Introduction

Is it meaningful to assert that today's weather was caused, if only in a minor way, by theatre productions from the past? We know that theatre-makers have for centuries burned fossil fuels to illuminate their stages and that, in the contemporary period, many performances involve elaborate lighting and sound effects that consume high levels of energy. There is also a long history of cooperation between theatre and the oil and petrol industries, through corporate sponsorship as well as indirect forms of support. Such impacts are less severe than is the case in such industries as aviation, motoring, or agriculture – but they are not negligible.

But perhaps a more momentous impact has arisen from theatre's capacity to shape attitudes towards the environment, other living beings – and fossil fuels too. It does that in many ways, but primarily by modelling the so-called 'real world' – through scenography, dramaturgy, acting, and other forms of theatrical representation – in ways that have often separated the human subject from (the rest of) nature, a problem exacerbated by the post-Enlightenment tendency in the West to conflate the 'real' with the 'human' while also positing nature and culture as separate categories. In this context, one might think of Shakespeare's *The Tempest*: of how Gonzalo, confronted by the unreality of Prospero's island, delineates the real from the fantastic: 'If in Naples/I should report this now, would they believe me?' he asks, thus performing for the audience the boundaries between fiction and everyday life (3.3.26–7).

That example might point us towards Amitav Ghosh's already-influential book *The Great Derangement* (2016), in which he proposes that one of the causes of the climate crisis is that the Western conception of literary (and thus, one can infer, of theatrical) realism has developed in such a way that when artists attempt to present climate change realistically, the results can seem closer to science fiction or fantasy: 'it is as though in the literary imagination, climate change were akin to extraterrestrials or interplanetary travel', he proposes (p. 7). Through fictions, languages, and other forms of cultural representation, the human species has organized the world in such a way that the climate crisis seems literally unbelievable, Ghosh argues – and that in turn affects readers' and audiences' sense of both urgency and agency in the face of the crisis. Here again *The Tempest* is instructive, its final act presenting Iris and Ceres as human personifications of natural processes – before Prospero admits that they are but 'spirits and/Are melted into air, into thin air':

> And, like the baseless fabric of this vision,
> The cloud-capp'd towers, the gorgeous palaces,
> The solemn temples, the great globe itself,
> Yea, all which it inherit, shall dissolve
> And, like this insubstantial pageant faded,
> Leave not a rack behind. (4.1.148–156)

These lines display possible evidence of an intuition on Shakespeare's part that the use of cultural forms to portray the realities of weather, climate, and the non-human will always prove futile, revealing itself necessarily as artifice, as something insubstantial and baseless: as evidence of a derangement, great or otherwise.

With those ideas in mind, it seems necessary to think about theatre in terms of its propensity not only to mirror but also to structure human attitudes: towards the environment, the climate, non-human living beings, and other features of what has come to be known as the 'natural world' – but which is better understood in terms of Baz Kershaw's definition of 'ecology' as 'the interrelationships of all the organic and no-organic factors of ecosystems, ranging from the smallest and/or simplest to the greatest and/or most complex' (2007, p. 15). As Theresa J. May (2021) points out, stage plays and theatre productions are, and always have been, informed by 'ecological ideologies and implications' that must now be made visible (p. 4). In other words, one of the assumptions underlying my argument is that the modern theatre, especially in the West, has often constituted, promoted, and reinforced 'ecological ideologies and implications'.

Una Chaudhuri (1994) sees this pattern as arising from the fact that theatrical naturalism (and, soon afterwards, realism) emerged in tandem with the spread around the globe of industrialization: theatre, she writes, thus 'hid its complicity with industrialization's animus against nature by proffering a wholly social account of human life. While asserting the deterministic force of environment, naturalism concealed the incompleteness of its definition of environment' (p. 24). There is, then, a need to explore how, why, where, and when theatre has borne responsibility for the ecological crisis – both conceptually (by constituting and reifying attitudes and beliefs) and materially (by engaging in practices that are destructive of the environment). But this Element also seeks to substantiate the assumption that theatre has played a positive role in raising ecological awareness: that it has offered alternative modes of engaging with the ecological, that it has developed and used environmentally responsible forms of artistic practice, and that it has encouraged audiences to take responsibility for their own actions. Those characteristics may also be identified in the past – perhaps may even be retrieved from the past, to be applied anew in the present.

My intention is to discuss these matters by exploring the theme of theatrical revival – and, by doing so, to find common ground between the conceptual and material perspectives described above. For the present purposes, I define 'revival' as the re-staging of dramatic performances in contexts and/or locations that were not necessarily imagined when the work was composed and premiered. Revivals can, I suggest, make visible ecological or environmental features that might previously have gone unnoticed: features which, in some cases,

might not have been consciously intended by the original authors or makers of a theatrical performance, but which will nevertheless be detectable and meaningful to audiences in later eras. Theatrical revival also necessarily performs a dialogic relationship between the present and the past: it is theatre historiography in action. Revival requires theatre-makers to understand and form attitudes to their history – but it also obliges them to give physical expression to their interpretation of that history, to render the conceptual in material form. Revival therefore necessarily re-enacts 'ecological ideologies and implications' from the past and in so doing can inspire agency in the present and, perhaps, hope for the future; it can therefore be seen as an example of what Kershaw terms 'performance ecology': 'a discipline . . . that aims to refigure the relationship between "culture" and "nature" that all humans inevitably inherit' (p. 15).

I aim to develop these claims by exploring case studies from the contemporary Irish theatre: revivals of plays by Beckett, Shakespeare, and Lady Augusta Gregory, all performed between 2018 and 2021. Shakespeare and Beckett are, of course, produced widely and often internationally – but, even so, my decision to prioritize a single national tradition requires some explanation. It arises from an interest in one of the methodological problems associated with the study of cultural ecology: namely, the difficulty of tracking the relationship between human agency and a set of phenomena that are vast in relation to both space and time, and which include climate, ecological interconnection, geology, and other 'hyperobjects' (to use a term coined by Timothy Morton and developed in detail in that author's eponymous 2013 book) that lie beyond the perceptual powers of the individual human, whether scholar, audience-member, or theatre-maker. Therein lies one of the risks that studying theatre and ecology entails: scholars must find meaning in case studies that, if too narrowly constituted, will be inconsequential but, if too broad, will lead only to generalizations or false claims of universality. I want to explore whether it is possible to find space between the irrelevantly small and the unknowably vast by discussing the impact of single productions that have emerged from what Morton terms 'monstrously long' timespans: productions that cut across national, linguistic, and formal boundaries: entities that are often so 'massively distributed that we can't directly grasp them empirically', as Morton puts it (2016, p. 11).

I also see the Irish example as being valuable because it is distinctive – and because I consider that the country has experienced a diverse range of phenomena that allow for comparative perspectives to emerge, both to Western and non-Western traditions. Ireland has, for example, experienced both colonialization and globalization: it was a victim of the former for almost 800 years but has been a beneficiary of the latter since the 1990s. In response to colonization by England, Ireland developed a form of cultural nationalism that continues to

define the operation of its theatre in the present; that national dramatic tradition asserted links between identity, landscape, language, and the natural world – developing a model that was inspired by European romanticism, but which would also inspire postcolonial theatres in Africa, South America, and India. Ireland has strong cultural ties to Britain and the United States – two countries that bear great responsibility for environmental destruction – but, unlike those countries, Ireland has a relatively limited store of fossil fuels, did not experience large-scale industrialization until the late twentieth century, and has made a comparatively small contribution to the pollution of the planet. Ireland is part of the English-speaking world, and has benefited economically and culturally as a result – but it also has an indigenous language (*Gaeilge*) that conveys an interconnection between humans and landscape, weather, and the rest of the biosphere; that indigenous culture was supplanted (but not eradicated) by English imperialism – giving Irish artists a dual perspective that has long been described as one of the defining features of its culture. Finally, and perhaps most pertinently for the argument outlined in this study, Ireland's modern culture has been influenced by the experience of a traumatic ecological collapse: the Great Irish Famine of the mid-nineteenth century, which caused the population of the island to fall from eight million in 1845 to roughly half that number in 1900. For these and many other reasons, a focus on Ireland can allow for the testing of ideas that might also be applicable in other geographical and historical settings, partly because Ireland has had experiences that cut across so many international, chronological, and ecological boundaries.

I have also begun with the proposition that the history of theatre, especially in the West, is interconnected with environmental histories – and specifically with our planet's descent into a new epoch that has come to be known, not uncontroversially, as the 'Anthropocene'. That is a contested term that connotes an incontestable fact: that the human species is facing the simultaneous and interrelated crises of climate change, ecosystem collapse, mass extinction, deforestation, and ocean acidification – not to mention the failure of those in positions of power to meaningfully address the role of human decision-making in those crises.

In these pages, I am attempting to consider how a consciousness of environmental exploitation, neglect, and destruction can be tracked in and through theatre histories, and through the material reflection of theatre historiography that the practice of revival requires. But there is a need to address the suitability of 'the Anthropocene' as a term for achieving that goal. The word's origins lie in Geology, and with a proposal that the impact of human activity upon the planet has become so strong as to require the designation of a new geological epoch, one that would follow the interglacial period of relative warmth and stability

that began approximately 11,000 years ago, and which is known as the Holocene. That proposal was made by Paul Crutzen at an event in the year 2000, and subsequently developed in an article published in the year 2002. An Anthropocene Working Group (AWG) continues (at the time of this writing) to debate whether the term should be formally adopted as a Geological time scale, but the word has long since escaped the boundaries of its discipline of origin so that, as the AWG (2022) itself states, it 'has developed a range of meanings among vastly different scholarly communities'. That gives rise to the problem that there are many different 'Anthropocenes', and that the term may therefore occlude disciplinary assumptions rather than allowing for cross-disciplinary understanding. It will therefore be necessary to define what the Anthropocene might mean for theatre studies, a task that I hope this Element will advance (though it does not claim to offer either the first or the final word on the subject).

More seriously, many scholars have pointed out that one of the problems with the use of the Anthropocene term is that it appears to attribute agency in relation to the climate and biodiversity crises to the species (*Anthropos*) when the primary responsibility lies with a small minority of humans (mostly inhabitants of Western industrialized nations). Accordingly, a wide range of alternative terms have been proposed. The most common of these is the 'capitalocene', a designation that aims to make explicit the link between capitalism and environmental destruction (see Moore, 2016; Davis, et al. 2019; for theatre studies, see Gillen, 2018 and Arons, 2020). That word has also sometimes been criticized for overlooking the extent to which other modes of societal organization have also entailed environmental destruction (the link between Soviet communism and the 1986 Chernobyl disaster is sometimes mentioned as a case in point), but it has the virtue of making clear how capitalism is undoubtedly a major cause of the ecological crisis, as well as being one of the primary barriers to addressing it. Also proposed are such terms as Haraway's 'Chthulucene', though she also uses the terms Anthropocene and Capitalocene as appropriate (2016). Then there are such words as 'phallocene', 'thanatocene', 'plantationocene', and others that are outlined by Bonneuil and Fressoz (2016). Also of great significance is the feminist critique of the Anthropocene paradigm, as explored especially by Stacy Alaimo (2017; see also Stevens, Tait, and Varney, 2017). Scholars such as Rob Nixon (2011) and Kathryn Yusoff (2018) have also argued that the history of the Anthropocene must be linked to the histories of colonialism, capitalism, and so-called modernization – phenomena that originated mostly in European contexts. And within theatre studies some scholars, such as Wendy Arons (2020) and Aleriza Fakhrkonandeh (2021), have offered strong arguments for the unsuitability of the Anthropocene paradigm altogether.

This Element does not aim specifically to defend the use of the Anthropocene term over all available alternatives, but instead to accept that the word exists and has currency both within and beyond the sciences. I am also influenced by Vicky Angelaki's exploration of how the term requires notice within theatre studies because its existence is indicative of a growing environmental awareness (2019, p. 7), and am sympathetic too to the suggestion that, for all its flaws, the word has entered public discourse in a way that allows members of the public to discuss meaningfully the role of human activity in environmental change and collapse. It has, for example, been included in the *Oxford English Dictionary*, has been used in the title of popular albums by Grimes and Renée Fleming, and has begun to appear in the names of university courses and research centres around the world. Following the lead of Varney (2022) and others, I also consider that it is possible to view the Anthropocene as an epistemic and investigative framework that can attend to such issues as capitalism, patriarchy, colonialism, and other phenomena that, some fear, risk being obscured by the use of the term *Anthropos*. I also hope to demonstrate the validity of the Marxist scholar McKenzie Wark's observation that a 'theory for the Anthropocene can be about other things besides the melancholy paralysis that its contemplation too often produces'. He elaborates on that claim by highlighting the need to get 'to work on the kinds of knowledge practices that are useful in a particular domain' (in the present case, the domain of theatre scholarship and practice) rather than becoming debilitated by the larger problem (2015).

My goal, then, is to 'get to work' – to show that, since the word exists anyway, it must be properly nuanced so as to make the Western, capitalist, and patriarchal roots of environmental crisis more visible – or, as Peter Sutoris puts its more succinctly, 'Instead of getting rid of this term, let's decolonise it' (2021). Yes, it is necessary, following Haraway, to be aware that 'the Anthropocene obtained purchase in popular and scientific discourse in the context of ubiquitous urgent efforts to find ways of talking about, theorizing, modeling, and managing a Big Thing called Globalization' (p. 45). But the adoption of the Anthropocene term need not require the abandonment of the more nuanced and specialized terms mentioned above: David Farrier, to give just one example, successfully uses several of them in his *Anthropocene Poetics* (2019). Having said that, I also accept that there is a need to attend fully to the concerns and objections of the scholars mentioned above. Ultimately, therefore, I am seeking to re-apply a call made by Alan Read in *Theatre and Everyday Life* (1995): 'what is needed', he writes, is 'not the ignorance of nature but more acute definition of the links between political, ethical and creative progress and living within nature, which inevitably is a transformation of nature' (p. 140). Theatre – and theatre criticism – have the potential and the responsibility to define those links.

Because of that impulse to place the 'Anthropocene' term in a broader cultural context, I am also interested in considering how theatre can contribute to one of the primary debates about the Anthropocene hypothesis, which concerns the determination of an appropriate starting point for it. Most scientists suggest that it began with the detonation of the first nuclear bombs in 1945 (initiating a period known as the 'Great Acceleration', which is discussed in the first section); others argue that it began in the 1760s with the industrial revolution, still others that it began in 1610, and a small number that it began thousands of years ago, with the invention of agriculture. Within the field of Geology, that debate is being conducted in relation to such considerations as the chemical composition of the atmosphere and the presence of pollutants in rock strata – and it is likely that the post-1945 era will be selected as the 'official' starting point. But, as Simon L. Lewis and Mark A. Maslin wrote in an influential article for *Nature* (2015), the outcome of that decision will have ethical as well as scientific consequences: 'The choice of 1610 [. . .] as the beginning of the Anthropocene would probably affect the perception of human actions on the environment,' they note. 'The Orbis spike [which occurred in that year] implies that colonialism, global trade, and coal brought about the Anthropocene. The event or date chosen as the inception of the Anthropocene will affect the stories people construct about the ongoing development of human societies' (p. 180). Kathryn Yusoff expresses the same idea with greater force and concision: 'Origins,' she writes, 'are another word for an account of agency or a trajectory of power' (p. 25).

The 'Orbis Spike' is a phrase developed by Lewis and Maslin to describe the fact that the year 1610 marked a low-point in the concentration of CO_2 in the atmosphere (the 'spike' denoted by the phrase is visible in graphs that track that presence over several centuries, and is based on measurements of Antarctic ice cores). That low-point was almost certainly caused by the colonization of the Americas and the subsequent genocide of indigenous populations there. Explained simply but, I hope, not simplistically, the claim is as follows: the arrival of Europeans and their diseases after 1492 caused tens of millions of Americans to die; forest regrowth occurred on the land that those people had been farming; that new vegetation sequestered large amounts of carbon, allowing more heat to radiate back to space and thus causing global temperatures to fall – a process that reached a 'spike' in 1610 before rebounding as land in the Americas returned to agricultural use. The term 'orbis' is derived from one of the Latin words for world, intending to capture the fact of human planetary interconnection that was initiated with the Columban 'discovery' of the Americas. So, as Lewis and Maslin point out, beginning the Anthropocene in 1610 would have moral implications, since it would inextricably link the

ecological crisis of the present to such causes as colonization, the genocide of indigenous populations in America, and the emergence of the trans-Atlantic slave trade – all of which have their origins in the early modern period, and in Europe. It would also make clear how human decision-making can have consequences that long outlast the duration of a single human life.

For theatre scholars, mention of the year 1610 might inspire further thoughts of Shakespeare's *The Tempest* – a play that was first performed in 1611 but which was probably written during the year before, having (it is speculated) been inspired by a written account of a shipwreck in Bermuda from 1609 (as discussed by Mentz, 2015, pp. 54–6). *The Tempest* could also be read in relation to Lewis and Maslin's argument about the Anthropocene: it is a story that 'people construct about the ongoing development of human societies' and it certainly has much to say about 'colonialism [and] global trade': Mentz sees the play as existing firmly within the Anthropocene, while acknowledging the problems with that word: 'climate change may be our fault', he writes (the 'our' referring to people living today in the West), 'but it is not only *our* world' (emphasis added; 2015, p. xvi). Plays such as *The Tempest* can be used to emphasize that the collective *Anthropos* in 'Anthropocene' refers not to universal human responsibility for environmental destruction, but rather to the necessarily universal character of the extinction of the human species.

Of course, Shakespeare knew nothing about the physics of climate change. But what might it mean to revive *The Tempest* in the present if audiences started to think of it as one of the first dramas of the Anthropocene? Whether arising from coincidence, correlation, or causality, it must be acknowledged that there is a chronological relationship between modern theatre and environmental history. Wolfgang Behringer (2010) has found evidence of new ways of seeing the world in literature in several sources from early modern Europe, finding examples not only in the plays of Shakespeare but also in Cervantes, Andreas Gryphias, and elsewhere (p. 144). Early modern European drama emerged in the sixteenth century; it therefore seems worth exploring the fact that the Orbis Spike coincides with the appearance of European plays, including *The Tempest*, that offered audiences different methods of understanding human interaction with planetary forces. In such a context, how might one interpret Thomas Dekker's decision to dedicate his *Satiromastix* (1601) 'to the world'? What to make of Ben Jonson's *The Magnetic Lady* (1632), and its use of planetary magnetism as a metaphor for the relationships between his characters? Are new approaches possible for reading and staging Lope De Vega's *La Dama Boba* (1613) or Calderón's *El Gran Teatro del Mundo* (c. 1634)?

It might also be possible to track how the Industrial Revolution coincided with – and allowed for – the introduction of new forms of stage technology,

much of it dependent upon the consumption of fossil fuels. In the early 1800s, for example, London's Lyceum Theatre became one of the first venues to use gas and oil for stage lighting; and electrical lighting began to be used at the Paris Opéra as early as 1849. And in the contemporary era, the 'Great Acceleration' period has coincided with a diversification of theatre practices in ways that have often mapped on to broader societal trends. Theatre has become both more experimental (partly because of increased state funding in the post-war period) while simultaneously becoming more expansive, as shown by the growth, from the 1970s onwards, of 'mega-musicals' such as *Les Misérables*, which require huge casts, and which seek to generate huge profits – mirroring broader trends in late capitalism towards nichification and massification.

The preceding two paragraphs offer a very brief sketch of a very broad field of knowledge, but in doing so they seek to illustrate that it is at least *possible* to use theatre historiography to test the idea that, if the Anthropocene *did* begin with the Orbis Spike – and thus with the development of early modern theatre – then it should be possible to find evidence of that development from the study of plays and performances from the 1500s to the present. By considering how the origins of the Anthropocene may be identified not just in rock strata and ice cores, but also in material cultural forms such as stage plays (including scripts, set designs, lighting designs, and so on), theatre scholars might be in a position to argue that our research can propose answers to questions that have proved inconclusive in such disciplines as Geology, Chemistry, and Marine Science.

Ecocritical and green approaches to theatre studies have been in use since at least the 1990s, and have been explored through monographs, journal special issues, articles, conferences, and symposia. Some of those publications predate the coinage of the Anthropocene term; others decline altogether to use that word – but in general, this scholarship has been invested in exploring how theatre can effect change in the present, through sustainability, activism, policy development, and other forms of transformative activity. The most extensive scholarship has involved the investigation of the relationship between contemporary theatre practice and ecology, often emphasizing the power of theatre to advocate for environmental justice; key examples include the scholarship of Vicky Angelaki (2019), Una Chaudhuri (1994, 1997, and 2013 especially), Baz Kershaw (2007), and Carl Lavery (2019), as well as Giannichi and Stewart's 2005 collection *Performing Nature*. And, in the context of Irish theatre, Lisa Fitzgerald's *Re-Place* (2017) offers a pioneering investigation of the interrelationship between environment, site-specific performance, and materiality. A second strand explores the concept of ecodramaturgy, a term (discussed in more detail in the next section) that involves the reading and/or reinterpretation of dramatic texts to retrieve, reveal, or

impose ecological perspectives – as seen in the scholarship of May (2005, 2021), Arons (2020), May and Arons (2012), and Woynarski (2020). Relatedly, a third strand applies ecocritical tools to the interpretation of dramatic texts, drawing on theoretical methods that have also been applied to re-reading fiction, poetry, and other forms of art; such scholarship often prioritizes single writers or periods (ecological approaches to Shakespeare's drama are particularly advanced – see Egan, 2006 and 2015; Bruckner and Brayton, 2011; Martin, 2015; O'Malley, 2020). The growing field of ecosceneography is also important for its analysis of the material impacts of theatre design and its consideration of the sustainability of theatre practice (as discussed by Julie Hudson, 2020 and Tanja Beer, 2021). There have also been noteworthy studies that explore older dramas, exploring how such plays might be, or have been, revived in ecocritical contexts, as shown in O'Malley's analysis of outdoor Shakespeare performances (2020) and by Cless's *Ecology and Environment in European Drama* (2010), which considers contemporary practice-based approaches to plays by Aristophanes, Marlowe, Shakespeare, Giraudoux, Brecht, and Chekhov. There is also a growing body of work that explores the intersections between theatre and theory – including the use by theorists such as Bruno Latour (2017, pp. 28–33) of theatre as a mode of theoretical enquiry, as well as the application of theoretical concepts to the ecological analysis of plays and performance by theatre scholars. Timothy Morton's work has been especially influential, as shown by Aston's exploration of dark ecology in Churchill (2015), Prateek's exploration (2020) of the same concept in relation to Ibsen's *Peer Gynt*, and Ahmadi's discussion of hyperobjects in relation to the drama of Andrew Bovell (2015). In what follows I will myself draw sometimes from Morton's ideas.

Of special importance is a growing number of publications that consider the theme of indigeneity and its relationship to the Anthropocene. Scholarship on that theme to date has often focussed on the indigenous cultures of north America and Australia. This includes studies such as those by Schafer (2003), Simmons (2019), Varney (2022) and Whyte (2017) – but of particular value are the ideas of Helen Gilbert (2013b, 2013a, 2014, 2019, 2020), which have provided methodological and analytical models for understanding how ecologically insightful dramas and productions have been created in contrast with, in isolation from, and/or in opposition to such intellectual formations as modernity, capitalism, or imperialism. 'At its widest scale', she writes.

> indigeneity now operates simultaneously as a portmanteau category establishing community among different peoples with distinct histories and geographies . . . . and a heuristic framework for thinking about that commonality in relation to origins, affiliations, cultural genealogies and place-based connections. In turn, this framework, in conjunction with on-the ground activism it underpins, has begun to exert pressure on international relations in subtle ways. (2013b, p. 174)