

Timberlake Wertenbaker's *After Darwin*: Identity and Ethics in the Interplay of Theatre and Science

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ABSTRACT

After the success of Michael Frayne's *Copenhagen* in 1998, a surge of interest was ignited among playwrights in writing about science by merging form and content to convey scientific ideas in a theatrical way. One of the best examples of the use of this interdependence of formal and thematic properties to theatrically communicate science is Timberlake Wertenbaker's *After Darwin*. Wertenbaker introduces different aspects of the theory of evolution such as mutation, natural selection, extinction, and the survival of the fittest into the structure of the play to reveal the impact of Darwinism on the construction of identity and ethical imperatives in modern world. This study shows how these aspects of Darwinism are built into the structure of *After Darwin*, with reference to Wertenbaker's treatment of identity and ethics. Prior studies have discussed ethics, identity, and evolution as separate entities. This study examines them as a single, integrated whole to reveal their interconnectedness and their significance in the theatrical and structural conveyance of science in *After Darwin*.

Key words: Science, Theatre, Evolution, Narrative, Ethics, Identity

INTRODUCTION

Over the past three decades, the surge of new plays and performances that, in one way or another, deal with scientific subjects and ideas appears substantial enough to be termed a new phenomenon. *New York Times* critic Carol Rocamora suggested in 2000 that "Science is becoming the hottest topic in theatre today, so much so that it's identifiable as a millennial phenomenon on the English-speaking stage" (50). On stage for four years in London, two years on Broadway, and performed in cities all over Europe and America, Michael Frayn's 1998 play *Copenhagen* stands at the heart of the proliferation of these plays, known as science plays. When the New York production of *Copenhagen* won a Tony Award for best play in 2000, a new surge of interest was ignited amongst science play practitioners in writing about and staging issues around science. Theatre and literary scholars also began writing about the role of science in the theatre. In September 2000, for example, an entire issue of the journal *Interdisciplinary Science Reviews* was devoted to an exploration of new trends in science and theatre. In March 2000, a major convention was held in New York featuring leading figures from the two domains. And in April 2000, a month-long festival of works inspired by science was held at the Ensemble Studio Theatre in New York. At the same time, Arthur Kopit's *Y2K* (1999) and David Auburn's *Proof* (2000) were staged at the Manhattan Theatre Club.

One of the science plays that was written around this period is *After Darwin* by Timberlake Wertenbaker. This play was staged for the first time at the Hampstead Theatre in London in 1998, the year which also saw the premier of *Copenhagen* and another successful science play, *An Experiment with an Air Pump* by Shelagh Stephenson.¹ On the first night of the performance, reviewers suggested a connection between *After Darwin* and those two plays, and following Michael Billington's proposal that "Our post-Utopian, post-religious, postmodern world is looking to science to provide the moral conundrums that are the essence of drama" (27), acknowledged the growing dominance and status of science within theatre.² Although *After Darwin* did not achieve huge success on stage or in print (not doing as well as *Copenhagen* or Tom Stoppard's *Arcadia*), the centrality of science in the play makes it a vital if overlooked contribution to the genre of the science play. *After Darwin* dramatizes how the scientific discoveries of Charles Darwin have influenced the state of our lives, in which ethical principles are constantly being threatened by humanity's struggle for existence. Wertenbaker effectively and beautifully explores topics such as natural selection, adaptation, the survival of the fittest, mutation, and extinction in relation to ethics, and draws the social map of a society whose inhabitants are incapable of moral choice; rather, they are driven by, as Sara Freeman puts it, "the biological imperative to select and survive" (214).

Parallel to her exploration of ethics within a Darwinian paradigm, Wertenbaker uses the same framework to launch into a long discourse on identity by examining its social and biological construction. The play features characters with floating identities, forced to take roles simply to survive, as though identity were merely a question of people performing themselves. The characters in Wertenbaker's play construct their own identities by incorporating within themselves dominant social norms and institutions as an act of survival.

After Darwin is one of the best examples of science plays that use realistic science metaphorically – in this case the theory of evolution (Darwinism) – as well as providing an accurate and plausible description of it, to make science the central character on stage. Wertenbaker brings the originator of evolution on stage to accurately explain his science, and then creates a group of fictional characters who fully feel its implications in their lived experiences of ethics and identity. In doing so, she uses Darwinism as a mechanism to discuss the human condition and, to use Shepherd-Barr's words, literally enacts the ideas that it engages with (*Science on Stage* 6). This is the quality that makes this play unique amongst the other science plays that deal with Darwinism or the theory of evolution,³ as the role of science in those plays is only peripheral and they fail to successfully integrate the scientific subject matter into the resources of the theatre. These science plays, therefore, lack what Shepherd-Barr, the leading science play scholar, considers the most important factor contributing to a *good* science play: that is, "to successfully enlist the physical resources of the theatre to illustrate and flesh out a scientific idea" ("Copenhagen and Beyond" 173).

There have been studies analysing and discussing the concept of morality and ethics in *After Darwin*. Sara Freeman analyses the position morality occupies in the play in the context of tragedy in the modern and postmodern society. Nicholas Ruddick in "The Search for a Quantum Ethics" discusses *After Darwin* along with other science plays with reference to the post-quantum perception of ethics as uncertain and indeterminate. The concept of identity has also been addressed by different scholars in regards to *After Darwin*. Sophie Bush in *The Theatre of Timberlake Wertenbaker* discusses the role of language in the formation of identity. Maya Roth in "Engaging Cultural Transitions: Timberlake Wertenbaker's History Plays from *New Anatomies* to *After Darwin*" addresses the issue of identity in the context of history and politics.

Darwinism in *After Darwin* has attracted scholarly attention too. Shepherd-Barr in "Copenhagen and Beyond: The 'Rich and Mentally Nourishing' Interplay of Science and Theatre" and a chapter on evolution in theatre in *Science on Stage: From Doctor Faustus to Copenhagen* uses Darwinism as a tool to skilfully discuss *After Darwin* in terms of different issues such as performativity, adaptation and acting, technology, gender, tragedy, and ethics. Shepherd-Barr's discussion of ethics in *After Darwin*, however, is limited, and more in-depth analysis of this aspect is needed; this is the gap that the current study intends to fill. In this study, the concepts of identity and ethics are examined in *After Darwin* with relation to Darwinian concepts of mutation, adaptation,

the will to survive, extinction, and natural selection. In doing so, this study completes the existing literature on *After Darwin* by putting these aspects of the play together and discussing them as a single, integrated whole to reveal their interconnectedness and their significance in the theatrical and structural conveyance of science in the play.

According to T. H. Huxley, "*The Origin of Species* (1859), for the first time, put the doctrine of evolution, in its application to living things, upon a scientific foundation" (101). In this book, Darwin formulated the basic controlling mechanism of evolution and provided a broad foundation of evidence to support his theory. The essence of Darwin's ideas is a phenomenon known as natural selection, according to which, if any being, in the act of the struggle for existence, changes, "however slightly in any manner profitable to itself, under the complex and sometimes varying conditions of life, [it] will have a better chance of surviving, and thus be naturally selected" (97). Those that are best adapted to survival are the fittest, while others become extinct. However, the physical and behavioural changes that make natural selection possible are caused by mutations: accidental, random hereditary factors that occur regardless of the benefit or loss to the organism. Nevertheless, in the process of natural selection, Darwin argues, "favorable variations would tend to be preserved and unfavorable ones to be destroyed the result of which would be the formation of new species" (438). Wertenbaker's play is about the young scientist, whom Captain Robert FitzRoy takes along on the *Beagle* to a voyage to South America and the Galapagos Islands, during which he collects the data that formed the basis for these theories.

After Darwin alternates between the past and present, with the same actors doubling in the two different time periods, but the former moves slightly forward and places its historical characters in the mid-nineteenth century. The play begins as a conventional history play focusing on Darwin and FitzRoy. However, in Scene 2, when Millie, a Bulgarian refugee director, suddenly intervenes, it is revealed that the nineteenth-century scenes are in fact the rehearsal of one play inside another. The historical scenes concern the philosophical discussions around the theory of evolution between the extremely religious Victorian moralist FitzRoy and Darwin, the passionate young scientist with revolutionary ideas, during their journey on the *Beagle*. The contemporary scenes, on the other hand, feature Millie, two actors – the young opportunist Tom and the middle-aged Ian, who leads a strict moral life, playing Darwin and FitzRoy respectively – and an African American playwright, Lawrence, rehearsing a play about Darwin and FitzRoy's voyage. In the interior play, Wertenbaker's focus is not on recreating the physical conditions of the voyage; rather, the goal is to recreate the ideological framework within which Darwinism was operating. The exterior play is also structured in such a way that it becomes a direct commentary on the impact of Darwinism on contemporary human life, its ethical imperatives, and the sense of self.

The dramatic tension of each period gradually increases as the play progresses. Darwin and FitzRoy's relationship becomes tormented because FitzRoy believes that, as a re-

sult of Darwin's ideas, the fixed certainties with which people have long lived, God and man, are thrown into disarray (Billington 27). He eventually comes to feel that he was responsible for the Darwinian revolution, which destroyed forever humanity's faith in God, and so kills himself (FitzRoy did indeed cut his own throat in 1865). Meanwhile, Tom is offered a part in an action movie by which he can realize his dream of becoming a film actor. However, to do so, he must quit the play, which means that it will have to be cancelled. To save the production, Ian emails the producer of Tom's movie with the false information that he has AIDS.

Surprisingly, many of *After Darwin's* critics have viewed Wertebaker's deployment of the device of the play-within-the-play as a serious drawback, arguing that it makes FitzRoy and Darwin's story secondary and adds unnecessary complexity to the play.⁴ However, these critics have got it wrong. The simultaneous depiction of the formation of the theory of evolution in the nineteenth century and its enactment through the behaviour of the contemporary characters in the twentieth century enables Wertebaker to depict the implications of the theory on the future. It gives her an appropriate context for a dramatization of the applicability of the Darwinian paradigm as an apt metaphor and frame of reference with which to structure and define the human condition: a condition where the struggle for existence has overshadowed not only our ethical and social life but also our sense of self and identity. Moreover, the device of the play-within-the-play allows Wertebaker to feature characters that, despite their temporal and spatial differences, deal with the same ethical and identity issues. She not only suggests the durability of the theory of evolution but also its inseparability from human life: the fact that it defines our existence as human beings.

ETHICS AND IDENTITY AND TIME-LESS EVOLUTION

No Chronology, No Linearity

The close relationship between the past and the present scenes and their interaction is the technique Wertebaker uses to establish as much similarity as possible between the past and contemporary characters, as well as skilfully and effectively showing the impact of Darwin's ideas on the everyday lives of ordinary people. The audience can see Darwin on stage simultaneously or immediately before or after the contemporary characters fully feel and experience the implications of his theories. In doing so, the audience can better see the enactment of Darwinism via the medium of theatre. An analysis of the structure of *After Darwin* therefore seems necessary.

The structure of the play reveals an elaborate pattern and shows how the past and present and the here and there of the play gradually constitute a continuous whole.⁵ Wertebaker's play embraces a relative temporality/spatiality in which distinctions between different temporal and spatial units are perceived as not absolute. In Act I the scenes belong either to the past or to the present. The only exception is the final scene, in which the two periods occupy the stage together:

an interaction between Darwin and FitzRoy with the stage direction "*Lawrence and Millie, watching*" (Wertebaker 34). In Act II, the changes between the two times are not as clearly marked as in Act I and the interjections become more recurrent. This act begins with the constant interruption of the dramatization of FitzRoy and Darwin's 1830 meeting by contemporary scenes. Then the past/present alteration pattern becomes regular once again, but unlike Act I where scene changes separate the two periods, the scenes change directly from the past into the present, making the interaction between the two time periods even closer. The pattern of alternation ends in Scene 7 and the two periods collapse and merge, with the historical and contemporary characters occupying the stage together. In their immediate and constant travel from one time period to another, the audience is also instantly transferred from a ship, the *Beagle*, in South America or the Galapagos Islands, to a rehearsal room, breaking the absolutism of space alongside of that of time.

After Darwin's fast and fluid movement between past and present and here and there creates a lump of different units of time and space, but also causes the fragments of the historical and contemporary narratives to constantly interrupt each other, and gives the play an episodic, nonlinear narrative structure. The natural flow of historical narrative is constantly interrupted by contemporary characters' comments on the play, and the linearity of the contemporary narrative is shattered every time the historical events are enacted on stage. This close connection between the past and the present on Wertebaker's stage further emphasizes the similarities of the characters, and their potential as subjects for analysis within the framework of Darwinism.

Connection and Ethical Opposition

As the two historical periods develop in parallel, a sense of the inseparability of Darwin's theories from the state of human life and ethics develops accordingly. While watching Darwinism gradually take shape onstage, the audience confronts Wertebaker's microcosm of characters who are put in situations to which, despite their temporal and spatial differences, they display similar reactions, reactions that can only be justified within the Darwinian paradigm: the fact that, regardless of our time, place, race, gender, culture, etc., the dominant force shaping our existence as human beings is the struggle to survive and to avoid extinction. As a result, the definitions of concepts such as ethical integrity and authentic identity can easily change, depending on the adaptation that the act of survival calls for. At one point in the play Ian says, "Millie, the moral dilemma is an overspecialized refinement that leads rapidly to extinction" (Wertebaker 54). This coincides with Millie's opinion that "The truth is not a good survival tool. It makes you vulnerable" (51). In *After Darwin*, the similarities that Wertebaker establishes between her historical and contemporary characters within the Darwinian paradigm create a network of connections that lead to the characters becoming connected across centuries and continents.

The struggle of FitzRoy, the historical moralist character, to persuade his companion Darwin not to publish his sup-

posedly anti-God theories is reflected and reproduced in the struggle of Ian, the contemporary moralist character, to persuade his fellow actor Tom not to accept the film offer. For both FitzRoy and Ian, adaptability is not the governing principle of existence. FitzRoy is not open to new ideas and prefers his own outworn Victorian mindset, while Ian has made a firm decision to remain on the stage practicing his own ornate, "old-school" acting skills (Wertenbaker 44). He even ruined his chances of getting a name in the film industry by rejecting a part as a serial killer in a successful movie (44). Like FitzRoy, Ian is a man of principle who values ethics and who has tried to live by his own moral code. He believes that it would be morally reprehensible for Tom to leave the play and therefore tries to cling to his ethical obligations to convince him:

You're part of a culture that nurtured you, that gives you your identity and protects you from despair. You're playing a man of extreme decency and you're taking the most superficial reading of his own words to excuse your disgusting, criminal, your tawdry... You've formed relationships here, to Millie, to me, to Lawrence. You have an obligation and you do know what that word means because under that camouflage of idiocy is a man of talent, who somewhere, however dimly, believes, believes... (Wertenbaker 46)

Tom, on the other hand, is a young, narcissistic, ambitious actor who is eager to experience the new media. He is ready to further his career and to accept a part in a trashy movie at the expense of the production's ruin. When Ian strongly objects to his decision, Tom justifies it in Darwinian terms:

IAN. You are not some animal foraging for food.

TOM. That's what Darwin's saying here, isn't it?... I'm hungry, Ian, I want to go where there's lots of food. (45)

Similarly, he does not accept Ian's definition of morality – "I don't understand that word, Ian" (45) – and instead argues that as human beings they are all driven by their biological impulses, forcing them to select and survive, and are therefore incapable of making moral choices. He is "cynical, selfish, stupid, immoral and want[s] only a good life" (Wertenbaker 26), and is prepared to sacrifice not only the production but also his friends. Tom is, in fact, Wertenbaker's perfect model for an evolutionary version of the human species, able to develop an organic relationship to the environment that he inhabits merely to survive. He is a Darwinist who plays Darwin, justifies himself in Darwinian terms, and enacts Darwin's theories.

However, Wertenbaker's moralist characters are not so different from her Darwinist characters. They too are not immune to the struggle for existence. Ian is an old actor who has been without work for two years due to his stoicism, and now he is in danger of becoming professionally extinct. He feels that his ornate skills, that characterize a classically trained actor, have become, to use Nicholas Ruddick's words, "like the cumbersome antlers of the vanished Irish elk" (128). Since he has already ruined his chances of getting a name in the film industry, this play is his only chance to survive, to save both his career and his acting skills. Eventually he undertakes the subterfuge of emailing the producer

of Ian's movie with false information, with the justification that he can betray his moral code in order to achieve moral ends. In doing so, Tom will quietly stay and continue with the play and everyone will be better off, including himself. So here, Ian's actions are driven by his need to survive. In Act II Scene 6, Ian also justifies his act within a Darwinian paradigm: "I don't want another two years without work. I want to survive, I want Millie to survive, I want this to survive... Just a chance, I thought – so I broke my code, like FitzRoy" (65-66).

And indeed, the character Ian is playing also breaks his moral code just to survive and avoid extinction. The first and the last scenes of *After Darwin* refer to what Feldman considers FitzRoy's "sense of historical injustice". The audience sees him in the first scene drawing a razor up to his throat, and while doing so, lamenting, to use Feldman's words: "the travesty of his own extinction" (175): "I leave nothing behind" (Wertenbaker 1), FitzRoy says. In the final scene also, he grieves over the sparseness of his legacy: "I left nothing behind... A light foam or ridicule and irritation... A puff of weather... The dark side of the light" (72). Young Darwin's outstanding discoveries onboard the *Beagle* have removed from popular memory the history of FitzRoy's achievements onboard the ship he captained. As a man who aimed "to change the history of the world", FitzRoy wants to be "remembered as someone who benefited mankind" (31), but his ambition is frustrated by his choice of companion. Moreover, as an extremely devoted Christian, he does not want Darwin's naturalist, areligious paradigm to be the winning one – in the Kuhnian sense of the word – in the battle of ideologies. He therefore must stop the man he took with him on the *Beagle* from publishing his theories so he will not be responsible for "unleashing the faith-destroying Darwinian revolution upon the world" (Ruddick 127). This is why, in the revision of the play, Lawrence decides that a man like FitzRoy, a Victorian gentleman who swears on the Bible (Wertenbaker 64) and is a man of faith, does not simply remonstrate with Darwin using words only; rather, he aims a gun at him, forces him to go down on his knees, and threatens him, an unarmed man, unless he swears to forgo his inquiries into evolution (Wertenbaker 63-66). What Wertenbaker is suggesting here is that despite their firm belief in ethical principles and moral codes, Ian and FitzRoy, just like Tom, cannot operate outside the Darwinian paradigm and the defining principle of their existence: the will to survive. In this light, their act of ethical betrayal becomes an act of adaptation in order to be naturally selected, to be among the fittest, and thus to survive.

Ian and FitzRoy are not the only contemporary characters whose moral views have conformed to their need to survive. Millie also has to go through the same transformation process. She knows that her survival depends on the success of Lawrence's play, because through it she can prove that she is talented enough to be a productive member of British society and consequently can make a case for permanent residency in the United Kingdom. She therefore decides to conceal the truth that she has never directed a play before. Her only connection to the theatre was working as a cleaner in a state

theatre after she was expelled from the science department in Bulgaria due to her Turkish heritage. She decides to conceal from the cast the truth about her background and her real motivations in staging the play. As quoted earlier, she states that “The truth is not a good survival tool. It makes you vulnerable” (Wertenbaker 51). The unethical practices of Wertenbaker’s characters in favour of survival reflect the remorseless logic of Darwinism:

FITZROY. We lose our moral sense and are no better than animals.

DARWIN. We are animals. (59)

Adding Millie to the play’s victims of survival, Wertenbaker allows the greedy spider of Darwinism to expand the scope of its sticky web of connections across centuries and continents and hunt the playwright’s past and present characters. This connection is reinforced by the fact that the same actors that play Tom and Ian also play their historical counterparts. The actors’ bodies, in other words, function as teleporters that instantly connect characters two hundred years apart just to show the durability and inseparability of Darwinian ideas from our everyday lives.

Hybrid Identities

Under the heavy shadow of Darwinism, a series of oppositional pairs emerge that operate within the domain of the characters’ sense of identity. In their struggles to survive they end up acquiring hybrid identities, as a result of their attempts to fit into the host environment; identities at the centre of which there are complementary dualities, polarities, or duplicities which are both mutually exclusive and mutually necessary.

In Wertenbaker’s play we meet, as Sophie Bush explains, “a cross-border adult, a more troubled species” (201), who has to deal with a range of threats and challenges. The best example of this phenomenon is the Bulgarian refugee, Millie. Before coming to Britain, she has had to suffer the consequences of a war of ethnic cleansing in Bulgaria, due to her Turkish heritage. Mistreated in her own country, she escapes to England, where she has to deal with the instability of a cross-cultural existence on a daily basis. To join the English species and survive, Millie knows that she needs to adapt to the new environment. She therefore learns new codes, a new language, and strives to appear “more British than the British” (Wertenbaker 26). In order to do so, she believes that she must remove all the elements of her foreignness, such as her accent. Tom tries to persuade her not to “lose the passion in [her] vowels” (27), but Millie is determined:

MILLIE. I can’t pass for British unless I get rid of them.

TOM. What a sacrifice.

MILLIE. Not for survival.

TOM. (*correcting the ‘u’ of survival*) Survival. (28)

She has also sacrificed her Bulgarian name, in favour of the English-sounding Amelia (51). However, it seems that Millie has not been able to fully adapt to her new environment (Wertenbaker 50-52) and is in the same condition of hybridity in England as she was in Bulgaria, where she was torn between her Turkish heritage and her Bulgarian nationality. The same features that are essential characteristics of

Bulgarian identity – intense passion and emotion (24) – also exist in her working methods. She “*throws herself down on Ian’s feet*” to beg him to follow her direction. When Ian disapproves of this, saying “This is no way to direct”, she replies, “It is in Moscow” (10). She therefore exhibits the same features that she has striven to discard.

However, Millie’s inability to erase the signs of her foreignness in order to seem British takes a positive form for her. Since Millie’s governing principle of existence requires her to adapt in order to survive, she decides to reinvent herself. She blends different facets of her past and her present into a new hybrid identity for the future because she believes that her Balkan qualities, her “intellectual energy and passion”, will supplement her new identity and enable her “to thrive in the West” (55). She understands every word of what Darwin says because she has read all of Darwin (50), and she combines her intellectual understanding with passion. In Act I Scene 3, she wants to see an effective depiction: “I see emotions in these lines... I see two men who embrace”. When Ian disagrees with her, saying “Maybe in Bulgaria”, she explains, “In Bulgaria they would take a knife to their arms and mingle their blood... they would be fighting in caves and forests against the Turks” (9). Ian accuses her of shaming them “with the excitement of her history”, but Millie refuses to accept the identification: “It is not my history any more, this is my history” (9). Here, Millie, a Bulgarian refugee, presents herself as a British national and in this way asserts ownership of English history to validate her newly adapted identity. This is why she desperately needs the play to open, to help her with the ratification of the tenets of her existence. Millie’s desire that the two actors embrace is in fact a “desperate bid to rewrite nationality, to render it an act of interpretation, to infuse English history with Balkan passion, to see a new life form emerge” (Feldman 176-177); a new life form that simultaneously makes her foreign and British, familiar and strange, outsider and native. She places herself among the fittest, through the process of natural selection, preserving favourable mutations (Balkan passion and intellectual energy) and eliminating the unfavourable (accent, history, name) to guarantee her survival. In other words, the differences defining Millie’s identity also reconcile with each other to make her survival possible.

Another character that can be discussed with reference to hybrid identity is Lawrence. He was raised among racial tensions in Washington, D.C. When he was eight, his mom took him out of school and separated him from dissatisfied black youth to live on white writers only:

I was beginning to go wild, beyond anger as you say – and she locked me up with books, everything she could lay her hands on. Here, she said to me, here’s your friends; Shakespeare, Milton, *Moby Dick*, that’s the only gang you’re ever to hang out with. She put in extra hours to hire tutors. No black writers. No writing on slavery. When I told her about Caliban she tore out *The Tempest* from my collected Shakespeare. (Wertenbaker 57)

Lawrence is not only cut off from his African American fellows, therefore, but also from the canon of his ethnic

heritage. He acknowledges the cancellation of his own heritage as follows:

Blind kings, barren women, runaway children and castaways peopled my childhood... they became my ancestors, these loved figures carved from the crooked timber of humanity... lining the shelves of my memory – a parallel evolution, where imagination multiplies... Their legacy, empathy, complexity. (Wertenbaker 72)

Just like Millie, who voluntarily eliminates her accent, Lawrence's mother removes all traces of her family's cultural heritage as an act of survival for her son. In other words, she destroys her son's unfavourable mutations in order to guarantee his survival in the new environment. In her determination to force Lawrence to transcend the circumstances of his birth and to adopt the cultural mores of another race and class, she has imposed the burden of biculturalism on him. Lawrence, like Millie, has acquired a history not his own and has adopted, in Feldman's words, "an imported tradition" (177). Despite his belief that thanks to his education he has been able to successfully forsake his ancestors and adopt a new culture, Lawrence also suffers the stresses of biculturalism. He says that one of the reasons why he decided to write the play was to narrate the story of the three natives of Tierra del Fuego, who were "the first people to suffer the stresses of biculturalism" (Wertenbaker 32). Lawrence's narration of their story is an attempt to tell his own bicultural history as a black man in America who tried to escape his situation by reading white literature. He, in fact, doubles the examples of the natives of Tierra del Fuego and is the conduit for their story. Lawrence now owns a hybrid identity, at once black and white, wronged by racial prejudice. He is "a hybrid, a completely new form" (56), one that mixes elements of his suppressed and acquired identities together.

In his description of the perfect adaptive evolution of Galapagos finches, Darwin creates a model to which Wertenbaker's characters correspond: "In this stage, this brave new world, isolated from the rest of the continent, the islands, themselves isolated from each other... there began to emerge birds so different from their forebears... that they must, in truth, be called a-new-species" (Wertenbaker 36). Lawrence and Millie are a new species with a hybrid identity; they neither belong to what is their own nor to what is not their own. They have acquired a new identity with two opposing but complementary modes of realization that form their very beings; an identity that represents the very act of survival.

Millie and Lawrence's confused identification with their native and non-native cultures is mirrored in the interior play. At the start of the voyage, FitzRoy tells Darwin that he intends to convert the savages they encounter en route to English culture and religion, with the purpose of eventually "redeeming" them. The prime example of these "miserable and savage creatures" (2) is Jemmy Button, whom FitzRoy captured in Tierra del Fuego, educated in England, and repatriated to his native culture. "Jemmy Button recognized his tribe" (31), Lawrence explains, "but could no longer speak his own language and his mother and his brothers refused to acknowledge him" (32). The attempt to repatriate Jemmy

produced disastrous results, and when FitzRoy returns to Tierra del Fuego the year after his voyage with Darwin, he discovers a miserable Jemmy Button who refuses to talk to him until he is fully clothed. He then tells "a tale of abject treatment by his tribe and family" (32). Jemmy's tribe have rejected his English influence and treated him very badly. However, he refuses to return to Western civilization with FitzRoy. Lawrence explains: "He had adapted Englishness with total enthusiasm, but had then readapted the customs of his tribe with equal commitment, thus becoming perhaps one of the first people to suffer the stress of biculturalism, a condition which was to reach epidemic proportions in the late twentieth century" (32). Jemmy Button also possesses a hybrid identity, simultaneously civilized and uncivilized, accepted and rejected, English and Fuegian.

Wertenbaker's strategy of having Lawrence tell Jemmy's story further highlights the connection that is created between the contemporary characters and the historical characters across time and space. In the domain of Wertenbaker's play, the Darwinian paradigm becomes the only accepted context within which the state of human life should be examined. It is a domain in which, amidst all the cultural and racial differences, the only similarity that connects all the characters is the necessity to absorb and unite oppositions; an act of survival that defines their existence. The struggles of characters to constantly evolve and adapt, however, becomes a source of uncertainty on Wertenbaker's stage.

THE UNCERTAINTY OF ETHICS AND DARWINISM

As discussed above, all Wertenbaker's characters consider the act of survival to be the main principle governing their existence, to the extent that even their moral principles can be defined within the context of adaptation and survival. Over the course of the play the struggle to be fittest and therefore to survive is the only fixed certainty that the characters accept and believe. Under the microscope of Wertenbaker's characters, the Darwinian struggle for existence is viewed as the only certain truth that authorizes the sacrifice of ethics in favour of survival. However, Lawrence is the only character who decides to do otherwise, sacrificing the Darwinian perception of human existence for the sake of his moral principles. From his standpoint, a necessary evil does not oblige people to go against their morality. This is why at the end of the play, when he learns about Ian's deception, he decides to stop the production, despite the fact that Tom is now happy to play the role. Lawrence cannot approve of Ian's act because he believes that he is responsible for his integrity (Wertenbaker 68) and that if he allowed the play to continue on such terms he would feel his work was contaminated (69). Millie tries to change Lawrence's mind, saying that his mother is coming to see the performance, but Lawrence replies, "If there's one thing a black American woman from Washington, D.C. knows, it's the difference between right and wrong... You have to stand up for your principles" (68). When she tries to make him see how deeply everyone needs this show to go on to survive both spiritually and economically, he replies, "Don't make me betray my moral

code... It's what I hold on to, Millie, it's what makes me hold my head high" (70). As a result of Lawrence's decision, the production will terminate and with it Millie's hopes of staying in the United Kingdom, Tom's film and theatre career, Ian's chance to save his "old-school" acting style, and even Lawrence's opportunity to prove to his mother that her "philosophy of education, his indoctrination in the English literary canon, and the cancellation of his own heritage" have worked (Feldman 177). Lawrence's decision will also affect the fate of FitzRoy, who as a failed character, marginalized by history in comparison to Darwin, had a chance of being reinstated in history through Lawrence's play.

When Lawrence informs Millie of his decision to stand by his moral codes, Millie replies, "Ian's broken his, Tom never had one, what makes you think you can survive without getting your hands dirty?" (Wertenbaker 70). This is where Wertenbaker raises one of the central quandaries of human life: in a world dominated by cruel Darwinism and the struggle for survival, which is the right path to take? To go down the road of survival and betray ethics, or to stand by moral principles, whatever the consequences? Which is the right decision to make "in this twenty-first century, in this third millennium, [where] human beings are in trouble in some way[?] They have lost their certainty" (Wertenbaker qtd. in Freeman 201). Wertenbaker does not provide an answer to this question, instead letting the audience's conscience and reasoning determine how the play should end. Shepherd-Barr explains that Wertenbaker only shows the audience members the problem and then asks them "to ponder the possible solutions and finally come to understand that they have a huge responsibility in their hands: no less than the fate of earth" (*Science on Stage* 119). She wants them to decide which one is to survive, Darwin or ethics? In doing so, she lets characters and the audience's observations of ethics and survival take control, introducing a polyphony and multiplicity of voices into the play. The interference and the clash of these different observations allows for a richness of possible meanings that eventually posits a radical indeterminacy at the heart of *After Darwin*.

Wertenbaker brings this uncertainty to the surface in the final scene, in which she directly addresses the audience and invites them to decide what decision Lawrence should make. Darwin/Tom is sitting at his desk speaking lines from *On the Origin of Species*, when FitzRoy/Ian enters carrying a bible, a razor, and a bowl. FitzRoy then begins to read texts from Genesis in despair. Millie and Lawrence are in the Darwin museum in Down House and Millie is reading the titles of the books about Darwin on the bookshelves, the same books that gave her the intellectual energy and passion to survive in the West. While Millie and Darwin continue their litanies, FitzRoy directly addresses the audience, lamenting the paucity of his legacy, with Lawrence staring at him. He then grasps Lawrence's shoulders, pleading with him to "give [him] substance" and asking Lawrence to find him and give him room (Wertenbaker 73). FitzRoy wants Lawrence to reinstate him in history, to help him survive historically. Then, as their fragmented speeches gradually decrease, all four characters

"look at one another and out towards the audience" (73), as if inviting them to be a part of their play and decide the fate of these characters: should Lawrence discard his moral principles and let the play survive, and with it Millie and her intellectual passion and FitzRoy's historical heritage, or should he stand by his ethics regardless of the consequences? This is the question that Wertenbaker's audience is supposed to answer. Here, the collision of the characters' opposing perceptions regarding the priority of ethics over survival and vice versa introduces a void of uncertainty into the play and consequently into the minds of the audience.

Nick Ruddick accuses Wertenbaker of seeking some sort of traditional absolutism in her treatment of ethics and morality: "Though the play is an intriguing work, its resolution relies in the end too much on a traditional ethical absolutism to resolve satisfactorily the questions of uncertainty raised by the divided action" (129). But as Shepherd-Barr rightly states, Wertenbaker beautifully juggles its many opposing ideas (*Science on Stage* 121), and as the above analysis has shown, she does not believe in a certain and straightforward answer when it comes to ethics.

CONCLUSION

This study has explored the ways in which Wertenbaker uses the medium of theatre to show the timeless impact of Darwin and his theory of evolution on her characters. Theories such as natural selection, extinction, mutation, and the survival of the fittest are used as a structural device to explore the complex concepts of ethics and identity. Having two sets of characters, one in the nineteenth century and one in the twentieth, Wertenbaker gives her audiences the chance to witness the formation of Darwin's ideas in the past and their impact in the present on characters that cannot maintain their identities and their morality without having them altered by inescapable and inevitable Darwinism. To further highlight the power of these theories, Wertenbaker involves even nineteenth-century characters in her game of Darwinism by showing them experiencing this impact fully. Wertenbaker's past and present characters have to define their identities and ethical principles within the framework of Darwinism in order to survive, and in doing so allow science to become a theatrical image, the structuring form behind the lives of the characters on the stage of the theatre. The connection that this study establishes between ethics and identity, its representation of them as two complementary components of a single, integrated whole at the centre of which stands the theory of evolution, and its in-depth analysis of their interplay within the framework of the theatre, are the contributions that this study has made to the existing literature.

NOTES

Note 1. In 1998, a range of science plays opened in Britain and America: *Copenhagen*, *An Experiment with an Air Pump*, *After Darwin*, Glen Berger's *Great Men of Science*, Nos. 21 and 22, Carl Djerassi's *An Immaculate Misconception*, Arthur Giron's *Flight*, Jonathan Mark Sherman's

Evolution (1998), and Todd Irvine's *Notes on the Uncertainty Principle*. This proliferation of science plays is a symptom of a special situation of renewed interest from playwrights in science, caused by a variety of factors, among which was the huge success of *Copenhagen*. A scholarly study of these factors is both necessary and timely but lies outside the scope of the current work.

Note 2. See the reviews by Charles Spencer for the *Daily Telegraph* on 15 July 1998, Sheridan Morley for the *Spectator* on 18 July 1998, and Benedict Nightingale for the *New York Times* on 9 August 1998.

Note 3. See Snoo Wilson's *Darwin's Flood* (1994), Jonathan Mark Sherman's *Evolution* (1998), Crispin Whittell's *Darwin in Malibu* (2003), Peter Parnell's *Trumpery* (2007), Craig Baxter's *Re:Design* (2008), John Hinton's *The Origins of Species* (2008), and Murray Watts's *Mr. Darwin's Tree* (2014).

Note 4. See the reviews by Spencer, Morley, and Susannah Clapp for the *Observer* on 19 July 1998, Robert Butler for the *Independent on Sunday* on 19 July 1998, and Alastair Macaulay for the *Financial Times* on 18 August 1998.

Note 5. For a detailed discussion of the structure of *After Darwin* see Mark Berninger, "A Crucible of Two Cultures: Timberlake Wertenbaker's *After Darwin* and Science in Recent British Science Plays". *Gamma: Journal of Theory and Criticism*, vol. 10, no. 109, 2002: pp. 107-120.

REFERENCES

- Billington, Michael. "The finch mob." Rev. of *After Darwin*. *Guardian Weekly*, 26 July 1998, pp. 26-27.
- Bush, Sophie. *The Theatre of Timberlake Wertenbaker*. Bloomsbury, 2013.
- Feldman, Alexander. *Dramas of the Past on the Twentieth-Century Stage: In History's Wings*. Routledge, 2013.
- Freeman, Sara. "Tragedy After Darwin: Timberlake Wertenbaker Remakes 'Modern' Tragedy." *Comparative Drama*, vol. 44, no. 2, 2010, pp. 201-227.
- Huxley, Thomas Henry. *Collected Essays: Methods and Results*. Cambridge UP, 2011.
- Rocamora, Carol. Rev of *Copenhagen*. *The Nation*, vol. 270, no. 22, 2000, pp. 49-51.
- Ruddick, Nicholas. "The Search for a Quantum Ethics: Michael Frayn's *Copenhagen* and Other Recent British Science Plays." *Journal of the Fantastic in the Arts*, vol. 11, no. 4, 2001, pp. 415-431.
- Shepherd-Barr, Kristen. *Science on Stage: From Doctor Faustus to Copenhagen*. Princeton UP, 2006.
- . "Copenhagen and Beyond: The 'Rich and Mentally Nourishing' Interplay of Science and Theatre." *Gamma: Journal of Theory and Criticism*, vol. 10, 2002, pp. 171-182.
- Wertenbaker, Timberlake. *After Darwin*. Faber & Faber, 1998.