science and art, history made and history in the making, men and women), and generates commentary through various points of intersection, namely in those images inspired by Wright’s painting. This textual interpretation leads toward a unified concept for production, emphasizing the performative qualities of the script, and perpetuating a clear dialogue to engage the audience. According to the playwright, “when [the play] work[s], [it] should, with a bit of luck, produce extremes of laughter and pathos, intellectual debate and emotional resonance, hard on each other’s heels.”⁷² By the playwright’s own estimation, the success of the production depends on a careful balance

⁷¹ Stephenson, *Air Pump*, 169.

⁷² Shelagh Stephenson, “Introduction,” in *Plays: I* (New York: Bloomsbury, 2003), x.

of oppositional pairings. As seen in the following chapters, it is this approach of give and take that prompted progress with designers, actors, and other production team members through the final execution of performance.

CHAPTER THREE

The Design Process

Introduction

Collaboration with the production team of designers ensued after consideration of Stephenson's script from dramatic and theoretical perspectives. The group included Baylor students and faculty members filling lead and advising design positions in scenic, lighting, sound, costume, makeup/hair, props, and technical direction. The design process was divided into three phases according to Baylor procedure: conceptual development in which the director worked closely with designers, production team collaboration in which the stage manager facilitated meetings with the director present, and the application of these elements during construction and technical rehearsals. During all of these phases, the director provided leadership to all positions and facilitated collaboration and aesthetic synthesis with the administrative support of the stage management team. The intention of this chapter is to provide documentation and justification for the design process utilized in the creation of Baylor's production of *Air Pump* from original concept to final execution.

Conceptual Approach

Seeking to capture the ideas presented by the playwright as well as provide central inspiration for story-telling, the production concept is essential to present a unified, cohesive whole. A production concept provides a defined and clearly

communicated basis to inspire staging, design, and performance decisions and is especially important for a script which calls for strong picturization and provides unique theatrical opportunities outside the limits of realism. In seeking to establish such a guiding principle for the production of *Air Pump*, the world of the play was considered through the frontispiece. As Peter Brook observes “when a performance is over, what remains?...When emotion and argument are harnessed to a wish from the audience to see more clearly into itself—then something in the mind burns...It is the play’s central image that remains, its silhouette will be its meaning, this shape will be the essence of what it has to say.”¹ Joseph Wright’s *An Experiment on a Bird in the Air Pump*, seen in figure A.1, describes the world at large to Ellen, and also permeates the world of the play.²

Wright’s painting shares characteristics with the play in content and form. As an example of historical and fictional narrative, the painting combines factual scientific material, setting, and figures within a fictional representation of Robert Boyle’s experiment in the home of Erasmus Darwin conducted by the theologian Jonathan Edwards on a cockatoo, as opposed to the more likely dove or pigeon. The painting also pictures female subjects as epitomes of sentimentalism with male subjects engaging with advancement, drawing on the general attitudes of the time regardless of historical actualities. The dramatic embellishments of the individuals pictured and the experiment itself also propose a performative event, purposely contrived for observation and entertainment. The painting serves as a tangible image inspiring the general aesthetic and

¹ Peter Brook, *The Empty Space* (New York: Simon & Schuster, 1996), 136.

² See Chapter 2 of this manuscript.

style for production, while also serving as a pattern for the repeated convention of image-making throughout the play.

Motivated by the central importance of Wright's painting, I conceptualized the play as a back room picture gallery where some artworks are drawn out of the chaos and displayed, while others remain buried in the uncatalogued artefacts of history, dialoguing across genre, time, and subject. The aesthetic in this conceptual space is shadowy, disjointed, tangled, and theatrical, but also classic and elegant. The artwork in the gallery provides counterpoint to other art pieces, just as Stephenson's text utilizes multiple time periods, multiple characters played by the same person, and the ongoing dialogue between science and art discussed in the previous chapter. Like the painting, the play presents isolated pieces of art throughout, but like the gallery, these art pieces fall within the broader context of history. Meaning is created in the relationship between images.

The presentational quality of the picture gallery also draws attention to itself as a space for observation. Stephenson's foreword to the reprinted version of the play refers to this characteristic manifested in the play as "a great deal of rhythmic energy and precision: theatricality, in fact."³ The constant changing of scenery and costuming exposes the mechanics of the theatre, calling attention to the performance as performance as opposed to a recreation of concrete reality. Dramatist Bertolt Brecht preferred the quality of self-awareness this type of theatre generates in his own episodic approach to theatre-making. Brecht argues the success of this style is owed to "the individual episodes...[being] knotted together in such a way that the knots are easily noticed."⁴ As

³ Shelagh Stephenson, "Introduction," in *Plays: I* (New York: Bloomsbury, 2003), x.

⁴ Bertolt Brecht, "A Short Organum for the Theatre," in *Brecht on Theatre*, ed. and trans. John Willett (New York: Hill and Wang, 1992), 201.

the previous chapter of this manuscript demonstrates, the resulting counterpoint is reflected in the form, genre, and content of the play. I was determined to capitalize on the theatrical conventions already present in Stephenson’s text as opportunity for heightened theatricality, not only “exposing the knots,” but including them and sometimes drawing even more attention to them in the rhythmic progression of story-telling.

Consequentially, design and staging choices were centralized by the counterpoint provided in both Stephenson’s play and the back room picture gallery concept for production. By utilizing Wright’s painting as a springboard for the look of the play, the medium as inspiration for a broader aesthetic, and the style of the script as a mode of presentation, the director and designers worked together to develop an ambitious staging of Stephenson’s play. While the resulting scope of the design was not the intention initially, continued collaboration and open brainstorming veered away from the minimalist approaches normally taken for the play. The performance space selected for this particular production made this approach possible.

Selecting the Performance Space

To accommodate the shifting of time periods in the play, both amateur and professional past productions have pursued a minimalist approach, capitalizing on the “theatricality” of the script as justification for a mostly bare stage. According to Baylor’s customary performance space for graduate thesis projects, the Mabee Theatre, a similar technique would have been essential. This performance venue is characterized by a thrust stage with seating for audience members on three sides of the stage. However, the multiple viewing points featured in this configuration are not desirable for the *tableau vivante* featured in Stephenson’s script. Instead, Baylor’s proscenium space, the Jones

Theatre, was selected instead to enable all audience members to view the stage from the same perspective. For *Air Pump*, the selection of the proscenium space proved essential for the creation of a total image.

Baylor's Jones Theatre presents a modified proscenium layout, comparable to well-known theatres of the modern age. This style of performance space provides several benefits for Stephenson's text specifically. While the arch allows for mimicry of the two-dimensional medium, the depth of the space allows for sculptural lighting and dynamic staging. The arch also provides selective staging with those areas delineated as "offstage" kept out of sight from audience view. In these offstage spaces, alternate scenic elements and properties can be stored, also providing concealment of staging mechanics for special effects. Costume, hair, and makeup adjustments and changes can be made within feet of the playing space, making quick changes very manageable with sufficient space delineated for these changes. The acoustics of the space also allows sound design elements to be much more controllable and believable with the distance established between the performance space and the audience. Overall, a proscenium venue enables large spectacle and theatrical illusion while providing every audience member with an unobstructed, standardized, and complete view of the performance.

While the benefits of selecting the Jones Theatre far outweighed the disadvantages, some challenges were presented. The distance between audience and performer often results in a lack of intimacy. In addition, Brecht's insistence that audience members not be hypnotized into trance-like viewership is a concern with such a traditional space. While the first concern was addressed through an approach to performance on the part of the actors, the second concern was amended in design and

technical direction. The extensive use of traditional features of the Jones Theatre, such as black masking curtains to cloak theatrical mechanics, and a concealing, red, velvet curtain between acts was modified. Features not able to be modified include unequal storage areas on either side of the proscenium opening, and limited positions above the playing space for hanging elements such as lighting instruments, electrical accommodations, and any other items needing to be suspended above the stage. Embracing these limitations was especially key in collaboration between scenic, and lighting areas of design.

In addition to these general and architectural concerns, Baylor's undergraduate training tends to favor the smaller and more intimate spaces of the thrust and black box theatres. Due to this bias, working on a large, proscenium space presents its own set of unique concerns specifically for Baylor undergraduate actors. These will be discussed further in the following chapter, yet are significant to note here as a disadvantage of the space.

Approaching Collaboration

While the design process for *Air Pump* began unconventionally through long distance meetings, the collaboration was largely consistent with the standard operating procedures set up for main stage productions at Baylor University. A two-hour preliminary brainstorming session was coupled with one on one exchanges with the production manager, technical director, scenic designer, and costume designer over the summer months. Pictures were shared between myself and each designer over a period of three weeks as ideas developed, and I gave as specific feedback as possible, carefully selecting vocabulary for productive collaboration. Words such as disjointed, chiaroscuro,

progress and decay, abandoned beauty, theatrical, incomplete, classic, and elegant were agreed upon by the designers and I in preparation of a streamlined production concept. I maintained and updated a compilation of ideas and notes in a thirteen-page electronic slideshow available to the group as new ideas were added and old ideas were refined. These informal interactions and idea/image exchanges culminated in the development of a more defined concept, agreed upon by the group and presented at the initial design concept meeting after the three-week brainstorming period.

The concept meeting was held over Skype with all principle designers in attendance prior to involving other technical members of the production team. No other additional members of the larger team were part of this meeting, but communication with the group as a whole was continual through Baylor's online file sharing platform. Due to this file sharing, designers were already aware of major topics, themes, and images, with preliminary conceptual ideas for each area of design and specific research images in some instances prior to the concept meeting. This preparatory exchange allowed the concept meeting to be a highly productive discussion with each area of design sharing ideas for conceptual direction and preliminary visual research from the scenic and costume designers.

At the meeting, I prompted discussion through an electronic slideshow. The first two slides highlighted the dramaturgical significance of Joseph Wright's painting for the play and as an inspiration for the production concept. Following was another image of a painting from the same era featuring a scientist and his wife, Jacques Louis David's *Antoine-Laurent Lavoisier and His Wife* (1788), seen in figure A.4. The image was

selected to capture the spirit of the 1799 protagonist, purposely excluded in Stephenson's rendition of Wright's painting.

Finally, a fourth slide featured two images to distinguish the stylistic difference of the prologue from the rest of the play. The first image, seen in figure A.5, intended to conceptualize the opening, but also inspire a sense of transition into another space. The second image, pictured in figure A.6, portrayed a conceptualization of what lies beyond the museum partition, in the back room picture gallery of Giovanni Paolo Panini's *Interior of a Picture Gallery with the Collection of Cardinal Silvio Valenti Gonzaga* (1740). The picture was manipulated slightly to convey the same tone and atmosphere of Wright's candlelit scene, but on a larger scale. Qualities observed include the gradation from light into darkness around the edges of the picture gallery, the imposing nature of the collection, the laboratory-like entanglement of the art pieces in the foreground, and the sense that the display is incomplete and work is still to be done.

These general conceptual slides were followed by individual slides with thoughts and research for each area of design including props and preliminary ideas for marketing. While this was a significant amount of preparatory work for me prior to the start of official design meetings, this compilation of information was in anticipation of the intense design process ahead full of unique challenges posed by Stephenson's script. Questions and decisions regarding these challenges were anticipated in advance allowing subsequent interactions to progress accordingly without waiting on me for information.

Continued brainstorming with individual designers ensued following this initial concept meeting. Since scenic and costume designs most prominently establish production aesthetic over other areas of design, time at the beginning of the design

process emphasized collaboration with these two designers. Once the scenic and costume designs were well underway, more specific conversations with sound, lighting, and props designers commenced in that order. The process of development for each aspect of design will be discussed in further detail in the following sections organized by design area.

Scenic Design

Before examining these efforts in more detail, it is important to note extensive travel over the summer months by director and designers alike limited sharing between design areas during the first phase of collaboration. This challenge was addressed through online sharing platforms and multiple Skype group meetings, which was sufficient for research and brainstorming, yet proved problematic as a foundation for concrete progress. This most severely affected the scenic design development, extending the length and frequency of design meetings just before preliminary designs were due and altering the Baylor production calendar slightly. Consequently, the lighting and props design meetings were deferred until more information was available from the scenic designer. Overall, however, the design process resulted in the creation of a visual and aural aesthetic capturing the directorial interpretation of Stephenson's script and fundamentally driven by choices made in the set design.

As described in the text, the Fenwick family home is a “big, plain, solid house...with a proper history.”⁵ Located in the city of Newcastle-upon-Tyne, a central location for the simple, but spacious manor provided plenty of shadowy corners and back rooms for the meeting place of “radicalism and dissent and intellectual enquiry”⁶ ongoing

⁵ Shelagh Stephenson, *An Experiment With An Air Pump*, in *Plays: I* (New York: Bloomsbury, 2003), 164.

⁶ Ibid.

during 1799. The state of the house in 1999, however, is in transition. As a family heirloom, the house was passed down to Ellen from her mother, whose parents owned it before her, yet Tom and Ellen no longer reside in the house and now are preparing to sell it for financial reasons. Instead of history in the making, the Fenwick manor is now an emblem of the past, growing more and more empty as items are packed during the play. The visual difference between the two eras is necessary to provide chronological reference, while the various locales provide opportunity to transition easily between eras. Three locales within the house are called for: Fenwick's lab in 1799 and 1999, the Fenwick dining room in 1799 and 1999, and Maria's bedroom in 1799.

Although the playwright provides a thoughtful ordering of locales for the purpose of quick transitions between eras, two additional locations were added for metaphorical purposes. For the beginning of the show, Susannah/Ellen performed the opening monologue as though in a museum with Joseph Wright's painting on display. The cellar under the house was also added for the portion of act two, scene two in which Armstrong and Roget discuss the procurement of dead bodies utilized for research. The play calls for the two men to be playing badminton in an area colder in temperature than the living quarters, possibly outdoors, but not designated for recreation. The change to the cellar maintained these characteristics while underlining the shady nature of the conversation. This also provided a solution to a difficult costume change by removing the need for outdoor clothing. This decision is an example of early decision-making made possible through preparatory work and early collaboration between director and designers.

Early brainstorming sessions with the scenic designer translated abstract conceptual ideas into concrete decisions implemented in early digital renderings, seen in

figure A.7. Wright's painting functioned as a design keystone while Panini's painting served as inspiration for the broader context of the spirit of counterpoint prominent in the play. The broken pediment pictured behind the central scientist in Wright's painting delineated a Georgian architecture scheme, while the vanishing background of the manipulated Panini painting inspired the illusion of negative space behind and around scenic units. The quality of height in the Panini painting extended Fenwick's imposing collection of artefacts to the negative space above the scenic units, mimicking the idea of paintings hanging on a wall in a picture gallery. In addition, the entire proscenium opening was framed as though the contents of the stage were within a picture frame, only with the lower portion of the frame removed for subtlety. Height also inspired a two story bookshelf with playable space on the second level by way of a wooden step-ladder found in visual research, as seen in figure A.8. While these discoveries were fundamental to the end result, the most significant developments in the scenic design process were the embracing of theatricality and, with this, the need for mobility.

Jumping back and forth between two time periods with obvious actor doubling and direct address of the audience, the script lends itself to a non-realistic approach at least in part. While the scenes themselves are largely self-contained, there is an obvious disjointedness and shift between scenes, acknowledging the theatrical vehicle on display. Collaborations with the scenic designer regarding this design challenge mutually favored the visible shifting of spaces as a feature of the play. Instead of hiding the mechanics of transition, this shifting could be exposed to capture the spirit of theatricality already inherent within the text, and serve to change the set quickly. At this point in the process, the revolving movement of "progress" was implemented into the total concept for the

production led by the scenic design. The previous mode of transition, flats on stage wagons allowed for scenic changes to be made upstage of the flats (figure A.9), but was abandoned in favor of a more theatrical option with the revolution of time as inspiration. An automated revolve was placed as a centerpiece to the design with items signifying one era on one side and the other on the other side, seen in figures A.10 and A.11. Scenic flats to be stored in the fly space above the stage would be visibly flown in and flown out to define the dining room (figure A.12) and Maria's room within the same playing space (figure A.13). Conversations regarding which scenic pieces could be mobile concluded the shelves on either side of the stage should also turn or change with the revolve, and the stepladder should be moveable to various positions onstage (figure A.14).

Although the scenic designer and I were in agreement regarding the non-realistic qualities of the script, I did not anticipate the challenges this would present for an inexperienced student designer. After multiple seemingly productive discussions regarding the possible moving pieces of the design, I asked the designer to provide at least three visual examples exploring our ideas on paper or in digital form to further refine rough ideas toward a final design. However, very few of the discussed ideas were manifested in concrete form at the following meeting. I again requested the designer produce a visual representation of the various transition options and provided him with three viable ideas based on our discussions. The designer responded that my request would be addressed in the paper model he was building for the next production meeting with everyone present. Unfortunately, I did not believe we were ready to present a model to the larger group because a further refinement of ideas was still needed. It was obvious I had not clearly communicated my expectations, and my positive responses to our

brainstorming sessions gave the impression that no further exploration was needed at this point in the development process. Unsure how to proceed, I approached the scenic design faculty mentor for guidance who then stepped in to troubleshoot and facilitate communication. In response to my expressed concerns, the faculty advisor urged both of us to agree on clearly defined goals and a summary of what had been discussed at the end of every interaction going forward. This streamlining of conversation would then allow the scenic designer to progress according to clearly defined expectations and also allow the scenic design faculty mentor to better assist the design process and assess progress.

The faculty advisor also postponed the quickly approaching preliminary design meeting in favor of another brainstorming session. At the meeting, the scenic design faculty mentor, the faculty directing advisor, Baylor's production manager, the stage manager, the scenic designer, and I met for several hours without the larger production team present. The scenic designer prepared and presented two different staging configurations using a paper model. A third option combining elements from the two options presented was agreed upon and problem-solving continued regarding each individual scenic unit and the collective shape of the paintings above the set. The placement of two conventional exits was determined, with the addition of escape stairs behind the two story unit for the purpose of quick entrances and exits. Two options for the placement of the hanging were also discussed, as seen in figures A.15 and A.16, while a final decision was postponed until further discussion with the technical director. I determined the orchestra pit should be lowered in order to emphasize the proscenium configuration and simplify construction. Another paper model with the implemented notes from this scenic breakoff discussion was agreed upon as the next stage in

development to be presented to the larger group. When the larger group reconvened, the updated scenic design plans were presented and another lengthy meeting was held with the addition of the lighting designer, lighting design faculty mentor, and the technical director.

During this subsequent meeting, a significant realization was made. Although, incompleteness was discussed early on, the quality had disappeared from the scenic design in favor of a more realistic symmetry and complexity of detail. The result was something more historically accurate for Georgian architecture, but not in keeping with the directorial concept. In addition, elements of transition, such as the revolving bookcase and quick-change shelves, had been eliminated to address concerns from the lighting design faculty advisor and the technical director. This loss was brought to my attention when the technical director remarked the set now seemed as though it was realistic, just with the walls removed. While the concurrence of the group was persuasive initially, qualities of incompleteness and mobility were lost by these decisions. In addition, without turning elements, changes of the set and properties would require production crew members to appear onstage during transitions and disrupt the visual style of the production. After further reflection, I was determined to defend these core elements of the concept to preserve the originally agreed upon needs of the production. In a lengthy meeting the next day between myself and the scenic designer, I urged the scenic designer to find a way to implement both qualities that were lost due to the most recent discussion and offered suggestions to do so. I documented this discussion in an email to the scenic faculty advisor and the directing faculty advisor to prevent miscommunication and provide proof these changes were requested on that specific date.

The final design presented in the next meeting reflected these updates along with a few others as a result of conversations between the scenic designer and technical director. The painting at the beginning would be attached to a rolling easel instead of the scrim for easy removal (figure A.17). The dining room would be staged off to the stage left side (figure A.18) in order to provide balance for Maria's room to be staged on the stage right side (figure A.19). The hanging would be upstage, as previously discussed, where the actress could be safely supported on a harness. This decision necessitated the removal of the step-ladder from the stage prior to the end of the play. The paintings to be hung the furthest upstage would be hung on two different batons, both removable for a total of three different stage looks to be explored in technical rehearsals. With these notes implemented, I was able to approve the final design without hesitation. During the following week, a scale model was constructed, see figure A.20, and the technical director began making plans for construction.

The specific color palette was determined after the final design was presented to the production team, but it was agreed early on that there should be a high contrast between the colors of the costumes and the set pieces. After the color palette for the costume design was selected, an image inspiring the scenic design color palette was agreed upon by the director and scenic designer, see figure A.21. Burnt sienna wood tones and antique brushed gold were selected based on historical research and the warm hues seen in Joseph Wright's painting. Set dressing and furniture pieces would follow suit. The scale model was painted accordingly.

While a final design was reached, concerns regarding the transitions between scenes still needed to be addressed and conceptualized. I prepared an eight-page

document, anticipating the specifics of each transition in each area of design, including scenic, costuming, lighting, sound, and props, with some indication of possible blocking to accommodate these transitions. After discussing these plans with the scenic and costume designers, I called a transitions breakoff meeting for other members of the production team. In attendance was stage management, lighting design, and sound design, including both faculty design mentors. We discussed plans for the most complicated transitions, addressing concerns directly. The intent of the meeting was to alleviate any stress and reaffirm willingness for collaboration while keeping to the overall vision for the production.

No major alterations occurred after this point, with the exception of two noteworthy adjustments. During the construction of the scale model, the balcony was discovered to be too narrow to walk back and forth on while also looking at the contents of the shelves on the second level. Since it was my primary intention to use the second story for this purpose, the depth of the balcony had to be altered by extending the top portion slightly in the realized ground plan. In addition, a full 360 degrees revolution of the automated revolve was agreed upon prior to construction. This would allow scene changes to occur with the revolve turning in either direction and also provide the option of turning the revolve for more purposes than just to transition between the two time periods. Due to a miscommunication during construction, the revolve was built to only turn 180 degrees, diminishing the staging variations possible. While this was unfortunate, this set piece was built before any other scenic elements were installed, and, consequently, I was able to adjust blocking and re-conceptualize affected transitions early in the process.

As transitions were staged during technical rehearsals and other elements were added, the presence of the chandeliers and the dining room walls in act two was a point of contention. During the paper technical talk through of how the show would be called, it was determined the chandeliers would be too distracting to reenter after the opening scene when the time shifted back to 1799. Also, the dining room walls would be too difficult to lower just after the onstage costume change before Tom and Ellen's scene. The scenic designer was not present and these decisions were made for the sake of the momentum of the second act. The designer was not aware of the change until the rehearsal just before preview, and requested the chandeliers be added back in for the preview performance. After seeing how distracting they were, however, we decided together to return to the original plan determined at the paper technical. After the second onstage costume change was cut, I also requested the dining room walls be added back in for the Tom and Ellen scene to draw a parallel to the previous Susannah and Fenwick scene. However, this change would mean adding a difficult sequence and altering cues just before the hanging. Taking this into consideration, together with the scenic designer and stage manager, we decided against the change in favor of safety over aesthetics in this instance.

Costume Design

While the scenic design demanded a more involved approach to collaboration and problem-solving, the costume design process was much more straightforward. Collaboration with the incoming faculty costume designer began with correspondence via Skype and email over the summer months. In addition to the concept meeting with the rest of the designers, we agreed on a few prominent qualities of each character to be

reflected in the costuming. Conceptually, we agreed the theatrical devices of the script in the onstage costume change and the double-casting were important to the style and momentum of the play. Ample time would be paid to make all costume changes both swift and effective, with special attention paid to the onstage costume change at the opening of the play. In addition, costume pieces would be constructed specifically for easy removal and placement.

Other than the costume changes, early meetings addressed the basic requirements of the script. Three costumes are called for to be used by the characters of the play within the play: a Britannia costume for Harriet, an Arcadia costume for Maria, and a sheep costume for Isobel, all fashioned by Harriet. It was determined these should be all materials Harriet would find in her mother's closet since Susannah forces Harriet to do the play. Another requirement is outdoor clothing for characters in both time periods emphasizing the wintry climate outside and inside the house. The designer planned to use coats and layering to simplify quick costume changes and planned to provide each character with an outdoor garment in addition to scarves and hats for the 1999 characters. Finally, Isobel's idiopathic scoliosis, described in the script as "severe" and "exquisite," should make her clothes not fit properly, as well as fulfill the description. It was my intention from the very beginning of the process for Isobel's deformity to be created through costuming and to not limit casting choices based on physical ability. A hump was fashioned according to visual research, seen in figure A.22, to be worn on the actress' right shoulder and a smaller formation was placed on her left hip to complete the illusion of the deformed curvature of the spine. This piece was connected to a body suit to be worn under the actress' dress. An additional harness for suspending the actress safely

above the stage, giving the illusion of a hanging, would be worn underneath the bodysuit with the deformity on it. All of these considerations were worked through in early collaborations with the designer in productive and thorough interactions.

In keeping with Brecht's historicization and the importance of image-making discussed in the previous chapter, I asked the costume designer to make choices based on what the audience would recognize as historically period and correct for the characters, as opposed to true historical accuracy. For instance, an audience member may not be familiar with the nuances of transitional clothing during the 18th century, but the film adaptations of Jane Austen novels are perceived to be within the generally correct time period from our audience's perspective and also provide a romanticized notion of femininity appropriate for Maria and Harriet Fenwick. In addition, the lady of the household at the end of the 18th century would normally wear a bonnet indoors, meaning Susannah would always wear one for the duration of the play. However, to our audiences, a bonnet signifies modesty and prudence, traits Susannah does not possess.

Combining visual research with historical knowledge of clothing, the costume designer urged a more traditional and restrictive silhouette for Susannah, in spite of the more liberated empire-waist silhouette popular in Jane Austen visualizations and at the turn of the 18th century. This more structured figure, seen in figure A.23, would not only set Susannah apart from her daughters, but also provide a more drastic alteration to the female form for the onstage costume change at the beginning of the play. After considering these benefits, I whole-heartedly agreed and the design for Susannah proceeded accordingly.

In addition to a difference in line to delineate character, collaborations with the costume designer led to specific choices in color based on character relationships. A manipulated photograph titled “Abandoned Beauty” was selected to inspire a tight color palette seemingly devoid of warmth, as seen in figure A.24. In the photograph, a once beautiful English manor house decays in the harsh light of winter. This image led to the selection of white, black, gray, blue, and green with hints of gold. Green was selected to visually unify scientific characters and blue was used to signify those characters more concerned with the heart. This binary could be seen most effectively in the characters of Susannah and Fenwick and Harriet and Maria, seen in figures A.25 and A.26. However, the binary was not entirely feasible for all of the costumes due to the need to borrow some pieces from another theatre company. The character of Roget, for instance, was planned to be in gray (figure A.27), but his jacket was brown due to this rental situation. However, it was followed as closely as possible in almost every other regard. Due to this tight color palette, all traces of red were toned down significantly, including the red of Harriet’s cape as Britannia (figure A.28), which is traditionally bright crimson according to the colors of the British flag. The color palette was also planned to be carried through the later time period. Visual research for the 1999 costumes reflected this intentional color choice, as seen in figure A.29, with less control over tone based on whatever pieces could be pulled from stock or otherwise procured.

After the actress to play Susannah/Ellen was selected, I approached the costume designer with concerns of the actress’ youthful appearance in contrast to the actresses playing her daughters, Harriet and Maria. The costume designer had already selected a more traditional style for the dress with layers of fabric to add volume to Susannah’s

silhouette. This increase in material would dramatically affect Susannah's ability to move quickly, aiding in the communication of age, and also require elegance and posture not as necessary for the navigation of the two younger girls' gowns. In addition to the volume of Susannah's dress, I requested a lower neckline to make Susannah appear more mature and make her attempts to gain her husband's attention obvious. This resulted in a very distinct shape to Susannah that aged the actress significantly combined with the youthful movements of the two actresses playing Harriet and Maria.

All of these choices were reflected in the preliminary design sketches, while the logistics of costume quick changes were yet to be determined. Normally, any quick changes are worked through during rehearsal on the Wednesday prior to the preview performance. The time spent in rehearsal includes training the wardrobe crew members as well as working through the change several times with the actors involved. Less than half an hour is typically all that is needed to accomplish this efficiently. However, with one onstage costume/wig change, over twenty other quick changes, and sometimes four actors changing at once, another solution had to be found for this production. In addition, I planned to experiment with a second onstage costume change to occur in the second act of the play. The change would involve the actor playing Fenwick/Tom and the actress playing Susannah/Ellen and would occur with both of them onstage simultaneously changing into their contemporary counterparts. The detailed choreography and rehearsal needed for this change would require time not possible with the standard schedule.

Since the costume shop manager typically organizes and choreographs quick changes, a meeting was scheduled with the designer, costume shop manager, stage manager, production manager, and director to address these concerns and, hopefully, find

a feasible solution. As a result of this meeting, both the costume designer and shop manager agreed to train and practice with wardrobe crew members outside of rehearsal in addition to a two hour quick change rehearsal to be conducted before rehearsal began on the Wednesday during technical rehearsals. To accommodate the added onstage wardrobe change, the designer and costume shop manager agreed to set aside time for this change specifically and to also be available in rehearsal during my staging of it. By the end of the meeting, the solutions found were satisfactory for all in attendance and we proceeded to plan accordingly.

In the period between rough and final design deadlines, fabric swatches arrived and the costume designer and I met to discuss appropriate textures and materials for each character. Susannah, as the lead and the most attention-seeking character, would be dressed in navy silk taffeta with gold embroidery and trimmings. Fenwick, as Susannah's husband, would also wear an attention-grabbing silk taffeta in a green banyan jacket with a fur collar in the opening scene, as seen in figure A.30. Much less flamboyant, Isobel's dress would be made of a knit linen material printed with a subtle feathery pattern, as seen in figure A.31. A simple grey-brown apron would be worn over that to make her appear plain and lowly. A simple kerchief was also added to Isobel's neckline to distinguish her from the other women in 1799 as more modest and sensible. Once these decisions were made, the costume designer selected other materials with a similar sheen to include in Harriet and Maria's dresses, Armstrong's suit, and Roget's tie and vest in order to delineate Isobel's clothing as recognizably the most plain in the earlier era. The materials selected during this meeting were ordered and used to construct the final designs, with one exception. The material selected for Susannah's gown with the gold

embroidery was discontinued before it could be ordered and there was not enough remaining to construct the costume. The costume designer, however, felt so strongly about the material selected, she ordered plain navy taffeta and had the gold embroidery pattern painted on the material by hand. The result was as stunning as the costume designer had originally intended it to be, but allowed the designer to make the gold even more prominent and eye-catching. Such special attention to detail like this and commitment to directorial concept characterized the costume design process in its entirety even to the final construction.

Hair and Makeup Design

The hair and makeup designer was incorporated much later in the process, after final costume designs were determined. Due to this late involvement, the costume designer handled the majority of dealings with her, relating concepts for each character previously discussed. The same concept of using recognizable images from popular film and television iconography of the 1790s and 1990s was utilized. Together, the costume and hair/makeup designer agreed two wigs would be the best solution to change between Susannah and Ellen quickly, a wig would be used for Fenwick while the actor's natural hair would be used for Tom, two wigs would be used for Harriet and Kate, and the actor playing Armstrong and Phil would have his hair styled for Armstrong and wear a hat for Phil. After preliminary meetings with the costume designer, visual research was collected and the hair and makeup designer and I finally met to approve each look before proceeding. By the time of this meeting, the costume designer's attentiveness to the directorial concept and the needs of the production had already vetted much of the material down to a few clear ideas for each character.

During the rehearsal process, costuming and hair/makeup were also considered together. Wig quick changes were coordinated and implemented at the same time as the costume quick changes. A member of the wig crew handled all wig quick changes while wardrobe crew members worked with the costume pieces. Make-up was not included in the quick changes. Thankfully, characters doubled were meant to be relatively the same age and complexion. Make-up was designed largely to delineate age and life experience.

During the day before opening night, Susannah's wig was left too close to a lightbulb in the room in which it was stored overnight. Unfortunately, a large hole was burned in the wig and it had to be completely restyled prior to the performance that night. Due to this mishap, extra care had to be taken while pinning the wig on the actress' head during the opening costume change from then on, making the costume change even longer than anticipated. Adjustments were made in the repeated rehearsals performed each day prior to performances and direction was also given the actress to pause strategically in order to cover the longer change time. While the onstage costume change only ever timed out satisfactorily once during the entire run of the show, the theatrical effect created was thematically central to the play and necessary to make work regardless.

Prop Design and Management

While Stephenson's text certainly presents challenges enough for scenic and costume designers, the large number and complexity of props called for in the script is also daunting for a properties master. Fenwick's collection imposes on the space in an orderly, but eclectic manner, displaying a mix of natural and scientific materials. In addition, all of these items must be stowed away during 1999 scenes or be appropriate for both time periods. Other props unique to the show such as the air pump and the

functioning steaming chimney hat must be designed and constructed from scratch. Still other props prove challenging, such as the bird used in the air pump experiment to be frozen in tableau and then be obviously alive, a noose that will not harm the actress, but convincingly appear fatal onstage, and a coffin with Isobel's body in it to be carried out on stage and displayed so the audience can see the actress inside. These requirements necessitate a skilled and creative props artisan with designerly sensibilities and collaborative skills. Fortunately, the student designer assigned this task was just the individual for the job. Unfortunately, a lack of communication on my part resulted in setbacks.

A close collaboration between the props mistress, scenic designer, and stage manager was maintained so the props themselves, the scenic design, the tracking and set changes, and the staging created a cohesive aesthetic. Having worked with the props mistress before in a different capacity, a relationship of cooperation was pre-existing between myself, the stage manager, and the props mistress. The props mistress and scenic designer also worked very closely together out of necessity.

Specific materials were selected to mark time period and emphasize industrial progress. Natural materials, such as animals, parchment, leather, quills, bones, glass, metals, and wood composed the textures selected for 1799. Manufactured and manmade materials, such as plastic, cardboard, synthetic fabric, bubble wrap, Tupperware, and electronics composed the 1999 hand props and set dressing, along with some of the same materials left onstage from the earlier time period.

In addition to textures delineating time period, parallel items appeared in each era to highlight the passage of time and the duality inherent in the text. When a modern

candle appeared in 1999, a candle from 1799 was placed in the same spot to draw a visual parallel. Candles used in the 1790s scenes were also replaced by handheld electric work lights and a flashlight used in the 1990s scenes. A feather duster made from natural-looking materials was selected to be used in the earlier time period while a bright blue synthetic duster with chrome handle was selected for the later time period.

In other instances, the same items were used for both time periods to establish fluidity between time periods and simplify set changes. Books, tea chests, glasses, wine bottles, silverware, the paintings, and some of Fenwick's collection all appeared in both time periods. In order to facilitate scene changes, actor business in almost all of the scenes included striking or setting props for the following scene regardless of time period. Beyond simply assisting in the momentum of transitions, this also served to connect the two time periods visually in the same way dialogue and double casting functions in performance.

Collaborations between the scenic designer and props mistress maintained a cohesive aesthetic for the production. Taxidermy animals and preserved bones were borrowed from the Mayborn Museum with very specific instructions as to their handling. This relationship was first established by the production manager. The props mistress and scenic designer then went to peruse the Mayborn Museum collection for potential items before retrieving them for use in the set dressing. The selection of paintings also was a collaboration between the scenic designer, and props mistress. After preliminary research, I suggested specific paintings with consideration of time, locale, and content. A faculty member from the Baylor Art Department offered advice on selected paintings. Based on this insight, one of the paintings was removed and another one added. The rest

of the selections were confirmed as appropriate. The scenic designer and props mistress then procured printouts of these paintings and mounted them in frames to be hung above the stage.

Staging Isobel's hanging was a collaboration between the actress, props mistress, costume designer, stage manager, and technical director, who doubled as the fight choreographer. The props mistress fashioned a noose with a breakaway knot for easy removal. The noose was attached to a black cord thrown over the second level of the upstage right corner of the bookshelves, invisible to audience members and controlled by an offstage crew member. A specially designed flight harness was worn underneath the bodysuit and dress designed for the actress with a pick point between her shoulder blades. A discreet opening in the back of the actress' dress allowed crew members to attach the actress to a wire that was attached to a pulley system in the fly space above the stage. However, the noose and the wire actually bearing the actress' weight remained unattached as a safety precaution.

The technical director and stage manager worked with the actors and production crew members in rehearsal to coordinate how the stunt was executed in performance. Once in position with the breakaway noose around her neck, the actress pulled down on the wire attached to her back, signaling the fly rail operators offstage to lift her up. The successful combination of costuming, props, and technical direction gave the illusion the actress was hanging from the noose, suspended in air above an overturned stool. Lighting further aided in masking the wire attached to the actress. To remove the actress from the noose, the fly rail operators lowered her to the ground as the actor playing Armstrong pretended to lower her. Meanwhile, the actress playing Maria undid the breakaway noose

and unclipped Isobel from the wire. These actions were hidden from the audience through staging. The preparation for the stunt in rehearsal took more time than anticipated, but the end result was convincing and dramatically satisfying.

Although, in general, interactions with the props mistress were very productive, a lack of discussion about the progress of the air pump, chimney hat, and bird resulted in their delayed procurement. Although I had inquired after these three items from the very beginning of the process, no concrete progress had surfaced only two weeks before technical rehearsals were to begin. I called a separate props meeting with the props mistress and props faculty member to address just these three items and make sure a plan was in place to complete them as soon as possible. While the intention was to confirm the utmost priority of these items for the success of the production, a lack of specificity on my part at this point in the process was detrimental to the development of the “live” bird. A research image of the correct air pump (figure A.32), and a chimney hat from another production (figure A.33) was given to the props faculty member and props mistress to use as a model and these props were built accordingly with great attention to detail. However, the bird remained unseen, and only abstractly discussed.

Starting at the beginning of the schoolyear in one-on-one meetings with the props mistress and technical director, I requested that a real bird be used for technical rehearsals and performances. Almost immediately, that was eliminated as an option, and weeks of searching for a non-live, but realistic-looking bird ensued. After the props breakoff meeting mentioned above, a faculty member took over the creation of the bird. The week of technical rehearsals, when no other options presented themselves, a bird was finally built by the faculty member with moveable wings and head. While the scale of the bird

was suited for the air pump, it was not suited for the birdcage to be used during Maria's monologues. I expressed concern for size when the bird was presented just before the first dress rehearsal, but agreed to try the bird in rehearsal that evening.

During rehearsal, the bird fell sideways in the cage multiple times, highlighting the reality of the non-live bird and producing an undesired comic effect. When multiple faculty members responded with the same concern for the appearance of the bird, an alternative solution had to be found. Having had great success in my collaboration with the costume designer, I approached the costume designer to request she make a simple cover for the birdcage. The costume designer was able to fashion something literally overnight and the result proved even more fitting for the pastoral tone of Maria's letters. The bird was still used in the air pump and transferred to the birdcage for the remainder of each performance, but the scale and position of the bird in the cage was pleasantly concealed. A satisfactory and aesthetically pleasing compromise was reached.

There is a delicate balance between management and room for creativity in collaboration with a design team, but, in this instance, I should have been much more specific initially and then directly involved throughout the creation of the bird. This may have alleviated unnecessary stress at the end of the production process. That being said, attention to detail is what I believe made the aesthetic quality of this production so high. Looking back on this situation, it is evident to me something had to be done regardless. I only regret not having been involved sooner.

Sound Design

Although often one of the last elements of design to be incorporated, I conceptualized the integration of sound in the total momentum of the play, driving

transitions as well as supporting, and sometimes juxtaposing, dramatic action. Due to this integration, the sound designer was part of the earliest design meetings over the summer months. While the exact needs of the play were still in the development stages, I urged the sound designer to take inspiration from the theatrical and fragmented style of the script and Joseph Wright's painting. Discussions with the sound designer pointed toward qualities of celestial wonder, elegance, time period, and cavernous, unseen space. Sound would embody these qualities already being implemented in other design areas while also serving as a connector between scenes and time periods.

Rather than predesign the soundscape, it was agreed final decisions would be made during rehearsals as much as possible, and the sound designer would attend rehearsals as specific sections of text were staged. This agreement early on helped establish an attitude of cooperation in discovery with the sound designer, even into technical rehearsals. In addition, actors were able to utilize sound as inspiration for character development. While this open-endedness to early design meetings presented certain frustrations, the end result was highly suited to the actual needs of the production according to my vision.

The deferment of final decisions about transitions did not stop the sound designer from gathering ideas for pre-show, intermission, and post-show cues. The sound designer was struck by an overarching progression toward a loss of innocence in the tone of the play that he hoped to frame with music. A spirit of observation to be reflected in the museum setting of the opening led to the selection of "elevator jazz" for the pre-show music, while the instrumental version of Lady Gaga's *Bad Romance* served as inspiration for the selection of baroque style pop songs from the turn of the 21st century for

intermission and post-show. The final sound cues would reflect a hopeful, but more traveled perspective, driving the audience onward to make their own informed decisions. An instrumental version of *Radioactive* by Imagine Dragons was selected for these qualities along with the significance of the lyrics that anyone familiar with the song would recognize. Other recognizable pieces such as Edvard Grieg's *Morning Mood* and Antonio Vivaldi's *Spring* from *The Four Seasons* violin concerti were selected as options to potentially underscore Maria's monologues, and cover transitions in some instances.

Experimenting with these sound options in rehearsal led to significant discoveries for actors. Prior to the incorporation of sound, the actress playing Maria struggled to fully embody the playful and ironic style of her monologues. When the underscoring was added, she suddenly understood the comedy of the moments we had blocked and felt more confident in making choices on her own for the character. Another important sound-related discovery occurred for the actress playing Isobel when the underscoring for her suicide note was incorporated. Previously, the actress struggled with phrasing and finding meaningful places to pause and take her time. When Dario Marianelli's "Darcy's Letter" from the *Pride and Prejudice* film soundtrack was introduced as underscoring, the phrasing of the piece inspired the actress to truly savor dramatic moments in the monologue.

Other general discoveries made by the sound designer during the rehearsal process influenced sound decisions, such as the prominence of time in the structure of the text and the movement and length of the transitions as part of the rhythm of the play. The revolving motion of the upstage turntable and rotating bookshelf further inspired a variation of ticking clock sounds for transitions into both acts, between scenes, and to

underscore the second onstage costume change. Sound cues were lengthened and manipulated to gradually slow down or speed into the following episode depending on intended mood and time needed for each transition. The sound designer also made the purposeful decision to exclude sound cues from certain transitions depending on the aural qualities of the episode preceding the transition.

Another significant discovery made during the production process occurred with the construction of the revolve. The technical director informed me the revolve would make an unavoidable wooden noise when in operation. Instead of seeking to mask the noise, the sound designer opted to use the noise as an intentional design choice, manipulating and augmenting the sound. This not only drew attention to the theatricality of the set changing in view of the audience, but also emphasized the aging of the house over time. As the play progressed and the overall style grew more and more theatrical and fragmented, the sound grew louder and louder with the exception of the last two transitions so as to not distract from the ongoing narrative.

Lighting Design

In the process of design for this production, lighting was the last area to be realized. Nonetheless, the lighting designer played an active role in early conceptual discussions with a clear understanding of the play and a strong response to Wright's painting as inspiration. The pictured chiaroscuro of the painting was especially central to the theatrical re-creation of painterly lighting effects onstage. I encouraged the lighting designer to think in terms of designing the shadows and negative space of the production, as opposed to simply thinking about the positive objects being lit. I urged the scenic and lighting designers to work together in this manner, designing with the other element in

mind to create a set designed for theatrical lighting opportunities and lighting to emphasize specific qualities of the set depending on time period and tone. Such a collaboration was especially evident, for instance, in the transition leading up to Isobel's hanging. During the blackout, the lighting designer intensified the pulsing light on the gold proscenium picture frame so it became a glowing, dynamic feature of design, also creating the illusion of a void within the contents of the frame.

My collaboration with the lighting designer was limited prior to technical rehearsals, but some specific ideas were discussed in advance to provide direction. Being careful to articulate the need to preserve realistic lighting within scenes, I pinpointed specific stage pictures to be lit outside the realm of realism. The opening tableau, closing tableau, and two tableaux within the text would be lit like the painting, and transitions should highlight the changing of the set with a gradual progression toward a more theatrical aesthetic. I also emphasized the need for bold choices and great care in crafting memorable images. Having worked with the lighting designer before, I encouraged him to take liberties and experiment as he saw fit, trusting his artistic eye. As other design areas made final decisions, the lighting designer planned accordingly, but was not able to truly experiment until after the nearly complete construction of the set.

In general, the lighting design provided variation between time periods as well as tonal progression throughout the play. The warmth of candlelight in the 1790s, contrasted with the cool, crisp white light of the 1990s established a noticeable difference in era. White lighting upstage of a French-door unit indicated wintry weather outside and a progression from late morning to evening in act one and then late morning to midnight in act two. Lighting also served to delineate transitions with deep blues and purples, while

patterned down-lighting on shifting pieces of scenery drew attention to the changing set. Paintings hung above the stage also each had their own light, as if hanging in a picture gallery on display. This same museum lighting was used in the opening pre-show.

Conclusion

When I first started to imagine what this production could look like outside the realm of what had already been done before, I imagined the ideal and reminded myself that would most likely not be attained. However, I greatly underestimated the incoming faculty member and student designers assigned to this project, as well as my own ability to provide visual and aural direction with room for collaboration. In addition, while the preparation required over the summer months before even the first design meeting was extensive and challenging provided travel arrangements, this gestation time prior to the schoolyear provided me the creative recharge needed to think through and to gain confidence for what lay ahead. The production resulting from this advance study and collaboration together with designers was intelligent, cohesive, and aesthetically pleasing, even more visually memorable than the version of the ideal in my head. Ultimately, however, the remaining image I hoped to leave the audience with was something they could interpret for themselves from the union of concept, design, and narrative. In order to accomplish this, casting and work with actors was required to fully realize Stephenson's text.

CHAPTER FOUR

The Rehearsal Process

Introduction

Though design aspects for Shelagh Stephenson's *An Experiment With An Air Pump* were demanding, the daunting task of bringing Stephenson's text to life required careful casting and incorporation of actors. Brecht was known to spend months in rehearsal with actors, exploring one aspect of story-telling at a time, and continuing discovery even into performance. Baylor theatre, however, does not share this luxury. Still, it was my intention to utilize Brechtian concepts as an inspiration for work with actors, and to continue exploration into technical rehearsals. With only four weeks to work with actors before technical elements were introduced, I selectively formulated my three-fold approach to rehearsals: first, "become acquainted" with the text, second, search for a character's subjective truth, and third, see the character within the larger context of society.¹ This chapter follows my staging of Shelagh Stephenson's text from auditions through final performance, tracing how the Brechtian spirit of Stephenson's play influenced casting, my approach to rehearsals, and my commitment to creating an effective dialogue inspired by the visual artistry exhibited in Wright's painting.

¹ Bertolt Brecht, "Notes on Stanislavsky," *Tulane Drama Review* 9, no. 2 (Winter 1964): 159, accessed February 5, 2017, <http://www.jstor.org/stable/1125107>.

Casting

Auditions at Baylor University are typically held in two phases: an initial audition including everyone available in the department, and a callback with less than half of the actors selected. Further readings may be requested at the discretion of the director. At the first phase of auditions for this production, actors were asked to select from a handful of monologues to prepare in Standard British Dialect. While the monologues were not from the play itself, they were selected for heightened language and status in keeping with the size and style of the 1799 era portrayed in Stephenson's play. As the easier of the two periods, I decided contemporary characters and alternate dialects would be addressed during the second phase of auditions. The auditions went smoothly and we were periodically ahead of schedule. After the first round of auditions, I eliminated anyone I would not be able to seriously consider and asked the remainder to come to callbacks.

For callbacks, actors were asked to read a short excerpt from the play. These sides were made available to the actors in digital form earlier in the day with hard copies available during callbacks. It was my intention to focus more specifically on individual characters as opposed to looking for performance style. Actors were divided into groups and scheduled to arrive at staggered times. Unfortunately, due to the number of individuals involved in the other mainstage production (also rehearsing during the same time) a large portion of actors were unavailable to read during their time slot. This unforeseen scheduling conflict caused us to forego the neatly scheduled structure of the evening. As a result, many actors were forced to sit and wait for their scene partners to be dismissed from the other rehearsal, while others were not able to read at all until later in the evening. I used the time as efficiently as possible, letting anyone go who I was certain

I did not need to see read again. Although I was only able to see some people read once, I made sure to give notes and offer direction for each actor to see how they would respond. This helped me tremendously in my final casting selections, allowing me to preview flexibility and the ability to take direction.

Essentially, casting was conducted with the counterpoint nature of Stephenson's characters in mind. Susannah Fenwick should be performative, and fiery, commanding attention when she enters a room. Ellen, on the other hand, should be refined, but straight forward and understated, resistant to superfluity. In addition to doubling, Susannah/Ellen would also have to be the clear opposite of Fenwick/Tom. Fenwick is a visionary, mature and pompous, spouting his progressive philosophies without reservation. Tom is intellectual, but deeply spiritual and thoughtful, only occasionally provoked. The same counterpoint approach to casting was taken for Harriet/Kate and Maria, as well as Armstrong/Phil and Roget. Isobel would be cast as an outsider, completely unique from all other characters.

The casting decision for Armstrong/Phil was very clear after only a few readings. It was essential for this actor to be convincingly humorous as Phil and also convincingly meticulous as Armstrong, but have a strong handle on the dialect differences for each. Since Geordie is an obscure dialect specific to the Newcastle region, my expectations were not very high at callbacks. However, the actor who was eventually cast was very convincing with both dialects from the very first time he read for me. After hearing him read, my only hesitation was his size, especially for the proscenium stage we would be working on. I was reminded by faculty members present that the costuming and physicality could make up for what he lacked in stature.

The casting of Roget was far more challenging. Physically, I envisioned a thin, awkward, and young man. This actor also must be an apt wordsmith and be able to play the period and size demanded by the performance venue. After selecting Armstrong/Phil on the evening of callbacks, I still had a handful of actors who could potentially play Roget. After describing my ideal Roget to a faculty member present at callbacks, he suggested the actor who I eventually selected for the part. I was hesitant because this actor struggles with articulation, making him difficult to understand especially in the Jones Theatre, where he had performed several times before. It was important to me that Roget be masterful in his delivery of difficult words as the future author of Roget's *Thesaurus*. The following day, I asked this actor, along with several others, to read a longer scene with the actress I selected for Isobel. Several actors read well, making my decision difficult, but the actor selected had an endearing quality I did not even know I was seeking for the character. His articulation would still need work, but I believed this production would be a welcome challenge for him.

In casting Maria and Harriet/Kate, I sought complementary qualities, but it was not necessary for them to naturally appear to be twins, or for both of them to have brown eyes, as the text requires. Initially, I paired up several sets of Harriets, Marias, and Isobels to read a scene together. I also selected a monologue for those women being seriously considered for the part of Maria. There were many options, but ultimately, it was important to me these two actresses could sense the comic tone of the text and were willing to adjust according to my notes. The actress who was eventually cast as Maria demonstrated the greatest comic timing, understood my intentions when asking for adjustments, and also naturally possessed the youthful and naïve qualities I sought. In

contrast, the actress selected for Harriet seemed to possess more life experience onstage and read the character with an obvious understanding of the comedy. I had no doubt her natural worldliness would work well for Kate, but it was obvious Harriet may require more attention. Having worked with this actress before, I was confident in her strong work ethic and knew she could achieve something more youthful as Harriet. While I was not looking for two women who could pass as twins, coincidentally, the actresses cast were exactly the same size and complexion, both with dark hair and dark eyes. For the final performance, this similarity in appearance aided in clarifying and emphasizing the rivalry between these characters.

There were not many obvious options for Isobel. While many talented actresses were called back, none truly embodied the delicate balance of humility and boldness I was seeking for this character. I determined prior to auditions, together with the costume designer, that costuming would largely take care of Isobel's deformity, allowing me to select this actor based on other qualities. The actress who was cast read the monologue for Isobel almost completely memorized with some semblance of a dialect and was able to implement my notes right away. She demonstrated a great comprehension of the character and the play, even if her performance needed work. From working with her before, I knew I would be able to build on the natural sincerity this actress is capable of onstage. Unfortunately, my prioritization of the non-physical qualities of the character in casting proved problematic later in the process. The ramifications of this choice will be addressed in the following chapter.

The best choice for Fenwick/Tom was very clear. A sense of time period and physical awareness was absolutely essential for the actor playing both of these roles to

define the two time periods. While there were a few actors with far more mainstage experience than the actor selected, no other options even came close to this actor's stage presence. Due to another production that was in rehearsal during the time of my callbacks, I did not see this actor until late in the evening. Once I heard him read, my fears were alleviated.

However, even by the end of the night, I was very concerned about the role of Susannah/Ellen. One actress had read for me at the very end of rehearsal, demonstrating great skill for comedy and portraying qualities of ferocity and wit I was looking for in Susannah. Yet, I was concerned that her melodramatic tendencies would not be suited for the contemporary world of the play. Another actress, who was eventually chosen for the role, demonstrated potential in both time periods, but her previous performances in other productions at Baylor caused some hesitation in casting her. Not wanting to make an uninformed, hasty decision, I took the unusual step of holding a third reading the following day to hear the second actress and the actor selected for Fenwick/Tom again. Their work together in that reading demonstrated to me that this actress would provide range for both characters. After several days and much deliberation with faculty members over my two options, I finally determined my ultimate hesitation was based on a lack of trust in myself to direct the actress adequately for the needs of the production. With this discovery, I cast the second actress and prepared for rehearsals.

Rehearsals

In my preparation for rehearsals, I consulted Bertolt Brecht's approach to actors apparent in his writings. While my background is largely Stanislavskian based, the theatrical style of this particular play required something beyond simple representation of

character and narrative. According to Brecht, the ideal actor is “an actor who can completely empathise and absolutely transform himself into the character....but at the same time and before all else...an actor who can stand away from his character and criticize it as a representative of society.”² This individual must be able to believably portray the character, but also direct attention to a larger context. Brecht developed this in a prolonged rehearsal process divided into three phases:

- 1) Before you assimilate or lose yourself in your character you must first become acquainted with it...
- 2) The second phase is that of empathy, the search for the character’s truth in the subjective sense...
- 3) And then there is a third phase in which you try to see the character from the outside, from the standpoint of society.³

Essentially, the actor must comprehend the character from multiple standpoints. Going into rehearsals, these three phases were planned into the first two weeks of rehearsals beginning with the first read-through.

Becoming Acquainted: First Read-Through, Dialect, and Tablework

This initial meeting consisted of general announcements and discussion of the play followed by a reading of the text from start to finish. The unfamiliar dialects and vocabulary proved problematic to the flow of the read, but these concerns would be addressed in the next two rehearsals. During the reading, actors were asked to make observations about their characters and notice counterpoint inherent within the text to be shared with the group. Brecht urges this first phase of character development, it is essential to formulate “opinions and objectives,” without both of these elements “one can

² Ibid, 166.

³ Ibid, 159.

represent nothing at all. Without knowledge one can show nothing.”⁴ Therefore, our first priority in tabletop was knowledge about the play and our interpretation of it.

Using Wright’s painting as a starting point, I led the discussion after the read-through, promoting collaboration and pushing for the level of analysis I expected of the actors in rehearsal. Through this discussion, we discovered the reality of Stephenson’s characters and the figures captured in the painting are at odds with one another. Harriet has a natural desire for innovation, but cannot be a scientist because of her sex, Maria is quick to steal the spotlight from her sister, yet must maintain her title as “the quiet one,” Isobel is educated, yet because of her station in life is considered inferior. As the lady of the house, Susannah is powerless to make a name for herself in her own household. Two hundred years later, Ellen is a brilliant scientist with the potential to change the world if she so chooses, yet she struggles to make a decision. Fenwick is a progressive visionary, holding social progress in high esteem, but is neglectful of its application within his own household. While Fenwick suffers tunnel vision by holding his gaze firmly on the future, Tom is consumed with those marginalized by science, romanticizing the ethics of the past. At this point, the actors were very responsive to the concept of character counterpoint, with the exception of one actor, but it was my hope this would be clarified over time.

The second rehearsal was devoted to clarification of unfamiliar concepts, vocabulary, and historical sensibilities present in the text. I developed a vocabulary game using unfamiliar words from the script. A glossary was then made from the resulting words and definitions as it pertained to the context of the word in the script. During this

⁴Bertolt Brecht, “A Short Organum for the Theatre,” in *Brecht on Theatre*, ed. and trans. John Willett (New York: Hill and Wang, 1992), 196.

rehearsal, I watched actors interact and observed problem-solving and group dynamics to inform my approach to scene work later. This exercise also encouraged collegiality and an interest in scholarship needed for scientific characters.

Part of the third rehearsal was dedicated to overviewing the implementation of the International Phonetic Alphabet, or IPA, for dialect work. At this rehearsal, the faculty dialect coach provided paperwork to the director, stage management team, and actors to serve as a guide for the production process, and gave the actors notes on specific passages of text. Early dialect work in rehearsal was kept to a minimum, but actors were encouraged to work on dialect outside of rehearsal with the dialect coach. The actors were also required to use dialect for any use of the script inside rehearsal. After blocking was established and run-throughs became more frequent, the dialect coach attended rehearsals and gave notes to actors also addressing vocal issues.

Finding the Inner Truth: Tablework and Exploration

Continuing the process of Brecht's character development (finding the character's inner truth) I planned two days of tablework. My goals were to address the heightened language and density of character relationships and generate adequate discussion to avoid confusion and provide brainstorming for blocking rehearsals. These rehearsals were divided by time period, addressing one set of characters at a time and aiming to discuss each scene at least once prior to blocking. After establishing objectives and character relationships, each scene was divided into beats based on topic changes. From this point, the actors and I agreed on a range of action verbs to try with their scene partners in rehearsal, also agreeing to continue to experiment throughout the process until the most fitting action verbs, subtext, phrasing, and stakes were found. This brainstorming

provided a foundation for character choices to be implemented in exploration and blocking rehearsals.

Inside rehearsal, actors were encouraged to analyze their character and his/her relationships with others. Outside rehearsal, actors were encouraged to work with other members from the cast in order to promote partnership in character development. This was especially helpful with the condensed rehearsal process ahead of us and proved helpful in ensemble building. According to Brecht, “the learning process must be coordinated so that the actor learns as the other actors are learning and develops his character as they are developing theirs. For the smallest social unit is not the single person but two people. In life too we develop one another.”⁵ This partnered approach to collaboration encourages a greater understanding of characters from the very foundation of scenework, and it was my intention to build on the naturally developing ensemble in an organic approach to staging.

Blocking rehearsals were divided by French scenes, a division of dramatic text based on the entrances and exits of characters, and time period so only certain people were called on certain nights. This division also allowed actors playing characters in both time periods to develop a difference in historical sensibilities for their specific characters. Broad ideas for blocking were communicated to the actors prior to running through scenes and then more organic choices were made after that. It was my intention to devote significant time to the relationships of Susannah/Ellen and Fenwick/Tom and also Armstrong and Isobel. During these rehearsals, actors were encouraged to try various

⁵ Bertolt Brecht, *Brecht on Theatre*, ed. and trans. by John Willett (New York: Hill and Wang, 1992), 197.

staging options and the most effective choice was selected until further exploration might better inform the choice. Collaboration and flexibility was emphasized to the actors through these rehearsals, preparing them for the complex process still ahead of us.

Blocking with an awareness of style and story-telling was a major goal of the four rehearsals in which the production was staged. I intended for the two eras to connect visually in the staging and use of props. Roget would move the step ladder in the same way that Phil would move the step ladder in the following scene to connect the two characters. Armstrong would casually lean against things frequently and Kate would do the same thing in the later era. Props such as the silverware Isobel polishes in 1799 and the tea chests would appear in both eras would be packed by Ellen in 1999. A candle placed on the tea chest used by Phil in 1999 would also be used by Armstrong in 1799 in the following scene to rest a candlestick on. This same tea chest would be moved over for Maria's monologue and then moved off the stage completely during the next transition into scene. Blocking choices made in these early rehearsals made transitions more effective and emphasized the connection between the various scenes and characters.

Monologue rehearsals were dedicated to discussion and experimentation, focusing largely on Maria. The actress playing Maria was the most inexperienced actor, openly admitting her confusion with the heightened language and character sensibilities. After further questioning, I discovered the actress had no prior exposure to British film or literature at all, and was at a significant disadvantage. I asked her to tell me what she could perceive from the text, with no outside research done yet on the historical time period. From this discussion, I built a physical vocabulary with her for the character based on images of "pastoral innocence" and her estimation of the character's

progression from performative to something more genuine and self-aware. We experimented with the use of props and some blocking options, acknowledging that research is absolutely necessary to move forward. In all my interactions with her regarding the monologues, I limited the number and harshness of my notes and maintained a positive attitude, providing affirmation that hard work and dedication to find the character's inner truth would eventually pay off. With subsequent rehearsals, the actress continued to grow in confidence, playing with her natural propensity for comedy with more ease and implementing my notes to the best of her ability.

After all monologues and scenes were blocked, the designers were invited to watch a full run-through to take notes on how designs would be used by actors and interact with the planned staging. As a result of this run, the needs of multiple transitions were clarified with designers and stage management in addition to some potentially problematic areas for the lighting design specifically. Minimal adjustments were made according to these notes.

Throughout the process, significant memory issues became apparent for two of the actors, forcing them to carry their scripts with them to complete a run-through. While harsh notes were given that night, these two actors continued to drop cues leaving obvious lulls in dialogue onstage and forcing other actors to cover their memory lapses. I addressed these actors in person one-on-one and also in front of the cast regarding their memory issues, urging them to remedy the problem at once. I gave no ultimatum, but outlined the professionalism expected of them. I was convinced the issues would remedy themselves with this emphasis.

The actor playing Fenwick/Tom was able to correct his behavior considerably, but the actress continued to allow unrehearsed pauses and stumbling over her words. Justifying her excellent character work as far outweighing the disadvantages of memory, I trusted that she would eventually know her part without faltering. While she continued to improve with each repetition and took initiative to schedule work outside rehearsals to go over lines with scene partners, she continued to have one or two memory lapses per night even into performances. Looking back on the content and unusual speech patterns of the Susannah/Ellen role, this difficulty could have been anticipated with protected time set aside for repetition and memory work in rehearsals. This was an oversight on my part to anticipate the unique challenges of Stephenson's text.

From the Outside: Workthroughs and Polishing

In an effort to provide more continuity, all rehearsals after the designer run included time spent on the transitions between scenes in conjunction with the scenes surrounding the transition. Large sections of text were rehearsed at a time, first working through the material slowly and then repeating sections with the transitions included. The purpose of these work-throughs was to piece together the counterpoint of the various scenes and characters back to back, across time periods, while providing immediate feedback. Actors were encouraged to try things instead of discussing them and notes were given referring to the characters in third person, as opposed to referring to the actors as the characters. While this may seem insignificant, Brecht suggests this strategy encourages detachment between the characters and the actors, allowing commentary to form.

The third phase of Brecht's character development was now underway, however the physical realities of the characters still required attention. I invited a faculty member who taught a period styles acting class to come into rehearsal and work with the actors on movement and proscenium performance. I planned to hone the style of the performance that week, and thought another voice giving notes to then be implemented in our work-throughs would provide perspective and confirmation for the actors. I requested the acting teacher work with the actress playing Susannah/Ellen specifically, who he had worked with before, to scale her performance for the venue. Until that point, she seemed hesitant to the natural melodrama of the character. In my discussions with her, she seemed to understand, but was very concerned about playing to a stereotype. I hoped, in stepping back and watching her during these exercises, I would learn how to better direct the actress toward what the production required.

The faculty member walked the actors through several exercises, but one exercise in particular was influential on my subsequent work with the actress. He asked her to come to the back of the audience and observe the movements of her peers onstage. The other actors completed simple gestures in an exaggerated manner. From the back of the auditorium, exaggeration appeared natural and completely fitting for the world of the play. She eagerly asked her fellow actors to watch from the back of the auditorium as she experimented with her movements onstage, receiving confirmation that a larger physical vocabulary was needed in the space. After watching her exploration and discovery, I realized connecting the external life of the character with her motivation for speaking would make everything much bigger, yet still motivated in a naturalistic manner. I also

recognized the actress required positive affirmation for experimentation. These were two keys to complete transformation.

After an hour of movement work, I proceeded to work through the first scene of act one, the longest portion of the earlier time period involving all the actors. We ran through the scene, stopping and restarting to give notes and experiment with physicality. I paid special attention to the actress playing Susannah/Ellen, offering suggestions and adjustments while coupling negative criticism with positive reinforcement. I also challenged the actors to connect performative aspects of their character to their audience, both on and offstage. Susannah/Ellen's lines could be delivered to the audience proper as well as specific characters within the scene, but her super-objective in the scene was to command her husband's attention. By connecting large, sweeping gestures, incessant drinking, and even a loud speaking voice to her super-objective, the actress' fears of simply playing an archetype were alleviated. In addition, her performative characterization could be played to the audience proper, often looking directly at them and commenting on the situation at hand. This breakthrough was favorably noted by several other production team members and faculty mentors, confirming this was the most fitting direction for the character and the heart of the narrative.

As a result, the following several rehearsals led to several discoveries. Moments of direct address, beyond just the opening monologue were explored and motivated within the world of the play. Maria could read her monologues to the audience, fully acknowledging them as though an ally in her plight with Edward, exposing the unfairness of her situation. Isobel would deliver her letters to the audience to comfort them regarding the social hierarchy at work onstage. In the closing moments of the play,

Susannah would step outside of the tableau surrounding Isobel’s coffin to gaze back at the performance at hand. Through the tension between character and actor, even stereotypical behavior can be played with self-awareness.

Although significant progress was made during these workthrough rehearsals, one scene in particular still lacked dramatic interest. During act one, scene three, an extended intellectual debate takes place between Fenwick and Roget, with sporadic interjections by Susannah. With dense scientific and political dialogue, the actors playing Fenwick and Roget were struggling to physicalize their characters. In this instance, my usual pattern of observation and adjustment according to the actor intuition was not sufficient to tell the story in a dramatically interesting way. To address this problem area, I planned a dedicated time in rehearsal to re-block this scene entirely. In preparation of working with the actors, I reviewed the paperwork we had done at the beginning of the rehearsal process, asking myself “what’s the position?” for every beat of the scene, as Brecht had done in his rehearsals according to theatre historian David Richard Jones.⁶ This subtle shift in my thinking about the scene provided a different perspective, allowing me to see the sub-textual power struggle at work instead of reading the text at face value. With this shift in perspective, I experimented with the actors in rehearsal, mapping out the progression of the scene first through staging images of the power hierarchy and then stringing them together with motivated blocking. Through this process, several dramatic moments emerged that were previously elusive. Asking “what’s the position?” to determine blocking instead of only asking “what’s the motivation?” allowed story-telling

⁶ David Richard Jones, *Great Directors at Work* (Berkeley, CA: University of California Press, 1986), 91.

to be manifested visually. Coincidentally, the outward manifestation of story-telling also shed light on the inner motivation of the characters.

One other actor also experienced significant breakthroughs during the final rehearsals leading up to technical rehearsals. Initially, when rehearsals began the actress playing Isobel demonstrated great boldness in her realization of the character. At the time, her choices seemed too confident for the character I envisioned, and I guided her toward something more humble and understated. The actress complied, exhibiting great willingness to make adjustments. However, as the process went on, I could see my vision of the character did not motivate the marked interest of her by the scientist characters called for in the text. In an effort to find something more fitting for the text, I asked her to reincorporate her initial instincts for the character. The result was a combination of her early and most recent work. While neither extreme was fitting by itself, merging qualities of lowliness and pride in the same character provided the dramatic interest previously lacking. Isobel was now unique within the world of the play, making her death that much more tragic.

Technical Rehearsals

Scheduling was an ongoing issue throughout the four weeks leading up to technical rehearsals, culminating in a demanding tech-week for both actors and production team members. Typically, the rehearsal process at Baylor is composed of four weeks with five or six four hour rehearsals each week and another week dedicated to technical rehearsals. With two other Baylor productions and Baylor Homecoming competing for space and rehearsal time, only eight rehearsals total were logically possible in those first two weeks of rehearsals. The third week, we were able to rehearse

five times, but Fall Break eliminated three possible rehearsal/work days over the weekend. In addition, the actor playing Armstrong/Phil was scheduled to have surgery over Fall Break, requiring his absence from two rehearsals and limiting his physical capabilities after that point. With no knowledge of this conflict during casting, the necessary procedure and recovery time was not factored into the rehearsal schedule initially. This greatly limited when we would be able to rehearse the closing scenes of the production and all transitions as they would eventually be performed.

With such a tight rehearsal schedule, technical rehearsals were meticulously planned out making slight alterations to precedent. The week of technical rehearsals at Baylor is typically comprised of four rehearsal components: a paper technical meeting without actors, a production crew preview, one or two cue to cue rehearsals, and then problem solving and repetition. Technical elements, such as lights and sound, are usually incorporated during cue to cue rehearsals on the Tuesday and/or Wednesday prior to opening night. Costumes, makeup, and hair are typically incorporated starting that Wednesday. For our production, we followed this model with additional rehearsal time set aside for the onstage wardrobe crew members to watch a run of the production, to be blocked into the onstage costume changes, and for wardrobe and wig crew members to rehearse quick changes. We planned for two evenings of cuing with time also reserved to work on the hanging. This would prepare all members involved for their various responsibilities to be executed on Tuesday evening during the first of two planned cue to cue rehearsals. This schedule would leave three rehearsals and a preview performance to acclimate cast and crew members to the momentum of the show prior to opening night.

In spite of our planning efforts, the technical requirements of the production along with communication issues, and unforeseen extra time needed for fight choreography almost entirely derailed our pre-determined schedule. Paper technical meetings and crew previews went according to plan, but on Tuesday, the first night of cue to cue rehearsal, the inexperienced run crew members failed to understand their call times. This was unfortunately due to failed communication between the stage manager and the production crew members. Both the stage manager and assistant stage manager were recovering from symptoms of walking pneumonia, having spent the day at the doctor and resting instead of sending out information in advance of the evening. This resulted in confusion and a delayed start to the first technical rehearsal. As the night went on, the amount of technical elements to be rehearsed and crew members involved dramatically slowed every transition to be rehearsed, even without costumes. Only the first act was completed that evening with no time left to work on anything else. Since this first rehearsal did not even involve all of the costumes and the second act would be far more technically demanding than the first, this was especially discouraging. I communicated my concern to the stage manager and production manager, emphasizing the need to maximize efficiency in the following rehearsals.

On Wednesday, the cue to cue was continued after a quick change rehearsal. The quick change rehearsal went smoothly with the exception of the choreographed onstage costume change. My intention to set this costume change to the sound of a clock added a choreographic requirement to an already complex change from Susannah and Fenwick to Ellen and Tom. Unfortunately, the allotted time was not sufficient, and this portion of rehearsal encroached upon the time for the second act cue to cue. By the end of the night,

more complications with transitions necessitated repetition in problem areas instead of progressing all the way through the act. We reached the point in the script where we had agreed to rehearse the hanging, but the fight choreographer was concerned for the exhaustion of the crew members involved due to the repetitions required by that evening's rehearsal. Work on the hanging was moved to the following evening along with finishing the cue to cue and starting a partial run-through. In every interaction, I attempted to exhibit patience and understanding, knowing this decision was absolutely necessary for the success of the production.

Behind schedule with several major items still to rehearse, Thursday's rehearsal was rushed and stressful. The hanging was rehearsed first, taking more time than expected. We then began the cue to cue for the remainder of the production. While completing the cue to cue, the costume designer and shop manager approached the stage manager and I about the necessity of seeing all the costumes onstage that evening in order to work on notes in time for the next rehearsal on Saturday. To address this concern, the run-through following the cue to cue was condensed to include only the transitions and a little bit of each scene. I also determined during this rehearsal that the onstage choreographed costume change would require additional rehearsal time not available in the time remaining. Time was still needed to work on the opening onstage costume change and the hanging, both required by the text. Taking all this into consideration, I cut the second onstage change completely, requested the actress and wardrobe crew members rehearse the first onstage costume change outside of rehearsal, and dedicated time the next evening to work more on the hanging. This was a very difficult, but necessary decision to protect the momentum of the second half of the play.

After the third night of stop and go, I demanded the rehearsal on Saturday include a full run regardless of the allotted rehearsal time for the sake of the actors. The production team agreed and all those involved were informed of the possible extended rehearsal.

The rehearsals on Saturday and Sunday went as expected with more time intentionally spent on the hanging before each rehearsal to eliminate any unnecessary time in the transition between scenes. However, the timing of the hanging reveal proved problematic. Due to the intricate choreography required to safely execute the stunt, the blackout between the end of Isobel's monologue and the reveal of the hanging was too lengthy to be dramatically effective. Also undermining the build in this transition was the dark and contemplative piece of music selected to cover the time needed to safely hang the actress. An alternate, more driving sound cue was suggested to be used. However, it was determined this change could potentially compromise the effectiveness of the other cues surrounding the hanging. With no additional rehearsal time left to practice the change, the stage manager urged a completely new cue placed so near an already complicated sequence of cues may cause confusion and compromise the safety of the fight choreography in place. Taking his concern into consideration, I agreed and the transition was executed as it had been previously rehearsed for opening night. Although we were not able to add the alternate sound cue, the stage manager and I agreed on the importance of continuing to work toward shortening the time in the transition for the greatest dramatic influence. After a few performances, the hanging was finally timed to the revolution of the turntable during the transition, achieving the desired effect. Undoubtedly, this could have been achieved sooner if more time was available initially for rehearsal of the hanging.

Throughout technical rehearsals, actors were encouraged to continue experimenting. While my time was divided between production team members and watching the actors during rehearsals, it was important to me to spend adequate energy taking notes for the actors to continue the search for inner and outer truth. I sent notes via email every night and arrived early each day before rehearsals to check with each individual actor to clarify or discuss anything of concern. I paid special attention to pacing and volume issues during these last few rehearsals, alerting actors to specific areas to be included in their warm-up prior to rehearsal the following night. I made a point to pass along character notes for each actor every night as well, urging them to continue discovering their characters in true Brechtian spirit, resisting the idea of a “finished” or “complete” work as far as the actors were concerned. This was continued into performances, as requested by the actors and stage manager, although to a lesser degree. Their request is evidence of a commitment to flexibility and collaboration, two qualities I urged them to embrace throughout the process, undoubtedly leading to the success of the production.

Conclusion

My approach to rehearsal was certainly not purely Brechtian, although it benefitted from Brechtian principles. These principles were central to my interactions in hopes of instilling in the production the counterpoint and commentary inherent within the text. While a prolonged rehearsal process such as Brecht’s would have been helpful to this highly technical production, it is a commitment to exploration and collaboration that ultimately determines the outcome. After several runs with an audience, performances steadily improved. The strong aesthetic and style of *An Experiment With An Air Pump*

was achieved through weeks of rehearsal and concentrated effort by everyone involved. Even in the face of artistic and logistical challenges, interpersonal conflict, and scheduling setbacks, the group remained unified by a common goal. The production process aimed to develop a theatrical experience that was aesthetically pleasing, thoroughly entertaining, inescapably moving, and intellectually stimulating. Whether or not this lofty goal was achieved in actuality will be discussed in the following and final chapter of this thesis, evaluating the final product as well as my role in the creation of it.

CHAPTER FIVE

Production Assessment

Introduction

Shelagh Stephenson's *An Experiment With An Air Pump* was successfully produced at Baylor University November 8-13, 2016 to appreciative audiences. Over the course of the seven night run, hundreds of audience members saw the production with nearly nightly standing ovations. Response from Baylor patrons and faculty was predominantly positive with special interest in the overall aesthetic. This chapter will examine the impact of this production in conceptualization, process, and performance based on audience reception and personal and critical analysis. Reception, strengths, and opportunities for growth will be evaluated taking into consideration synthesis of design elements and work with actors, from casting to final performance.

Reception

Overwhelmingly, reception was favorable. Audience members were moved to laughter, cheering, tears, gasps, and even verbal response as the shocking events of the play unraveled. Lively reactions during performances were coupled with positive reviews and intriguing conversation after each performance. One audience member approached me to relate he planned to attend the performance again to continue reflecting on the intriguing characters and situations presented. Others found it to be "wonderfully

complex,”¹ “very entertaining,”² and “incredibly impressive.”³ Still others were taken by the stunning visual quality of the designs in combination with the story-telling. At intermission during several performances, I overheard audience members admiring the distinct characters and styles emphasized through the counterpoint of each time period. Others argued it was one of the most beautiful and compelling productions to be performed at Baylor in the last several years. One patron, in particular, insisted it was “by far the best acted show [she had] seen at Baylor” in her four years of being a season ticket holder.⁴

Conversations which continued after performances and into the following week further revealed the thought-provoking experience that was the production. Several individuals reported a fascination for the unconventional mode of story-telling and complexity of the debate presented. In every exchange, the patron was pleasantly conflicted, insisting that further reflection was needed to process the various perspectives and events dramatized so vividly. In hindsight, audience members also expressed surprise at the entertainment value of a play with such weighty content, crediting this as a strength of Baylor’s production. Feedback demonstrated a careful balance of lightness and seriousness in story-telling made the complex issues presented both dramatically interesting and accessible even for non-scientist audiences.

Faculty also spoke very highly of the production, praising the creation of an engaging environment with a strong visual appeal. Many moments of dramatic beat work

¹ Baylor patron, e-mail message to production manager, January 3, 2017.

² Baylor patron, e-mail message to author, November 9, 2016.

³ Baylor patron, e-mail message to author, November 13, 2016.

⁴ Ibid.

were praised, especially in the second half of the play, with a clear progression toward the high points of each storyline. For those faculty members who also observed rehearsals, my collaboration with actors to shape the characters and overarching story led to thoughtful and dynamic performances. According to faculty feedback, the development of beautiful designs along with compelling acting choices resulted in truly stunning stage images and evocative story-telling. In addition, the use of the proscenium venue as a true picture frame through which to see the play was an effective tool for highlighting the presentational aesthetic of the production.

Many faculty members commented on the memorable performances my work with the cast was able to cultivate, such as the complex characteristics the actor playing Roget was able to portray and the highly refined performance the actor playing Fenwick and Tom delivered. Faculty members who were present during rehearsals commented on the progress of characterization evident in performance and made with the actresses playing Susannah, Isobel, and Maria in only a short time.

Strengths

Reflecting on the feedback I received from final performances, and my experience of the production process, several areas emerge as strengths. Intuitive casting, a highly collaborative experience, and the development of a strong aesthetic under my leadership all contributed to the success of the production as a whole.

Starting from the very beginning of the process, careful selection of the actors laid the foundation for vibrant story-telling. Prior to auditions, I mapped out the qualities of each character using Stephenson's text as a guide and determined the dynamics of counterpoint to be built visually and aurally through character. My strategy for casting

was based on these two considerations; in addition, I resolved to remain flexible and open to actors who demonstrated something other than initially anticipated. Openness during auditions and flexibility with the scheduling conflicts during callbacks led me to narrow down my options until the most appropriate choice emerged. Even when multiple options presented themselves for the lead, the pre-determined criteria was helpful as the basis for final casting choice. Although the actress selected for the role required my special attention throughout the process, the sympathetic and graceful qualities she brought to the character were exactly what was needed within the group dynamic. The result was a complex and entertaining performance.

Students grew as actors through collaboration. Instead of expecting all actors to work in the same way with the same motivating factors for every style and genre of play, I spent time interacting with actors in group settings, pulling them aside to discuss or give notes individually, and observing the dynamics of the ensemble while experimenting during rehearsals. It was through this process that trust was built and the most effective method of communication was discovered for each actor.

I was pleased with the distinct character discoveries this collaboration produced. Through movement work and exploration, we were able to establish variation for each doubled character. Starting with a general physical understanding of each character, I challenged the actors to take their characterization choices as far to the extreme as possible. I then provided feedback regarding what was successful. One example of this was with the actor playing both Fenwick and Tom. The actor's dance background provided a natural understanding of the posturing and grace needed for the earlier time period, but the nuances of Fenwick's character were still to be discovered. On a scale of

naturalistic to foppish, we explored how far to each extreme was appropriate for the character and discovered a range of performativity in the process. The result was a complex and commanding performance with both genuine and highly performative moments within the context of the physicality required of the time period. Tom, on the other hand, required a much more casual presence, with only very select moments reserved for heightened emotion. We experimented with how to vary Tom's energy from Fenwick's, trying the exact opposite of our scale for Fenwick. Through this process, we discovered the actor's posture, hand movements, and inflection were key to creating the visual and aural difference. By allowing these outward alterations to inspire the inward realities of the character, the actor was able to create two completely separate characters.

Communication with designers led to the creation of a visually captivating aesthetic. Throughout the design process, my vision was communicated in a manner accessible to each designer. I continue to be thankful for my education in design and technical theatre prior to attending Baylor. This training strengthened my artistic eye and attention to visualization, but, more significantly, enabled me to translate abstract concepts into elements of design using a designer's vocabulary. This allowed early interactions with designers to be productive and artistically exciting which led to a strong aesthetic in the final design.

During technical rehearsals, my commitment to listen to concerns fully and implement input when possible cultivated a relationship of cooperation. This was instrumental in the difficult decisions made later in the process. An example of this was in the cutting of the chandeliers from an awkward scene change after the final dress rehearsal. The chandeliers were added into the change as requested by the scenic designer

and then removed for the opening night based on my concern that the look of the transition with chandeliers was not what the scenic designer intended. Knowing my decision was protecting his design, he wholeheartedly agreed to the change even after the final dress rehearsal.

Other decisions made during technical rehearsals, such as the elimination of the second onstage costume change, demonstrated my commitment to protect the total integrity and momentum of the production. Although this onstage change was designed to draw intentional connections to the opening costume change and also provide theatrical interest during a transition, the rehearsal required to refine and polish the choreography was not available. It was my prerogative to ensure the elements required by the text were refined instead. My artistic discernment and leadership in this instance allowed the final moments leading up to the closing to be executed with precision for the greatest dramatic effect.

My purposeful communication with the stage manager for this technically demanding production was particularly successful in the dramatic pacing of transitions. Being aware of the technical requirements of the production, I approached the stage manager at the beginning of rehearsals about my vision for the momentum of the show. Since he would ultimately determine the timing, it was important that he understood what each transition should accomplish, supporting and not undermining the story-telling. I arrived at least a half hour early to every rehearsal in order to make myself available to him for transition discussions. My communication and open-ended questions about these moments engaged him in the problem-solving of these intricate sequences and gave him creative agency in calling the show. This especially made a difference in the most

difficult and dangerous transition between the end of Isobel's suicide note and the reveal of her hanging. He took special ownership of the timing of these moments, especially after the final dress rehearsal when the tension was still not building to the correct spot for the greatest impact. After talking through my concern on the day leading up to opening night, he adjusted his calling of this sequence to accomplish exactly what I described. In the following performances, he proceeded to tighten up every transition, timing each element to maintain momentum instead of simply change the scene.

Opportunities for Growth

Although reception was largely favorable, and I was generally pleased with the outcome, identifying and analyzing areas needing improvement is a valuable part of every artistic process for continued development. After weighing criticism from Baylor faculty and production team members, as well as conducting my personal analysis, several opportunities for growth emerged: the scale of the design, the development of the story, time management throughout the process, and my approach to connecting two different time periods visually. If given more rehearsal time or the opportunity to go back to amend these areas, I have determined possible solutions that, if implemented, may have provided a different outcome.

Scale of the Design

While the production concept was inspired by and aligned with the needs of the script in theory, the execution of it required much more development as evidenced in the scale of the design. The height and mass of the two-story bookshelf unit visually overpowered the effectiveness of the revolve and the presented narrative. The balance and height of the design prevented the quality of incompleteness I intended to develop in

keeping with the production concept. This quality could have been maintained by scaling down the size of the other set pieces and highlighting the revolve as a prominent feature of design.

Due to the scale of the design and intentionally theatrical style of the production, transitions were necessarily dramatic. Unfortunately, the large size of the transitions made inconsistencies more apparent with only an ambiguous visual and aural rule for such dramatic movement between episodes. Lighting and sound assisted in establishing some semblance of consistency, but even these features were varied according to my direction. Dark lighting prevented some transitions from being seen clearly, while others were highlighted and the sound design was inconsistent in the underscoring of these moments. The transitions specifically with the large dining room flats became cumbersome and unnecessary to the narrative. All of these inconsistencies further emphasized the lack of fully developed conceptualization of these moments. In hindsight, I realize my aversion to the sloppiness of inexperienced crew members during transitions perpetuated a missed opportunity for exposing the transitions theatrically. Incorporating crew members would have been completely appropriate given the production concept.

In hindsight, it is evident the core issue in my conceptualization of the scenic design was a misunderstanding of the size of the performance venue. Excited by the possibilities of such a large space, I pushed the designer to fill the proscenium opening using the height and depth to create the illusion of space. However, this approach detracted from the nuances of character and dialogue present in Stephenson's work. My misjudgment of scale ultimately led to other repercussions in story-telling to be discussed in the following section.

Development of the Story

Due to the small size of Joseph Wright's painting used at the beginning of the play, the bird metaphor was difficult to follow for the duration of the play. Initially, I envisioned a bigger version of Joseph Wright's painting to be used during the opening monologue. The scenic designer researched the largest size the painting could be printed and I did not challenge him further to find another solution. The script suggests using a projection of the painting for visibility, but I was hesitant to use a projection because of the complete lack of technology from the rest of the play with the exception of cell phones in two of the 1999 scenes. The painting is an important enough element to the story-telling that it should have been a priority from the beginning to be large enough to make the details obvious, and thus, draw stronger connections to the painting throughout.

Although my work with actors was predominantly positive, my work with actors fell short on two accounts in shaping the overarching narrative. Part of what I have been working on in the past few years is to focus my attention on developing the lead characters as the most important pieces of the story-telling. In doing so for this production, however, I neglected to spend sufficient time shaping the characters of Armstrong and Isobel. It was our intention to make the audience believe Armstrong truly loved Isobel, but in doing so, the character seemed to lack complexity until his true intentions were revealed in the second act. The actor also often defaulted to a less pronounced use of his body onstage for both Armstrong and Phil. The result was inconsistent with the earlier time period and not obvious enough to support his characterization in the later time period. Although I gave him notes to fix the visual weaknesses of his characters in the last week of rehearsals, I should have challenged his

physicality in early rehearsals to provide body-mind connection for the actor from the beginning of character development.

It was also a conscious decision not to cast the part of Isobel based on physical ability to portray the character's deformity. Instead, a specially built costume piece would give the illusion of a curvature of the spine under the actress' dress. Unfortunately, making a casting decision without regard for physical ability characterized my neglect of Isobel's deformity in story-telling. Isobel's costume piece was not used in rehearsals until technical rehearsals, and appeared much less pronounced than anticipated. By that point in the rehearsal process, there was no easy solution. The actress selected was not prepared physically for the demands of the part and I had not been directing her toward any movement work to highlight her deformity. Instead of asking for a new costume piece or for the actress to attempt something that may be comical, I directed the actress to make her discomfort obvious whenever sitting or standing still. Unfortunately, I do not believe this was obvious enough to merit the description of Isobel's deformity in the text. In hindsight, I should have worked with her from the beginning of the process to develop something fitting for the production, and asked to see the costume piece in rehearsals much earlier. If faced with this situation again, I will certainly prioritize any physical characteristics intended to be major points of the narrative in casting, but also throughout the rehearsal process.

Feedback from the faculty illustrated how I failed to overcome certain textual challenges, also distracting from the story. Although the second act was engaging, memorable, and complex, the first two lengthy episodes of the first act undermined the impact of the second half of the play. The way the script is built disorients the audience

initially by throwing them into a bustling world of scientific discovery and intellectualism without much warning for three-quarters of the first act. The episodes are longer, there is more scientific jargon, and an American audience must also adjust to the foreign dialects. These challenges combined with memory and pacing issues, unfortunately, weakened the first half of the play and lessened the impact of the very tightly calculated second act. These episodes required further exploration.

A second textual challenge still apparent in performance was Maria's letters. We were able to make these sections mildly entertaining, but they still did not add much to the overall narrative. Conceptually, they did not fit into the world of the transitions, nor did they fit into the world of the scene work. The first two monologues especially were unclear and required further exploration to incorporate them into the total conceptualization of the production. I believe this was a challenge of the script that we were only able to partially address in performance. While more time in rehearsal would certainly have been beneficial, the fundamental issue of Maria's letters was in my conceptualization of them. Rehearsal was spent preparing the actress for performance instead of experimenting with delivery, but more exploration could have provided the inspiration needed for synthesis.

Time Management

Although effectively shaping a story is of central importance to the final performance, the most significant opportunity for growth in the production process was time management. Inside rehearsals, more time could have been spent on the opening scenes to explore dynamic staging options and provide opportunity for movement work during the first two weeks of rehearsals. In addition, taping out the stage in another

rehearsal space while the Jones Theatre was unavailable during those two weeks would have also made early rehearsals more productive for animating the difficult language perpetuating memory issues. Beyond day to day scheduling adjustments, problems with memorization and design development could have been avoided with clearly established and enforced deadlines.

Although the problem with memorization became apparent shortly after the off-book date, it was never effectively addressed. This, in turn, affected the integrity of the production, which is the director's responsibility to protect. I should have requested a faculty member come to rehearsals when the issue first presented itself to warn the actress more forcefully. Actually replacing the lead in this situation would not have been appropriate, but more aggressive action should have been taken and time planned to address the issue early in the process.

Collaboration with the props mistress was generally smooth, however; it was not until late in the process that I was informed the undergraduate student had no power to design or construct difficult props. Due to this confusion, the bird, air pump, and chimney hat were addressed too late to experiment with enough time to allow for needed adjustments. Although I inquired multiple times about them starting from the very first concept meeting with all the designers present, I never demanded they be done by a date other than the unspoken deadline for final props, which is the first day of technical rehearsals. This delay created undue stress for the other designers and the actors working directly with these items not knowing exactly what they would be working with and having to take time out of technical rehearsals to work through this. The air pump and chimney hat were finally constructed the last week of rehearsal and worked for what was

needed, however the bird was still a problem even after construction. With an earlier deadline, adjustments could have been made accordingly. I should have identified who would make the prop at the very first production meeting and worked directly with that individual to communicate exactly what was expected, including a spoken and agreed upon deadline.

The ramifications of scheduling oversights throughout the process were most apparent during technical rehearsals. The slow momentum of cue to cue rehearsals resulted in unnecessary tension between designers as we approached opening night. Before rehearsals even began, my concerns regarding the time needed to work through all the technical elements were dismissed as unprecedented. However, knowing the scope of my vision for this production, I should have continued to remind production team members of the importance of being efficient and professional during technical rehearsals. More available rehearsal time would have allowed for further exploration of transitions implementing actors and production crew members, and alleviated the tension between the scenic and lighting designers specifically. Professionalism and efficiency would have encouraged a calm working environment conducive to creativity even under pressure.

Connecting Two Different Time Periods

My approach to staging the two distinct time periods was imbalanced, and therefore, the final result was also imbalanced. The 1999 scenes lacked the same intentionality and visual interest of the earlier time period. The use of the table and chairs repeatedly in the 1999 scenes led me to direct the actors toward a lot of sitting and stillness, which made these scenes lack energy in some instances. More problematic,

however, was my conceptualization of the later time period as “naturalistic” in contrast to the earlier time period. With this direction, the actors interpreted this as “intimate,” making their physical and vocal choices small and understated. Although I was aware of a lack of energy and projection in these scenes, at the time, I did not equate it with my conceptualization of the era. With a few more rehearsals of exploration with the actors, this could have been identified and addressed. However, feeling rushed to have a solution for these scenes prevented me from pursuing other options, which was also an issue of efficient rehearsal time.

My conceptualization of a visual dialogue between eras through connections in staging was not entirely successful in the use of the moving staircase. To facilitate movement back and forth between time periods, I had originally envisioned multiple pieces of the set moving to create a more fluid understanding of the performance space. The staircase was conceptualized to provide variation in staging and also accomplish the mobility I sought. As rehearsals went on, moving the staircase proved cumbersome and the unit took up more visual space than I had anticipated. In addition, when moved away from the second-story of the bookshelves on stage right, the staircase seemed out of place. However, at the time, I was unable to come up with a way to solve the problem other than not using it as a mobile piece until it needed to be moved offstage for the hanging scene. This would have distracted from a major dramatic moment of the narrative, so I determined to attempt to address the issue with blocking. While I was able to find creative solutions to incorporate the staircase, it was distracting as a moving piece within the world of the play and added an unintentional semiotic meaning to such an unimportant element of the design.

Conclusion

This project was a source of significant personal growth for a number of reasons. In my work with designers, a lack of scholarly material on the playwright and the play forced me to formulate what was truly my own analysis and interpretation of the text. In addition, a lack of production history in similarly sized performance venues forced me to take risks based on my conceptualization and collaborative brainstorming. I defended my concept vigorously and challenge others to find creative solutions to production challenges. In my work with actors, the content required me to animate lengthy and difficult conversations and to work on creating characters that were very unfamiliar to me. I was also challenged to pay careful attention to dramatic structure and story-telling through the development of multiple stories at once. It is because of this stretching experience that I was able to lead my fellow collaborators toward bold and memorable choices in development and performance, also challenging them the same way I was being challenged.

When I first arrived at Baylor University in August 2014, one of my first assignments was to read Anne Bogart's book titled *What's the Story: Essays About Art Theatre and Story-telling*. In the book, Bogart distills effective directing into four simple steps that I resolved to cultivate over the next three years. First, "show up," meaning come prepared with a plan, but also with an open mind. Second, "pay attention" to how the text is manifesting itself with the people in the room. Third, "tell the truth," even if that means abandoning something that has been meticulously worked on. Finally, "don't be attached to the results,"¹ or, in other words, always allow room for improvement.

¹ Anne Bogart, *What's the Story: Essays About Art, Theatre and Storytelling* (New York: Routledge, 2014), 114.

My direction of Shelagh Stephenson's work demonstrates growth in all four of these areas. While I have always conducted extensive research in preparation for rehearsals, I have not always been prepared to completely abandon my research making room for discovery and collaboration, as Bogart suggests. As was evident in tabletop rehearsals, discussed in chapter four, I pressed actors to contribute their own observations and conduct their own character-based research and analysis, favoring their findings over mine in many cases.

The second step, paying attention, was a central part of my approach to rehearsals. As discussed in chapter four, I encouraged demonstration and experimentation instead of lengthy discussion. I also honed my approach to each actor based on their interactions with other cast members and their responses to my direction. This would not have been possible without a commitment to paying attention.

In my determination to tell the truth, I avoided making broad, sweeping statements of approval, although I deliberately maintained a positive attitude in meetings and rehearsals. I was so intentional in this approach that it became a nightly competition for the actors to tempt me to respond with favorable generalizations after run-throughs. However, I resisted, so as not to give the impression we had reached a finished product. As evidenced by my discussion in chapters three and four, when something design or acting-related was not working effectively, I gave a note to find an alternate solution as soon as I was aware of the issue. I continued to give notes even until opening night in my commitment to the quality of the production.

Finally, I demonstrated flexibility and risk-taking in continued exploration even into performance, pursuing a non-realistic design in the face of possible failure, and

making difficult edits late in the process. By not being attached to the outcomes of our collaboration, I was able to maintain distance to assess and improve accordingly. As demonstrated in chapters four and five, this contributed to the success of the production and to my continued growth as a director.

When *An Experiment With An Air Pump* was suggested as my thesis project, I was unsure of the outcome. This play was “ambitious” as reviewers noted at both the British and American debuts, and the content was far outside my comfort zone. In my experience, however, it is in this very uncomfortable mindset that valuable skills are gained and creativity is broadened. This level of achievement and growth was evident in direction, design, and acting, and will undoubtedly influence future production work for all those involved. On top of it all, response from patrons and faculty members demonstrated the resulting performance was engaging and thought-provoking, being named among the “best of the best”² of Baylor’s repertoire with strong performances, entertaining story-telling, and a beautiful aesthetic. Although challenging, I found this production process to be thoroughly rewarding, and will count it as a major milestone in my personal development for years to come.

² Baylor patron, e-mail message to author, November 13, 2016.

APPENDICES

APPENDIX A

Conceptual, Research, and Design Images



Figure A.1 Joseph Wright of Derby, *An Experiment on a Bird in the Air Pump*. Courtesy of London National Gallery.



Figure A.2 Research image for the character of “Arcadia.” Fran ois Boucher’s *The Interrupted Sleep* (1750). Courtesy of the Metropolitan Museum of Modern Art.



Figure A.3 Research image for the character of “Britannia.” Black and white print (1854). Artist unknown.



Figure A.4 Concept image: Jacques Louis David's *Antoine-Laurent Lavoisier and His Wife* (1788). Courtesy of the Metropolitan Museum of Art.



Figure A.5 Concept image: Museum façade.



Figure A.6 Concept image: Giovanni Paolo Panini's *Interior of a Picture Gallery with the Collection of Cardinal Silvio Valenti Gonzaga* (1740), with color and spatial manipulation by the director.



Figure A.7 Early digital rendering capturing selected qualities of Joseph Wright's painting.



Figure A.8 Research image: moveable wooden ladder.

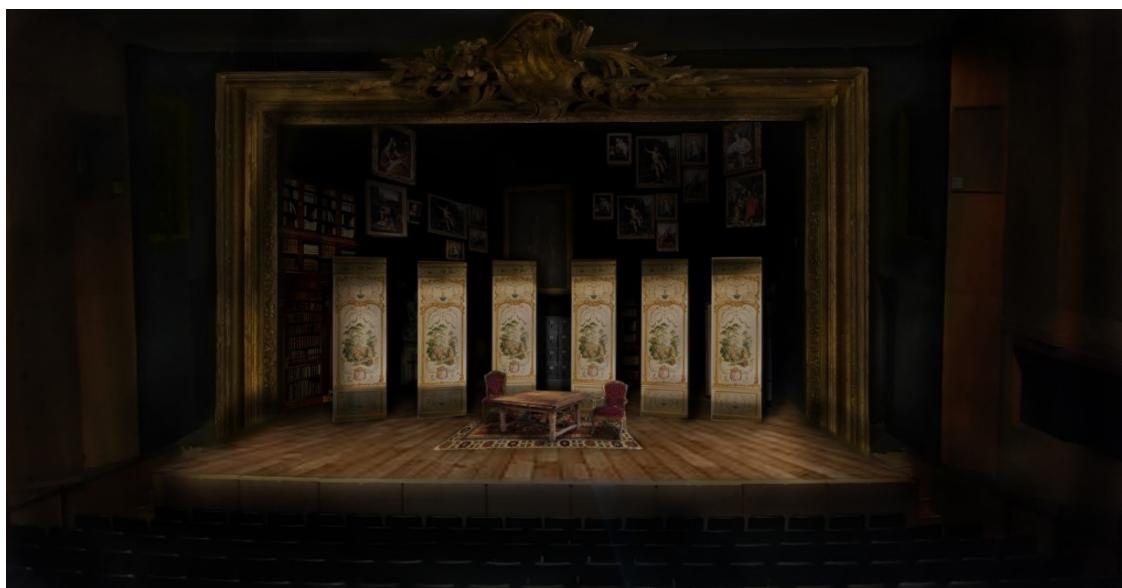


Figure A.9 Digital rendering demonstrating an early transition concept with mobile flats to be placed for dining room scenes, allowing scene changes to occur upstage of the flats.



Figure A.10 *Air Pump* scenic design preliminary paper model featuring the 1799 laboratory with automated revolve, stage left double-sided bookcases, and mobile staircase included.



Figure A.11 *Air Pump* scenic design preliminary paper model featuring the 1999 study with automated revolve, stage left double-sided bookcases, and mobile staircase included.



Figure A.12 The dining room configuration in the paper model.



Figure A.13 Maria's room delineated by a painting flown in on stage right in the paper model.



Figure A.14 Mobile staircase in its alternate upstage position, shown in the paper model.



Figure A.15 Preferred staging option for Isobel's hanging, shown in the paper model.



Figure A. 16 Alternate staging option for Isobel's hanging, shown in the paper model.



Figure A.17 Staging of the opening prologue using the painting attached to an independent mobile easel in the scale model.



Figure A.18 Dining room stage left configuration shown in scale model.



Figure A.19 Maria's room to be staged on stage right, shown in the scale model.



Figure A.20 Final scene design depicted in the scale model featuring the 1799 laboratory with the staircase in its upstage position.

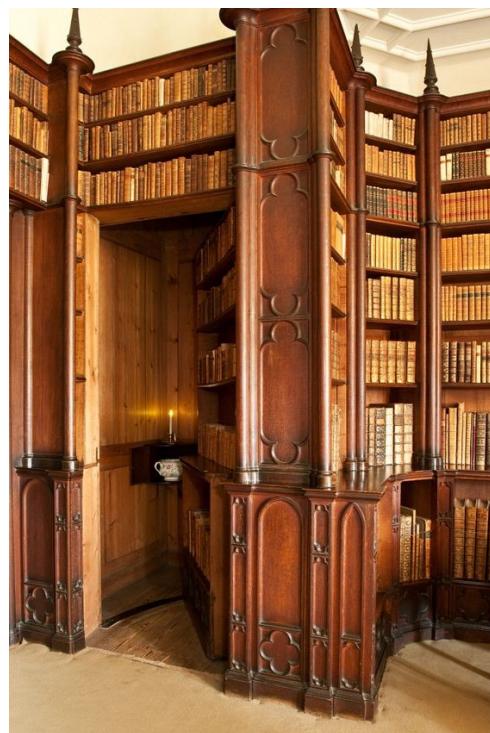


Figure A.21 Image inspiring color palette for the scenic design.



Figure A.22 Research image: severe idiopathic scoliosis informing design of the deformity bodysuit made for the actress playing Isobel.



Figure A.23 Research image: restrictive 18th century women's corset inspiring Susannah's costume and the opening onstage costume change.



Figure A.24 Image inspiring costume color palette. "Abandoned Beauty."



Figure A.25 Costume renderings of Susannah and Fenwick.



Figure A.26 Costume renderings of Harriet and Maria.



Figure A.27 Costume renderings of Armstrong and Roget.



Figure A.28 Costume renderings of Harriet as Britannia and Maria as Arcadia.



Figure A.29 Conceptual research for costumes to be pulled for Ellen, Kate, Phil, and Tom.



Figure A.30 Rendering of Fenwick in his banyan coat.



Figure A.31 Costume rendering of Isobel.



Figure A.32 Research image of Robert Boyle's air pump.



Figure A.33 Research image of chimney hat from another production.

APPENDIX B
Selected Production Photos



Figure B.1: Preshow staging



Figure B.2: Ellen delivers the opening monologue



Figure B.3: Onstage costume change into Susannah



Figure B.4: Susannah joins the tableau of the experiment during the prologue



Figure B.5 Act One, Scene One. The 1799 study.



Figure B.6 Act One, Scene One. “We stand on the ‘cusp.’”



Figure B.7: Act One, Scene One “That’s the magic of theatre, Isobel.”



Figure B.8 Roget is seen on the moveable staircase while Fenwick talks to Isobel.



Figure B.9 “You’re rather pretty, d’you know that, Isobel?”



Figure B.10 Maria's first letter. "His head popped open like a pomegranate."



Figure B.11 Act One, Scene Two. The 1999 study. "I think it's a wonderful opportunity."



Figure B.12 Ellen in costume inspired by research. “Why fill it with ersatz history...?”



Figure B.13 Staircase seen on stage left during a 1999 scene. “What’d you make of spontaneous combustion?”



Figure B.14 “So there’s no risk to the fetus.”



Figure B.15 Maria’s second letter. The birdcage cover can be seen to her right. “I think of you often.”



Figure B.16: Act One, Scene Three. Roget and Isobel in the dining room.



Figure B.17 “That’s one skill he took back with him to France then.”



Figure B.18 Armstrong watches Isobel from above in Act One, Scene Three



Figure B.19 Armstrong and Isobel in tableau on stage right. Tom and Ellen on stage left.



Figure B.20 Armstrong draws near to kiss Isobel. “Don’t you trust me?”



Figure B.21 Isobel delivers a monologue from center stage at the end of Act One.



Figure B.22 Intermission.



Figure B.23 Act Two, Scene One. Harriet's play-within-the-play. "I am Britannia."



Figure B.24 “The frisking lambs!”



Figure B.25 “Stop it, all of you!”



Figure B.26 “Sir, this is not the place.”



Figure B.27 Transition from Act Two, Scene One into the next scene using the revolve. Isobel rode the revolve as it rotated into the 1999 side.



Figure B.28: Transition into Act Two, Scene Two. The revolve turns with Tom discovered on the 1999 side.



Figure B.29 Act Two, Scene Two. “I think attention’s a form of prayer.”



Figure B.30 Armstrong and Roget prepare to play badminton in the cellar. The candle and tea chest appear in the same location as the previous 1999 scene.



Figure B.31 Maria writes a letter to Edward. The tea chest is again used here.



Figure B.32 Act Two, Scene Three. Harriet wears a chimney hat with steam.



Figure B.33 Susannah laments her plight. "I painted, read poetry and plays."



Figure B.34 During the scene, dining room flats were removed and Susannah and Fenwick transitioned into the laboratory as though walking into another room in the house. “They wait for a man to bestow his mysterious gift.”



Figure B.35 “I couldn’t sleep for thinking of the web of veins.”



Figure B.36 Harriet and Maria's fight.



Figure B.37 "What is it that you particularly love about Isobel?"



Figure B.38 “You’re a bastard, Armstrong. A complete and utter bastard.”



Figure B.39 Utilizing the revolve as a hiding place for Isobel in the previous scene, the transition to the 1999 side of the revolve revealed a heartbroken Isobel hiding in the space between the two eras.



Figure B.40 Act Two, Scene Four. Tom sits in the same chair as Susannah from the earlier scene.



Figure B.41 The action of 1999 freezes in tableau as Isobel enters to read her suicide note.



Figure B.42 “My life stretches before me, and it is now a bitter road.”



Figure B.43 Act Two, Scene Five. The discovery of the hanging.



Figure B.44 Armstrong and Maria remove Isobel from the noose, hiding the breakaway knot and the wire connected to the actress' harness.



Figure B.45 Actors lowered the actress down to the ground where she was unhooked from the wire by the actress playing Maria.



Figure B.46 Armstrong smothers Isobel with his hand.



Figure B.47 “Was there no note?”



Figure B.48 Roget confronts Armstrong before punching him in the gut.



Figure B.49 Ellen watches the transition into the final 1999 scene.



Figure B.50 “You’ll get another job.”



Figure B.51 “Let’s go and put the champagne in the fridge.”



Figure B.52 Actors roll Isobel's coffin out in full view of the audience during the following transition into the final 1799 scene.



Figure B.53 "Here's to a future we dream about, but cannot know."



Figure B.54 The actress playing Susannah steps out of the scene as actors freeze in tableau, recalling the opening of the play.

BIBLIOGRAPHY

- Backalenick, Irene. Review of *An Experiment With An Air Pump*. Directed by Doug Hughes. Manhattan Theatre Club, at City Center Stage, NY. *Back Stage 5* November 5, 1999: 36. Accessed September 15, 2016. <http://go.galegroup.com/ps/i.do?id=GALE%7CA57764580&v=2.1&u=txshracd2488&it=r&p=GRGM&s=w=w&asid=089be7a6480ff5ba7abfa832f4c41cc44>.
- Barnett, Claudia. “A Moral Dialectic: Shelagh Stephenson’s An Experiment with an Air Pump.” *Modern Drama* 49, no. 2 (Summer 2006): 206-222. Accessed September 5, 2016. <http://muse.jhu.edu.ezproxy.baylor.edu/article/201089/pdf>.
- Bassett, Kate. Review of *Five Kinds of Silence*. Directed by Ian Brown, Lyric Theatre Hammersmith, London. *Daily Telegraph*, May 6, 2000. Reprint, *Theatre Record* 20, no. 11 (June 2007): 672.
- Benjamin, Martina. *A Question of Identity: Women, Science, and Literature*. New Brunswick, NJ: Rutgers University Press, 1993.
- Billingham, Peter. “Shelagh Stephenson.” In *The Methuen Drama Guide to Contemporary British Playwrights*, edited by Martin Middeke, Peter Paul Schnierer, and Aleks Sierz, 466-486. London: Methuen Drama, 2011.
- Blakemore, Michael. “From Physics to Metaphysics and the Bomb.” *New York Times*. April 9, 2000.
- Blanchard, Jayne. “Science, Passion at Play.” *The Washington Times*. December 7, 2006.
- Bogart, Anne. *What’s the Story: Essays About Art, Theatre and Storytelling*. New York: Routledge, 2014.
- Boyle, Robert. *New Experiments Physico-Mechanical, Touching the Spring of the Air and its Effects, (Made for the Most Part, in a New Pneumatical Engine)*. Oxford: H. Hall, 1660.
- Brecht, Bertolt. *Brecht on Theatre*. Edited and translated by John Willett. New York: Hill and Wang, 1992.
- . “Notes on Stanislavsky.” *Tulane Drama Review* 9, no. 2 (Winter 1964): 155-166. Accessed February 5, 2017. <http://www.jstor.org/stable/1125107>.
- . “A Model for Epic Theater.” In *Directors on Directing*, edited by Toby Cole and Helen Krich Chinoy, 234-244. Indianapolis: Bobbs-Merrill Co., 1963.

- . “A Short Organum for the Theatre.” In *Brecht on Theatre*, edited and translated by John Willett, 179-205. New York: Hill and Wang, 1992.
- Brook, Peter. *The Empty Space*. New York: Simon & Schuster, 1996.
- Butler, Robert. “Theatre: Sometimes, bigger really is better.” Review of *The Memory of Water*. Directed by Terry Johnson. Hampstead Theatre, London. *The Independent*. January 16, 1999. Accessed February 8, 2017. <http://www.independent.co.uk/arts-entertainment/theatre-sometimes-bigger-really-is-better-1074448.html>.
- Case, Sue-Ellen. “Towards a New Poetics.” In *Feminism and Theatre*, 112-132. New York: Routledge, 1988.
- Ceci, Stephen J., and Wendy M. Williams, eds. *Why Aren’t More Women in Science?* Washington, D.C.: American Psychology Association, 2007.
- Conley, Susan. “Shelagh Stephenson’s play is sharp, hilarious and contemporary—much like its writer.” *Arts and Books 2001*. Accessed September 14, 2016. <http://www.ivenus.com/culture/theatre/CU-EX-ShelaghStephenson-wk58.asp>.
- Croft, Susan. “Shelagh Stephenson.” In *She Also Writes Plays: An International Guide to Women Playwrights from the 10th to the 21st Century*. 245-246. London: Faber and Faber, 2001.
- David, Jacques Louis. *Antoine-Laurent Lavoisier and His Wife*. 1788. Oil on canvas. The Metropolitan Museum of Art, New York. Accessed February 6, 2017. <http://www.metmuseum.org/art/collection/search/436106>.
- Diamond, Elin. *Unmaking Mimesis: Essays on Feminism and Theater*. New York: Routledge, 1997.
- DiGaetani, John Louis. *A Search for a Postmodern Theater: Interviews with Contemporary Playwrights*. New York: Greenwood Press, 1991.
- Doollee: The Playwrights Database. “Shelagh Stephenson.” *Doollee.com*. Accessed February 6, 2017. <http://www.doollee.com/PlaywrightsS/stephenson-shelagh.html>.
- Dromgoole, Dominic. “Shelagh Stephenson.” In *The Full Room: an A-Z of Contemporary Playwriting*. 232-233. London: Methuen Publishing, 2000.
- Egerton, Judy, ed. *Wright of Derby*. London: Tate Gallery, 1990.
- English Theatre Berlin. “Science & Theatre.” Producing Series. Accessed February 6, 2017. <http://www.etberlin.de/producing-series/science-theatre/>.

Financial Times. “The Pitfalls of Progress.” Review of *An Experiment With An Air Pump*. Directed by Matthew Lloyd. Hampstead Theatre, London. *Financial Times*. October 19, 1998.

Fowler, Jimmy. “Parental Guidance Suggested.” *Dallas Observer*. April 5, 2001. Accessed February 7, 2017. <http://www.dallasobserver.com/arts/parental-guidance-suggested-6392371>.

Freeman, Jennie R. “An Actor’s Method to Creating the Roles of Harriet and Kate in Shelagh Stephenson’s *An Experiment With an Air Pump*.” MFA Thesis, University of New Orleans, 2011. Accessed September 18, 2016. <http://scholarworks.uno.edu/cgi/viewcontent.cgi?article=2295&context=td>

Gorman, Bill. Review of *An Experiment With An Air Pump*. Directed by B.J. Jones. Northlight Theatre, Skokie, IL. *Aisle Say Chicago*. Accessed February 6, 2017. <http://www.aislesay.com/CHI-AIRPUMP.html>.

Gornick, Vivian. *Women in Science: Portraits from a World in Transition*. New York: Routledge, 1997.

Hall, Edward. “Edward Hall Introduces Old Money.” *Hampstead Theatre*. November 21, 2012. Accessed February 6, 2017. <https://www.hampsteadtheatre.com/news/2012/11/edward-hall-introduces-old-money/>.

Haynes, Roslynn D. *From Faust to Strangelove: Representations of the Scientist in Western Literature*. Baltimore: Johns Hopkins University Press, 1994.

Heffernan, James A. W. “Art, Science, and Sacrifice in the Experiments of Joseph Wright and Shelagh Stephenson.” In *Representing Restoration, Enlightenment and Romanticism: Studies in New Eighteenth-Century Literature and Film in Honour of Hans-Peter Wagner*, edited by Anja Muller, Achim Hescher, and Anke Uebel, 115-125. Trier, Germany: Wissenschaftlicher Verlag Trier, 2014.

———. *Cultivating Picturacy: Visual Art and Verbal Interventions*. Waco, TX: Baylor University Press, 2006.

Irigaray, Luce. “Is the Subject of Science Sexed?” Translated by Edith Oberle. *Cultural Critique* 1.1 (1985): 73-88. Accessed July 5, 2016. <http://www.jstor.org/stable/1354281>.

Isherwood, Charles. Review of *An Experiment With An Air Pump*. Directed by Doug Hughes. Manhattan Theater Club, City Center Stage, New York. *Variety*, October 31, 1999. Accessed February 6, 2017. <http://variety.com/1999/film/reviews/an-experiment-with-an-air-pump-1200459975/>.

- Jones, Chris. "On the Map: Shelagh Stephenson's Plays Now Enjoy An International Following." *Chicago Tribune*. September 29, 2000. Accessed February 7, 2017. http://articles.chicagotribune.com/2000-09-29/entertainment/0009290044_1_playwrights-tom-stoppard-steppenwolf.
- Jones, David Richard. *Great Directors at Work*. Berkeley, CA: University of California Press, 1986.
- Jones, Kenneth, and Robert Simonson. "MTC Officially Starts *An Experiment With an Air Pump* Oct. 31." *Playbill*. October 31, 1999. Accessed February 6, 2017. <http://www.playbill.com/article/mtc-officially-starts-an-experiment-with-an-air-pump-oct-31-com-85142>.
- Kacer, Thomas. "'I am Britannia, The Spirit of Our Age': Time Shifting as a Study of the Idea of Progress in Tom Stoppard's *Arcadia* and Shelagh Stephenson's *An Experiment with an Air Pump*." *BRNO Studies in English* 33 (2007): 157-167.
- Kleiman, Kelly. Review of *An Experiment With An Air Pump*. Directed by B.J. Jones. Northlight Theatre, Skokie, IL. *Chicago Reader*. October 12, 2000. Accessed February 7, 2017. <http://www.chicagoreader.com/chicago/an-experiment-with-an-air-pump/Content?oid=903611>.
- Live Theatre. "Harriet Martineau Dreams of Dancing, world premiere a new play set in Tynemouth 1844 by Olivier Award-winning writer Shelagh Stephenson." Live Theatre. October 17, 2016. Accessed February 7, 2017. <http://www.live.org.uk/about-us/news/harriet-martineau-dreams-of-dancing-world-premiere-a-new-play-set-in-tynemouth-1844-by>.
- _____. "Shelagh Stephenson." Live Theatre. Accessed, March 2, 2017, <http://www.live.org.uk/artist/shelagh-stephenson>.
- Loxton, Howard. Review of *An Experiment With An Air Pump*. Directed by Liisa Smith. Giant Olive Theatre Company, Lion and Unicorn Theatre, London. *British Theatre Guide*. 2011. Accessed February 7, 2017. <http://www.britishtheatreguide.info/reviews/exptairpump-rev>.
- Manhattan Theatre Club. "Sloan Foundation." Manhattan Theatre Club. Accessed August 3, 2016. <http://www.manhattantheatreclub.com/about-mtc/sloan-foundation/>.
- Marks, Peter. "Cutting Ethical Corners in the Name of Science, Then and Now." Review of *An Experiment With An Air Pump*. Directed by Doug Hughes. Manhattan Theater Club, City Center Stage, New York. *New York Times*, November 1, 1999.
- Mitter, Shomit. *Systems of Rehearsal: Stanislavsky, Brecht, Grotowski and Brook*. New York: Routledge, 1992.

- Mullins, Edwin B., et al. "Joseph Wright of Derby: *An Experiment on a Bird in the Air Pump*" (video). Directed by Reiner E. Moritz. Germany: ArtHaus Musik, 2012. Accessed September 17, 2016. <http://search.alexanderstreet.com.ezproxy.baylor.edu/view/work/2100989>.
- Nelkin, Dorothy. *The DNA Mystique: The Gene as a Cultural Icon*. New York: Freeman, 1995. Accessed September 27, 2016.
<http://hdl.handle.net/2027/mdp.39015059146384>.
- Panini, Giovanni Paolo. *Interior of a Picture Gallery With The Collection of Cardinal Silvio Valenti Gonzaga*. 1740. Oil on canvas. Wadsworth Atheneum Museum of Art, Hartford, CT. Accessed February 6, 2017.
<https://www.wadsworthshop.org/products/giovanni-paolo-panini-interior-of-a-picture-gallery-with-the-collection-of-cardinal-silvio-valenti>.
- Paulson, Ronald. *Emblem and Expression: Meaning in English Art of the Eighteenth Century*. Cambridge, MA: Harvard University Press, 1975.
- Raby, Gyllian. "From Pre-Luddites to the Human Genome Project: Smashing Frames in Shelagh Stephenson's *An Experiment with an Air Pump*." In *Images and Imagery: Frames, Borders, Limits*, edited by Leslie Boldt-Irons, Corrado Federici, and Ernesto Virgulti, 137-150. New York: Peter Lang Inc., 2005.
- Schiebinger, Londa. *Nature's Body: Gender in the Making of Modern Science*. Boston, MA: Beacon, 1993.
- . *Has Feminism Changed Science?* Cambridge, MA: Harvard University Press, 1999.
- Schmitt, Natalie Crohn. *Actors and Onlookers: Theater and Twentieth-Century Scientific Views of Nature*. Evanston, IL: Northwestern University Press, 1990.
- Shepherd-Barr, Kirsten. *Science on Stage: From Doctor Faustus to Copenhagen*. Princeton, NJ: Princeton University Press, 2006.
- Sommer, Elyse. Review of *An Experiment with an Air Pump*. *CurtainUp Review*. 1999. Accessed July 14, 2016. <http://www.curtainup.com/experimentwithanairpump.html>.
- Spencer, Charles. *Theatre Record* 16, no. 15 (1996): 928.
- . "The Long Road: a heartbreakin journey to forgiveness." Review of *The Long Road*. Directed by Esther Baker. Soho Theatre, London. *The Telegraph*, May 21, 2008. Accessed August 13, 2016.
<http://www.telegraph.co.uk/journalists/charles-spencer/3673547/The-Long-Road-a-heartbreakin-journey-to-forgiveness.html>.

- Stephenson, Shelagh. *An Experiment With An Air Pump*. In *Plays: I.* 135-231. New York: Bloomsbury, 2003.
- . *An Experiment With An Air Pump*. London: Methuen Drama, 1998.
- . “Diary of a Woman in Despair.” *New Statesman* (July 9, 2001): 38-41. Accessed July 13, 2016. <http://go.galegroup.com.ezproxy.baylor.edu/ps/i.do?id=GALE%7CA77059349&sid=summon&v=2.1&u=txshracd2488&it=r&p=AONE&sw=w&asid=4f171cc1e9b775bb7ec2c48d10f2c893>.
- . “Introduction.” In *Plays: I.* ix-x. New York: Bloomsbury, 2003.
- . *Plays: I.* New York: Bloomsbury, 2003.
- Swain, Kelley. “An Experiment with an Air Pump: Medical Ethics Staged.” Review of *An Experiment with an Air Pump*. Directed by Liisa Smith. Giant Olive Theatre Company, Lion and Unicorn Theatre, London. *CultureLab Blog*, October 28, 2011. Accessed February 6, 2017. <https://www.newscientist.com/blogs/culturelab/2011/10/experimenting-with-medical-ethics-on-stage.html>.
- The Quarter Club. “Shelagh Stephenson: Writer and Playwright Talks Courage to TQC.” Interview with Shelagh Stephenson. *The Quarter Club*. Accessed February 6, 2017. <http://thequarterclub.org/interviews/we-caught-up-with-shelagh-about-caryl-churchill-masterchef-selfies/>.
- Throsby, Karen. *When IVF Fails: Feminism, Infertility and the Negotiation of Normality*. London: Palgrave Macmillan, 2004.
- Usher, Robin. “Shelagh and Her Sisters.” Interview with Shelagh Stephenson. *The Age.Com.Au*, May 26, 2004. Accessed February 6, 2017. <http://www.theage.com.au/articles/2004/05/25/1085442127029.html>.
- Wainwright, Jeffrey. “What’s the Big Idea?” Review of *An Experiment With An Air Pump*. Directed by Matthew Lloyd. The Royal Exchange, Manchester. *Independent* [London], February 19, 1998: 7.
- Wickham, Glynne. *Drama in a World of Science and Three Other Lectures*. London: Routledge and Kegan Paul, 1962.
- Wright of Derby, Joseph. *An Experiment on a Bird in the Air Pump*. 1768. Oil on canvas. The National Gallery, London. Accessed February 6, 2017. <https://www.nationalgallery.org.uk/paintings/joseph-wright-of-derby-an-experiment-on-a-bird-in-the-air-pump>.