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Letter from the Editor-in-Chief

It is my delight to present the 11th volume of St Anne's Academic Review.

You have, in your hands, or on your screens, a rich collection of manuscripts written and crafted by members of the St Anne's College community. The scholarship here reaches just about every corner of the human intellect. Even a cursory look at our titles on the preceding page will assure you of that range.

In this volume, we are rooted in the present and go as far back as 84 BC. Among the peer-reviewed pieces, you will find the latest insights on brain science, data on the impact of the coronavirus, and fine analyses of texts by medieval French and living authors. Two articles in the Social Science section – one on LGBTQ+ students in British schools, the other covering Japanese post-Cold War politics – merit attention for their depth of investigation. Our cultural commentaries and creative works also make for intelligent reading, shining a light on the individual voices of their authors.

I give credit to each of my colleagues on the Editorial Board, who generously gave their time all year to advise our authors, edit their pieces, and facilitate the Open Peer Review process, and with such professionalism. Special mentions go to Erin and Trish for working assiduously in multiple disciplines; Brittany for editing Spark Reviews; Lise for her artistry in designing our new website and logos; and, of course, to Daniel Mercieca for returning to help on the journal's every front and leading the production of our very first promotional film.

Also underpinning this volume is Alexandra Paramour, whose expertise in academic writing prepared us to carry out our patient work, and my predecessor Alex Kither who guided me along the way. We thank Principal Helen King, Communications Officer Jay Gilbert, and the MCR led by Zhen Shao for their kindness in supporting the journal's ambitious projects.

Enjoy reading STAAR Volume 11 and listening to these fresh academic voices. May our authors tell you something new about the world today and inspire your own learning.

Ye-Ye Xu

Fresh Academic Voices

St Anne's Academic Review

In 2021, St Anne's Academic Review joined forces with STAMP, the college MCR podcast, to produce an exciting series of interviews with five contributors writing for Volume 11:

- **Naomi Hoodless –** Experiences of LGBT students in British schools
- **Brittany Hause –** Effects of language contact through "Amor de un campestre" (article forthcoming)
- **Conrado Eiroa Solans –** The nature of human emotions
- **Theodora Markati –** Using viruses to treat genetic disorders
- **Ramani Chandramohan –** The theatre of *fabliaux*

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St Anne's Academic Review: Volume 11

Experiencing Time with Trees and Swans: Understanding Climate Change through Two Contemporary Novels

Charlotte Fraser, School of Geography and the Environment

Abstract – This article explores the role played by two works of contemporary literature in navigating the climate crisis. It seeks to emphasise the value of creative responses to climate change in aiding transformative conceptualisations of nature and the environment. This will be explored primarily through an analysis of the alternative temporal structures created through trees in Richard Powers' *The Overstory* (2018) and swans in Alexis Wright's *The Swan Book* (2013). I will consider the implications of the changing environment on literary framings of time and narrative. This discussion is informed largely by Dipesh Chakrabarty's notion of 'species thinking', alongside Amitav Ghosh's and Timothy Clark's more explicit criticisms of the contemporary novel's representation of climate change. In response to these theories and criticisms, the timeframe of trees offered in Richard Powers' *The Overstory* is explored as an example of multi-scalar thinking. Alexis Wright's *The Swan Book* on the other hand provides continuous tension between anthropocentric and ecocentric conceptions of time that more explicitly query what is lost when time is conceived in purely human terms. Both novels guide the reader to think through time in an ecologically informed way, imbuing the reader with a greater sense of urgency towards climate change.

Keywords: climate change, contemporary novel, time, ecocentrism

Introduction

Contemporary literature can help to foster alternative conceptualisations of the environment. Calls by scholars such as Esther Turnhout to 'creatively rethink what it means to do environmental knowledge' (368) are being answered in the social sciences through the suggested move towards ontological pluralism. This position recognises both the existence and the limitations of the various perceptual frames through which the Earth can be understood and experienced (Nightingale). Mike Hulme similarly argues for a shift from the epistemologically constrictive pursuit of answers to the embrace of a broader conceptual horizon. This is achieved by 'adding layers of meaning to our experience and understanding of reality' (334): a process known as 'knowledge thickening' (336). In doing so, the scientifically defined boundaries of environmental knowledge are transformed into a more fluid set of responses. Hulme suggests that the humanities play a particular role in this process, for they 'frequently pose normative questions that, rather than being resolved, can only be better or more deeply understood' (334). This results in the generation of introspective 'self-knowledge' (332) which in turn can motivate climate action.

This article extends this logic to the arts themselves by exploring the contemporary novels of Richard Powers' *The Overstory* (2018) and Alexis Wright's *The Swan Book* (2013) as examples of creative responses to environmental knowledge production. First, this paper will define Dipesh Chakrabarty's notion of 'species thinking' ('Four Theses' 213) in order to identify the forms of epistemological disruption introduced by the climate crisis. Then, it will outline literary criticisms that view the genre of the novel as being in opposition to this thinking, before exploring more expansive perceptions of contemporary literature and climate fiction. With time adopted as the primary theme, this paper will discuss and offer analyses of the two novels, revealing their ability to adopt a temporal mode that engages the reader in a mode of 'species thinking' (Chakrabarty, 'Four Theses' 213). Powers' use of an arboreal temporality engages with a form of scaling that integrates anthropocentric temporalities into a broader chronology. Wright, on the other hand, depicts the competing nature of anthropocentric and 'multispecies' (Rose 136) temporalities. In doing so,

she reiterates the importance of ecologically informed approaches to time and the Aboriginal cosmologies that support such thinking. Ultimately, these arguments and readings speak to the importance of using the contemporary novel, and contemporary literature more broadly, as a tool for comprehending our times of environmental change. The two texts explored here, particularly *The Overstory*, are not overtly preoccupied with detailing the events of climate change. Rather, by adopting ecologically scaled modes of time, and by situating the reader in these temporalities through the act of reading, the two texts query and conceptually undermine the dominance of short-sighted, anthropocentric thinking. In doing so, the texts can be read as oppositional to the very forms of thinking and sense-making that facilitate the creation of anthropogenic global warming. By engaging the reader in a form of 'species thinking' (Chakrabarty, 'Four Theses' 213) as they navigate the text, both novels make a significant contribution to 'thickening' (Hulme 336) the knowledge of climate change.

Species Thinking: Re-evaluating Chronology

Creating a nuanced temporal understanding of climate change is no simple act. The nature of this perceptual change is explored by Dipesh Chakrabarty, who argues that the assumption of 'a certain continuity of human experience' throughout past, present and future imaginings is disrupted by the current climate crisis in the 'collapsing of human and geological chronologies' (Chakrabarty, 'Four Theses' 210). Making sense of this change, Chakrabarty argues, calls for 'species thinking' (213). Species thinking 'requires us to both zoom into the details of intra-human justice – otherwise we do not see the suffering of many humans – and to zoom out of that history, or else we do not see the suffering of other species' (Chakrabarty, 'Whose Anthropocene?' 111). Thus, it asks us 'to mix together the immiscible chronologies of capital and species history' (Chakrabarty, 'Four Theses' 220). This process involves the intentional destabilisation of anthropocentric conceptions of time, encouraging a dual approach that simultaneously recognises the present moment and that beyond it.

Anthropocentrism and the Contemporary Novel

However, multiple critics have identified anthropocentrism as a prevalent feature of the novel, making it a particular challenge for novels to incorporate the alternative chronologies outlined by Chakrabarty. Robert Macfarlane highlights how the discreet and incremental nature of climate change leaves the writer with questions of 'how to dramatise aggregating detail' and 'how to plot slow change'. This idea of gradual change is explored more politically by Rob Nixon, who emphasises that in order to 'confront [the] slow violence' (10) of climate change and other environmental sources of harm, it is required 'that we attempt to give symbolic shape and plot to formless threats whose fatal repercussions are dispersed across space and time' (10). Applied to contemporary literature, the 'dispersed' (10) nature of threats invites authors to reconsider anthropocentrically scaled timeframes. Instead, writers must devise ways of drawing attention to events that are 'low in instant spectacle but high in long-term effects' (Nixon 10).

Amitav Ghosh and Timothy Clark suggest that such a temporal criterion is antithetical to the novel genre. Their criticisms should be prefaced by a reminder that the novel genre is vast, and a rejection of it in all its varying forms appears stifling. Nonetheless, for Ghosh, examinations of the novel are grounded in a stringent understanding of form. Novels exist in 'discontinuities of time' (59) and must be 'actualised within a certain time horizon' (59); the corollary of this is that the temporal uncertainty within discussions of climate change becomes hard for such fiction to depict. For Timothy Clark, it is the 'anthropocentric delusion' present in the 'still-dominant conventions of plotting, characterisation and setting in the novel' that prevent it from being an appropriate literary form for climate change (*Ecocriticism* 164-65). Both Ghosh and Clark argue that the realist tendencies of some types of novel create a form of 'concealment' (Ghosh 12), favouring the 'intelligible and coherent world at the personal scale, centred on individual agency' (Clark, *Ecocriticism* 165). Although novels written in this way are able to depict the experience of the human, they often fail to capture greater global changes. Clark extends this issue of the 'personal scale' to the very way in which we read and criticise literature. '[The] professionally familiar circle of cultural representations, ideas, ideals and

prejudices' found in literary criticism needs to be opened up to a global, long-term scale that explores 'physical cause and effect, or the environmental costs of an infrastructure' and incorporates 'questions that involve non-human agency' ('Scale' 164). Clark suggests reading through three scales – the personal, the national, and the global – as a way of 'creatively deranging the text through embedding it in multiple and even contradictory frames at the same time' (163).

These criticisms largely rest on a perceived resistance between the novel genre and an expansive view beyond the human. Stef Craps and Rick Crownshaw suggest that the exclusion of climate change fiction from what some people consider to be '"serious" modern literature' (1) gave fuel to this critique. Texts that engage more explicitly with the troubles of time and nonhuman phenomena have not been properly considered in the critical discussions outlined above. The following sections of this paper explore two novels that engage with these themes: *The Overstory*, which implements an arboreal timeframe through trees, and *The Swan Book*, which looks at time from the perspective of swans and Aboriginal cosmologies. These texts offer examples of climate fiction that engage with climate change more as a mode of reading than as a series of events to be detailed. By exploring the temporal structures adopted in each text, this paper will offer insight into how these modes of reading and, indeed, 'species thinking' (Chakrabarty, 'Four Theses' 213) are generated, and how contemporary literature can be utilised as a site of environmental knowledge 'thickening' (Hulme 336).

Exploring Tree Time in *The Overstory*

This section offers a brief reading of Richard Powers' *The Overstory* (2018) to provide an example of multi-scalar time in the contemporary novel. Powers adopts a structure that rests on interconnected narratives which give rise to temporal scaling. However, a more subtle form of connection, the literary technique of the list, takes this temporal scaling one step further. By utilising lists, *The Overstory* encourages a mode of reading that is able to scale out to the global and into the personal through the intermediary timeframe offered by the trees of the book. In doing so,

future events are integrated into a timescale that affords them a greater sense of urgency, encouraging readers to recognise a strengthened connection between present and future climates.

In terms of structure, Powers produces an alternative timeframe by adopting a chronology that is concurrently vast and intimate. From the moment Jørgen Hoel plants the first of his chestnut trees, the text's sense of time shifts to align with both human and arboreal growth: 'In four more years, the Hoels have three children and the hint of a chestnut grove' (7). However, once the children and the tree have reached a certain level of maturity, the tree's sense of time slows in relation to the children. John Hoel reaches adulthood, starts a family, and industrialises the farm, but for 'the last remaining chestnut, all this happens in a couple of new fissures, an inch of added rings' (9). Human time and tree time run first in parallel, but then are opposed to one another. This is seen most clearly when the Hoels take on the project of photographing the great tree on a monthly basis, contrasting the continuity within the printed photos with the changing emotional contexts in which they were taken. In fact, '[t]he photos hide everything', for the human timescale is always 'to Frank Jr.'s back, each time he opens the lens' (16). The events suppressed behind each frame begin to overflow their confines: 'The hushed-up incest, the lingering alcoholism, a daughter's elopement with the high school English teacher. The cancers (breast, colon, lung), the heart disease, [...] the car death of a cousin's child on prom night' (16). The anaphoric 'the' sentence formulation grants specificity to each event in Frank Jr.'s life, even when details are rendered abstract on the arboreal timeline. Thus, in *The Overstory*, as Umberto Eco suggests in *The Infinity of Lists*, '[t]he list becomes a way of reshuffling the world' (105). Powers' list here reshuffles the world within a new temporal order and brings events into alignment with increased rapidity. The use of brackets also creates an embedded list, mirroring the tree-rings which become a temporal reference point for the book as a whole. The events which the family experienced are not effaced, but the centrality of the human experience in the timeline is reconsidered. Read in relation to Clark's 'derangement of scale' ('Scale' 158), Powers' punctuation opens the text up to readings at different scales which coexist and interact. Clark suggests that the third global scale, while highlighting the 'hidden costs of

lower scale thinking', also has a 'tendency to register a person primarily as a physical thing' (163). In doing so, the global scale can be 'almost too brutally removed from the daily interpersonal ethics, hopes and struggles that it ironizes' (163). However, the contents of Powers' list can be seen to retain a sense of the 'hopes and struggles' of life whilst operating at a larger scale. Thus, Powers' use of tree time invites, rather than resists, a multi-scalar reading. By situating human perception in a space that is able to represent simultaneously the personal and the arboreal, *The Overstory* re-contextualises the 'personal scale' (Clark, 'Scale' 157) of the novel within a broader globalised setting.

Early in the text it is detailed that a whole generation's lifetime exists in the space of time it takes for the tree to grow into 'early middle age' (16), and it is this logic that will shape the reader's experience for the rest of the novel. The reader, like Adam, is guided to think in tree time; he says, 'Seventy plus seventy is nothing. A black willow plus a wild cherry.' (471). Powers' adoption of a new timescale creates a perceptual mode through which the reader is encouraged to think with ecologically informed meaning – meanwhile, keeping the details of the human experience mostly intact. In an online interview, Powers extends this logic to the very way in which 'we might just be able to save ourselves' from continued climate change, arguing that we can only achieve this 'by coming home to the world's influence and living in its seasons, not our own' (Hamner). Thinking in an arboreal timeframe has practical power; it encourages the reader to assign greater weight to future events, as they are no longer perceived as an abstract possibility. Instead, a heightened tangibility is integrated into an understanding of future climate change. This conceptual shift is needed especially from much of the Global North, whose experiences of climate change are currently less extreme; yet geographically and historically these populations account for the majority of CO2 emissions (Friedlingstein et al.). *The Overstory* encourages the reader to imagine what might be gained by thinking through the temporality of a different species and to refuse the flawed short-sightedness of anthropocentric thinking.

Swans and Ecocentric Temporalities in *The Swan Book*

Where Powers allows for a scaling in and out in the reading of his text, Alexis Wright in *The Swan Book* (2013) presents the complications that can occur when alternative modes of temporal sense-making interact. The intergenerational memory stored in the ancient tree of the novel, along with the cyclical and regenerative time signalled by the motifs of swans, creates an interactive 'multispecies' (Rose 136) temporality that connects the human protagonist, Oblivia Ethelyne, with nature. These ecologically-informed temporalities are impinged upon by the anthropocentric forces of the novel. Wright uses competing temporal systems to disrupt the power of anthropocentric epistemologies and ultimately to create a moment of 'arrest' (Johns-Putra, 'Climate and History' 259) that allows both the reader and Oblivia to break free from the short-sightedness embodied in such thinking. This enacts 'species thinking' (Chakrabarty, 'Four Theses', 213) as the reader is guided to retrospectively assess the narrative through an ecological lens of regeneration.

The Swan Book follows Oblivia's story. First, Oblivia is found mute and in a tree by the climate refugee, Bella Donna. Then she is taken from her home, the swamp, by the president of Australia, Warren Finch. Finally, she makes her return home, guided by swans. The text was written in the context of political interventions in 2007, which saw the introduction of the Australian Army into numerous Aboriginal communities in the Northern Territory (Johns-Putra, 'The Rest is Silence'), and it is set in a future imagining of a world engulfed in climate change. In Wright's own words, Oblivia represents 'the lives of Aboriginal people living at the front line of oppression and dispossession' (Wright, 'Inward Migration'). Wright adopts a climatologically destructive world as a backdrop, in which 'climate change wars' (20) have already ravaged most nations and left 'countless stateless millions of sea gypsies looking for somewhere to live' (20). Oblivia is forced to navigate these terrains of uncertainty when Warren Finch, a 'self-proclaimed Indigenous hero' (254), takes her as his promised wife and destroys her home.

Warren and Oblivia's unhappy union allows their respective modes of temporal sense-making to coexist in the structure of the novel. Adeline

Johns-Putra recognises the continuous tension between the ecocentric (Oblivia) and the anthropocentric (Warren and other characters) that pervades much of the text. However, while this tension is evident, the distinction may be incongruent with many Aboriginal conceptions of human–nature relationships, which regard humans and nature as more interconnected than Johns-Putra's framing allows for. Her reading can be nuanced by Deborah Bird Rose's notion of 'multispecies time' (136) to draw these interactions out further. For instance, Johns-Putra identifies Oblivia's muteness with an 'alternative, ecocentric reality', whereas the articulated voices of other characters in the text represent 'what is conventionally accepted as "reality" in anthropocentric and Eurocentric terms' ('The Rest is Silence' 35). Johns-Putra also points out that her muteness is created by a 'rupture in time' (34) caused by Oblivia's rape, forcing her to hide in a sacred eucalyptus tree and subsequently be connected to 'primordial memory' (*The Swan Book* 6). This conception of time where the past, present, and future mutually coexist is a central tenet to many of the different epistemologies of Aboriginal populations (Nicholls). Thus, the tree grants Oblivia a sacred connection to a time that exists beyond the present, and which has been forcibly eroded in the rest of her community. From this perspective, Johns-Putra argues, Oblivia's muteness embodies an ecocentric temporality, as well as 'reality' ('The Rest is Silence' 35). However, *The Swan Book*'s interaction with time goes beyond binary distinctions. Deborah Bird Rose explains that in Aboriginal cosmologies 'the web of life can be understood as the complex interactions of sequence and synchrony, as these patterns play out across the lives of individuals, species, country, climate, and years' (129). These come together to form 'embodied knots of multispecies time' (136) that reveal the transtemporal interactions between organisms that constitute an individual in the present. Oblivia's connection to ecocentric notions of time represents a synchrony between species, rather than a rejection of the human. This queries ecocentric-anthropocentric dualism and instead speaks to an entwined system of 'connectivity and responsibility' (138) in which actions and temporalities are influential and dependent.

These 'knots' (136) are made visible in Oblivia's relationship with the tree from which she emerges. Some people from the swamp say 'that she

was really the tree itself; she had become the tree's knowledge; or, possibly she was related to the tree through Law, and the tree took her away from her people' (83). Originally, the tree was seen as the physical embodiment of the 'reciprocal bond of responsibility' between the swamp people and their ancestors, a mutuality which 'held all times together' (69). However, once the Army destroys the tree, Oblivia becomes the final physical connection to the site at which 'the stories of the swamp were [previously] stored' (69).

Despite the tree's absence, Oblivia continues to be connected to the ancient stories: 'the Law that stretched back to the beginning of time' (97). Her transtemporality is also guided by the swans with which her movements are deeply intertwined. The birds represent the natural rhythms of ecocentric time. Moreover, they are imbued with a culturally constructed history of 'swan artistry': references to swan-related poetry, opera, and literature that create what Ben Holgate calls a 'global swan mythology', which is utilised to 'attract a transnational audience' (640). However, when interpreted as a reference to time, this swan mythology centralises a history of swan-oriented storytelling, emphasising the swan's ability to carry 'away the past, present and future on its webbed feet' (*The Swan Book* 24). That said, this centralising process appears incomplete. The stories about the swans, no matter how numerous, can never be fully articulated by the humans in the novel, for 'nobody in the North remembered the stories in the oldest Law scriptures of these big wetland birds' (58).

Climate change has displaced the swans, and regimes of oppression have prevented the passing down of their Law to the swamp people. Recognition that 'Swans had Law too' (58) articulates an absence in the human understanding of the swans, whilst affirming the birds' continued agency in retaining their laws. In one of her essays, Wright explains that Aboriginal people 'say that the land is a living system of harmonious laws for the safekeeping of country and understand that these laws need to stay strong, because once they are broken so, too, is the harmony' ('Inward Migration'). She writes, moreover: 'We are taught resilience through the stories of regeneration that have ensured the survival of our culture—a culture that has always remained central in our sovereignty of mind. This sense of sovereignty and self-governance is embedded in our spirit and

drives our awareness and insistence that all times are important, and no time is resolved.' Thus, this moment of dislocation between the swans' laws and the swamp people's remembrance of them signals a significant threat and disruption to the swamp people's own resilience and sovereignty. Regenerative connections are explicitly oppressed by the Army whose destruction of the sacred tree, pollution of the swamp people's land, and silencing of the people's cultural stories and laws amalgamates into sheer toxicity. This disrupts the harmony of the swamp people's coexistence with the land and instead creates an atmosphere of fear: 'They accused the swans of looking right into their souls and stealing traditional culture' (61). However, the connection between Oblivia and the swans – 'The swan could not take its eyes away from the little girl far down on the red earth' (16) – suggests she will remain rooted in multispecies time and be able to return home in the final pages of the novel. She maintains closeness to ecocentric and sacred notions of time and return to country; and 'the stories of regeneration' (Wright, 'Inward Migration') which the swans come to signify are essential to protecting this bond to her heritage.

Manmade Time

The multispecies temporality expressed through Oblivia and the swans appears in stark contrast to the manmade time of Warren Finch. Warren, an Indigenous man, is figured as a site of ideological dispute as he becomes the vessel for colonial rhetoric, rendering him an 'assimilated other' (Johns-Putra, 'The Rest is Silence' 36). This is expressed through the development of a hierarchical anthropocentrism. Once a boy dancing with the brolgas birds, an adult Warren becomes 'far more excited about how the world danced for him from way up high [...]. The Warren Finch dance.' (109). The shift from communal dancing to individualist dancing is mirrored in his conceptualisation of time. In contrast to Oblivia's connection to intergenerational and non-human temporalities, Warren's sense of time is firmly embedded in the manmade. His watch appears repeatedly as a reference point in much of his action, particularly when he is forcing the swamp people to search for his future wife. He attempts to manipulate time through his technology by 'checking his watch to quicken the thinking

in the room' (129). His obsession with immediacy and the speed that the watch signifies overpowers any other conception of moving through time; even when he tells himself to 'Go slow Warren' (142), he is unable to stop himself from 'simultaneously checking the time on his watch' (142-3). Warren's timekeeping highlights his especial connection to the present. As a young boy, he was unable to 'understand that his dreams belonged to the future' (99), which nearly cost him his life as he pursued a swan he recognised from his sleep and almost drowns. As he ages, however, this obsession with the present becomes a far more insidious force. While the Army destroys the sacred tree for fear of its intergenerational connections, Warren decimates the swamp people's entire land in an act of retaliation against his own past. He extracts Oblivia from the swamp, choosing her as 'the last real link to a world he had severed' and 'the attachment he had planned to keep' (169). Warren decides, however, that there is 'no time' (207) for places like the swamp, and destroys the land in a way that mirrors the tree's explosive end.

Disrupting ecocentric time

The destruction of the tree and the swamp enacts a temporal erasure, which is a recurring theme throughout *The Swan Book*. Intergenerational memory and traditions of the swamp people are repeatedly under attack as the novel unfurls. The paradoxical nature of Oblivia's name – at once an identifier of herself as a person (Olivia) and a signifier of effacement (obliviate) – speaks also to the instability surrounding recognition and remembering events. Such instability can be seen when Oblivia is removed from her home by Warren, which disrupts Oblivia's unity with, and memory of, ecocentric time: 'Already she felt the swans becoming disconnected from her' (143). Indeed, the meanings of Warren's forename – a piece of enclosed land for breeding rabbits; or a dense and confusing connection of streets – mark him as a figure that attempts to impose anthropocentric control over nature and is capable of making Oblivia literally and figuratively lost. This is seen in the disruption that accumulates as Oblivia is surrounded by the manmade environment of the city. Here, technology becomes invasive. Warren's mobile phone, for example, 'rang

like an alarm bell interrupting her thoughts, to dominate the past, to insist the future be heard' (206).

It is the television, however, that becomes the most explicit site of temporal splitting. Oblivia comes to recognise herself on the screen when watching a televised alternative version of herself and Warren. At first, she is unable to 'understand how she kept seeing glimpses of herself' (227) and reaches the conclusion that 'Warren Finch was stealing parts of her life for his own purposes' (229). This version of Oblivia is 'the wife he wanted her to learn to be', something which 'was forcing the girl to go mad' (229) to begin with; but eventually, this wife becomes an ideal that Oblivia craves euphorically – a disruptive force. While walking with the owls and swans on 'a pilgrimage' (236), Oblivia 'would again feel an excitable urge exploding in her stomach, to rush back to the apartment in double-quick time before dawn, for she was always hoping to become the television wife, to see herself greatly loved' (237). The 'double-quick' pace places emphasis on the present and on immediacy, aligning her with Warren's human obsessions. This desire to view herself as the 'television wife' signifies an embodied anthropocentrism: Oblivia turns her attention to the projected vision of herself rather than the world around her. In doing so, she abandons the natural seasonality and ecocentrism which had guided her intuitively to this point.

From the human to the global scale

The modern city which eats into Oblivia's memory almost eclipses her, until the sight of swans 'in numbers so vast they blocked the moonlight' suddenly causes her to awaken: 'When had her swans bred? Where had time gone? How many seasons of swans' breeding had passed by and she had not noticed? How long had she lived in the city? [...] Now she knew there had been many seasons of swan-egg cradling and cygnets reared which signalled above all else, that she had spent more time in the city than she had ever expected.' (243). This sudden reintegration into the cyclical seasons of swan breeding allows her to break free from the continual 'here and now' (242) that the city embodies. When read in light of Clark's scalar logic and Chakrabarty's dual chronologies, this moment can be considered

a zooming out to a global/'species' timeframe (Chakrabarty, 'Four Theses' 213). Johns-Putra, building on the work of Clark, Chakrabarty, and others, outlines the importance of a moment of 'arrest' that prompts the reader into 'an awareness of the myriad connections that constitute species history' (Johns-Putra, 'Climate and History' 259). This moment of arrest marks a 'critical interruption' whereby: 'the reader is called upon to see how certain events, figures, symbols, or even objects come together in a way that is both relevant to [the reader] now and revelatory of something outside [the present moment]' (Johns-Putra 260). Oblivia's awakening can be read as an example of one such moment: both Oblivia and the reader are drawn into a mutual arrest where they suddenly re-acknowledge the ecological temporality that exists within the narrative. The city is the stage for anthropocentric realism, which Oblivia and the reader can only be 'shocked [...] out of' (Johns-Putra 258) by this sudden epistemological interruption.

Thus, unlike *The Overstory*, which integrates an arboreal temporality into its structure, *The Swan Book* explicitly treats the difficulties that arise when characters and readers attempt to think through multiple temporalities and at multiple scales: notably, the frequent messiness and tension that occur when different timeframes and scales interact, as identified by Clark and Chakrabarty. Wright in *The Swan Book* offers a creative way of thinking through these complications. In terms of knowledge 'thickening' (Hulme, 336), this work overtly examines moments of incompatibility between coexisting temporalities and what is lost when one temporality is subsumed into the other. Moreover, the reader's assumption that the narrative is complete and generally guided by Oblivia is brought into question: within the city, the reader accepts Oblivia's understanding of the swans as whole, before the moment it is suddenly revealed that Oblivia's knowledge of them is partial and detached. Although swans are present in much of the city narrative, their real actions are inaccurately depicted until the 'freak of nature' (243) occurs. It is only after this moment of shock that both the reader and Oblivia become aware of the ecocentric reality that has been existing silently, and continually, throughout the novel, removed from its human participants. The swans continue to breed and regenerate, unlike Oblivia and the other anthropocentric characters that remain entrapped in the present moment. This scene points to the notion of time being cyclical,

whereby actions are interlinked and in reciprocal relation, and it reiterates the importance of this awareness of time for building Oblivia's own experience of self. By regaining synchrony with the swans and by 'read[ing] the country now as they do' (293), Oblivia can move away from the city and return home to her traditional land.

Conclusion

Both *The Overstory* and *The Swan Book* offer ways of reading the world that impart some insight on how one might approach the 'untidy times' (*The Swan Book* 97) of climate change. The importance of the arboreal in Powers' structure and timeframe affords a more robust reading of the text; it can be approached from multiple scales – human to global – and still possess clarity and coherence. This is ultimately achieved by decentering the human and instead recognising the other temporal realities which coexist on our planet. In this expanded temporal horizon, climate change and other environmental realities looming decades in the future seem far more tangible than when anthropocentrically imagined. In *The Swan Book*, the difference between immediacy and intertemporality is explored more overtly. Oblivia and the swamp people have their intergenerational and ecocentric modes of perception threatened by the markers of the present: Warren Finch and the Army. However, by the end of the novel, Oblivia has returned to the swamp and continues to exist on her traditional land with the swans. Thus, *The Swan Book* exposes the limits of the anthropocentric epistemologies that seek to disrupt Aboriginal sovereignty within and outside of the text. It does so by displaying the resilience of 'multispecies time' (Rose 136) as a means of regeneration in a climatologically altered world.

Both novels offer a conceptualisation of time that extends beyond anthropocentrism, opening the reader up to an understanding of 'species history' (Chakrabarty 220) that emphasises our place within nature. By engaging with temporal structures in such a way, the novels foster a mode of reading which works against the forces that produce climate change. These imaginative explorations of ecological thinking help to cultivate within the reader a 'self-knowledge' (Hulme 332) that encourages critical

reflection on the boundaries of human experience and on that which exists beyond. In our era of devastating climate change, ecological thinking needs to be harnessed for global action. The two novels productively explore how this transformation in perception might be brought about, and give merit to the potentially influential role of literature and the arts in conversations on climate change.

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Theatricality and metatheatricality in the Old French *fabliaux*

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Abstract – The Old French *fabliaux* dating from the 12th and the 13th centuries consist of short comic narratives. Despite their status as written texts, the prologues and epilogues of the *fabliaux* are only fully realised through recitation by solo *jongleurs*: travelling artists. This paper will connect the performance of the *fabliaux*, guided by the *jongleur* as both actor and narrator, to the *fabliaux*'s theatrical mode of storytelling. This form of storytelling is characterised by the depiction of characters as actors and stage directors, and the use of facial expressions, voice modulations, and props both inside and outside the narrative world. The *fabliaux* of Jean Bodel and Rutebeuf will be highlighted as fruitful sites for considering theatricality in narrative since these authors also produced dramatic works. Although some scholars have renewed interest in medieval performance culture, they have not adopted a specifically 'theatrical' analysis of the *fabliaux*. This essay seeks the latter: it will explore the theatricality of the *fabliaux* by interrogating the following interrelated issues: How are theatricality and metatheatricality manifested in the narratives of *fabliaux*? How do the *fabliaux* in performance differ from those experienced through private reading? What benefits do we gain, and what difficulties arise, from a theatrical approach to the *fabliaux*? In general, modern interactions with written narratives occur through subvocalisation, except where reading aloud is concerned. Whilst medieval manuscripts were not consumed in a purely 'oral' culture, this paper will expose our neglect of the ways in which the *fabliaux* were most effectively actualised in performance.

Keywords: Old French *fabliaux*, medieval narratives, theatricality, metatheatricality, *jongleur*, performance contexts

List of abbreviations

Jean Bodel (c.1165–c.1210)

Barat et Haimet	*Barat*
Le Vilain de Bailleul	*Bailleul*
Brunain la Vache au Prestre	*Brunain*
Gombert et les deus Clercs	*Gombert*
Du covoteus et de l'envieus	*Covoteus*
Le Vilain de Farbu	*Farbu*
Des deus Chevaus	*Chevaus*
Le Sohait des Vez	*Sohait*
Le Jeu de Saint Nicolas	*Saint Nicolas*

Rutebeuf (c.1230–1286)

Charlot le Juif	*Charlot*
De la Dame qui fist trois Tors entor le Moustier	*Moustier*
Frere Denise	*Denise*
Le Pet au Vilain	*Pet*
Le testament de l'anne	*Asne*
Le Miracle de Theophile	*Theophile*

Garin (early 13th century)

Berengier au lonc Cul	*Berengier*

Anonymous

Boivin de Provins	*Boivin*
Le Prestre Crucefié	*Crucefié*

Introduction

As the teenage actor Luke McGibbon recites *Le Vilain Asnier*, a 13th-century *fabliau*, his smile almost breaks into open laughter as he reads the description of the *vilain* loading manure onto the asses' backs. Luke's classmates chuckle in the background. The interaction between McGibbon and his on- and off-screen audiences – in a 2019 YouTube reading from the channel 'Medieval Tales in Performance' produced by Eve Berge Vitz – is a recent affirmation of Willem Noomen's statement: '[c]'est dans la performance que le fabliau se réalise' (Noomen, 'Performance et mouvance: à propos de l'oralité des fabliaux' 129).[1] Brian J. Levy and Norris J. Lacy's calls for prioritising 'la vie concrète' (ibid) of the *fabliaux* extend the 'théâtralité' of medieval literature (Zumthor, *La lettre et la voix de la « littérature » médiévale* 289) to the role of the *jongleur* – a costumed minstrel – in interpreting fabliaux for courtly and popular audiences.[2] The notion of the 'théâtralité' is defined by the primacy of the voice as articulated through the body (ibid), though it is noted that Anglophone scholarship renders 'la théâtralité' as both 'theatricality' and 'theatrality'. The latter refers to a semiotic reading associated with Jean Alter concerning 'the constant process of re-creation through transformation which revives old texts in new performances', as can be seen in medieval and modern adaptations of the *fabliaux* (Alter 115).

The aforementioned scholars in medieval French studies tend to promote a broad interest in performance contexts over a specific reading of theatricality in the *fabliaux*. This essay will instead explore the theatricality of *fabliaux* by interrogating a series of interrelated issues:

1. How are *fabliaux* created through live *jongleur* performances compared to private readings of these works?

2. How are theatricality, and by extension metatheatricality (signals to spectators within the texts which draw attention to the performed nature of the *fabliaux*), manifested in these narratives, and what are the

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[1] 'The *fabliaux* are created through performance'. All translations into English given in the footnotes are the author's own.

[2] 'Concrete life'. 'theatricality of medieval literature'.

consequences of these manifestations for modern and medieval audiences?

3. What benefits do we gain, and conversely what risks and difficulties arise, from a theatrical approach to the *fabliaux*?

Modern interactions with written narratives generally occur through subvocalisation – internal speech through personal reading – except on rare occasions such as reading children's bedtime stories aloud. Whilst medieval manuscripts were also consumed privately by individuals outside of the collective culture of oral transmission, scholars have somewhat overlooked how medieval texts were – and can still be – actualised in live performance to much greater effect.

The influence of *jongleurs* on how audiences received the *fabliaux* remains one of the 'great imponderables of medieval literature' (Busby 70). Scholarly engagement with the theatricality of these works has largely focused on intratextual references (Noomen 1990) and some historical evidence for the performance settings in which *jongleurs* transmitted the *fabliaux*, such as the medieval French *Provins* fair (Faral 1964). More recently, the critics Caroline Foscallo and Josefa López Alcaraz have considered the theatrical qualities of the *fabliaux* in relation to later versions of these texts as farces (Foscallo, 2009; López Alcaraz, 2013). This essay, however, will also take into account works that did not ultimately become plays, and it aims to encourage modern readers to analyse the dramatic nature of the *fabliaux* by making hypotheses about which verbal and non-verbal aspects of these narratives could be emphasised during live recitations.

Defining 'narrative', 'theatre', and *fabliaux*

In this examination of elements of theatricality, working definitions for both 'narrative' and 'theatre' are not rendered antithetical, as is sometimes the case in discussions amongst critics. This essay takes 'narrative' to mean a written work in which the guiding figure of a narrator mediates the plot and the voices of characters throughout, alternating between making

comments in the first- and third-persons. 'Theatre' is regarded as a means of storytelling that often lacks mediation between characters and the audience. It involves the distribution of roles amongst multiple actors who utilise facial expressions, gestures, costumes, voice modulations, props and stage directions, and, to a lesser extent, scenery in improvised setups.

The context of the early Middle Ages also shapes this distinction between 'theatre' and 'narrative'. Before the rise of the *fabliaux* in the 13th century, theatre originated in the performance of 12th-century liturgical rituals. With their rudimentary stage directions and clunky dialogue, early vernacular plays, including *Le Jeu d'Adam*, hardly constituted well-defined dramas. Hence, 'theatre' will be interpreted using relatively wide parameters to encompass lesser refined works.

Similarly, the definition of 'narrative' in the *fabliaux* does not map onto other medieval genres or what Hans Robert Jauss saw as historic 'families' of texts. As Roy Percy notes (Percy 125), even *fabliaux* which internally label themselves as such have been excluded from Joseph Bédier's definition of the text-type for not containing conventional narrative structures, as well as from Noomen and Nico van den Boogaard's *Nouveau recueil complet des fabliaux* (NRCF). Whilst *fabliaux* regularly feature third-person narrators, some types of *fabliaux* – including *dits*, which are dominated by a first-person speaker, like in Rutebeuf's *Dit de l'herberie* – must be acknowledged as problematic cases within contemporary medievalists' attempts to classify the *fabliaux* genre.

Les fabliaux **in question**

Out of the 150 surviving *fabliaux*, this essay focusses on the 16 works cited earlier in the 'List of abbreviations' by Bodel, Rutebeuf, Garin, and anonymous authors. The applicability of this paper's reflections is therefore restricted to furthering an understanding of theatricality in these narratives only. Bodel and Rutebeuf's *fabliaux* are fruitful sites for the exploration of theatricality in narrative, since the two *trouvères* – poet-composers – also produced dramatic works (*Le Jeu de Saint Nicolas* in 1200 and *Le Miracle de Theophile* in 1260s, respectively). Judging by his appeal to Louis IX's

generosity in *La Pauvreté* and claims in *La Mort Rustebeuf*, Rutebeuf was a Parisian *jongleur*. Bodel was likewise involved in the performing arts: 'Il est possible que, pendant sa jeunesse, il ait parcouru les villages de l'Artois comme jongleur *forain* […] [I]l devint […] héraut de la Confrérie dite 'des Ardents' […]' (Rossi and Straub 15).[3]

The *fabliaux* listed under 'Other' contain structural or thematic elements that are suited to performance or aligned with more strictly 'dramatic' forms, such as 14th- and 15th-century farces.

The problematisation of theatricality and metatheatricality, as well as their appearance as themes, in the above corpus will be investigated: first, through a consideration of characters as actors and of objects as props in the *fabliaux*, and second, through overt references to *jongleurs* as performers.

Transformation: characters as actors and stage managers

One major aspect of the *fabliaux* which should be examined is the depiction of characters as both actors and stage managers, roles they change between in performance. This notion of a play-world draws on the structuralist approach of Mary Jane Schenck, according to which 'the fabliau characters are revealed primarily through their actions, i.e. the functions they execute' (Schenck 30).

Such actions operate on the narrative level for readers, as well as on the visual and aural planes for live audiences. As Sophie Marnette has shown, *fabliaux* characters fit stock categories: 'le dupeur […], la dupe et le dupeur dupé […]' (Marnette, 'Voix de femmes' 106).[4] This structure of the comic narrative, which was noted by Hermann Bausinger, recurs in the 13th-century play *Le Garçon et l'Aveugle* and the 15th-century *Farce de Maistre Pathelin*, revealing an almost in-built sense of narrativity in medieval drama (Bausinger, 'Bemerkungen' 118-136).

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[3] 'It is possible that, during his youth, he travelled around the villages of Artois as a festival *jongleur* […] he became a herald of the so-called Confraternity of Burghers and *Jongleurs'*.

[4] 'The trickster, the tricked and the tricked trickster'.

Furthermore, theatricality emerges as a guiding force in the *fabliaux* through the characters' ability to shapeshift across the divides between men and women, the courtly and the bourgeois, the living and the dead, and humans and objects. These individual movements amongst a panoply of actors are choreographed by the *jongleur*, who works simultaneously as a single performer and a director in front of live spectators. For Edmond Faral, this narrative changeability implies a 'theatrical' mentality in both characters and *jongleurs*: '[…] donner l'impression qu'on est un nouvel individu - c'est […] le principe de l'art dramatique' (Faral 237).[5]

In Rutebeuf's *Denise*, the opening moral 'li abiz ne fait pas l'ermite' exposes the construct of identity on the basis of clothing.[6] The *fabliau*'s first seven lines emphasise the deceptive nature of clothing and foreshadow the plot through sartorial nouns and adjectives – 'ermite' (v. 1), 'draz' (v. 3), 'vestus' (v. 3), 'vesteüre' (v. 5), 'habiz' (v. 7) – and a general appeal to the audience 'nos demoustre' (v. 7).[7] As the *jongleur* ends their metatheatrical comment, the motif of Denise's 'guise' (v. 80) dominates the narrative, being associated with her transformation into a Franciscan friar. In a set of reported speech imperatives, Rutebeuf informs the audience of Frere Simon's instructions to Denise before she carries them out at vv. 134-141. The narrative framing here means that Frere Simon's disingenuous manipulation of Denise's costume change is itself ironically overseen by Rutebeuf's mocking narratorial stance, which in turn parallels the way that the characters' depictions are ultimately manipulated by the *jongleur* in an instance of metatheatricality:

> Mais si celeement feïst
> Copeir ces beles treces blondes
> Que ja ne le seüst li mondes,
> Et feïst faire estauceüre
> Et preïst tele vesteüre
> Com a jone home couvandroit […] (vv. 74-79).[8]

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[5] 'The aim of the dramatic arts is to give the impression that one is a new individual.'

[6] 'The habit does not make the monk'.

[7] 'Monk', 'cloth', 'clothing', 'to clothe', 'habit', 'shows us'.

[8] 'But rather that Denise should secretly / have her blond braids cut / unknown to anyone, and have the tonsure done / and dress herself as was fitting for a young man'.

Ces biaux crins a fait reoignier ;
Comme vallez fu estaucee
Et fu de boens houziaus chauciee
Et de robe a home vestue
Qui estoit par devant fendue
Pointe devant, pointe derriere (vv. 134-139).[9]

La robe de l'Ordre li done,
Et li fist faire grant corone […] (vv. 147-148).[10]

The recurring elements of this costume change are the cutting and tonsuring of Denise's hair and her wearing boys' clothes and the Franciscan habit. These descriptions are enhanced by the medieval androgyny of Denise's name (Zink 494), which in Old French refers to both male and female forms. The *jongleur* may have further constituted Denise's gender identity by wearing a Franciscan habit in performance and imitating the pitch of a 'pucele'.[11]

After escaping Frere Simon, Denise adopts another alias. This time, the chevalier's wife dresses her for bed – 'La vest ansois qu'ele couchast' (v. 308) – and lies to Denise's mother about her convent upbringing before she is married off, becoming 'ma dame Denize' (v. 334).[12] The involvement of guardian figures in both of Denise's costume changes presents the young protagonist as a somewhat unwilling actor. The obsession with costume changes throughout the *fabliau*, down to the final word 'abit' (v. 336), highlights the creative possibilities, but also the social transgressions enabled by this facet of theatricality.[13] This reflects how, for Charles Muscatine and Gabrielle Lyons, 'the prime motivation of the fabliaux is an interest in mutability, coupled with a mistrust of fixed hierarchies' (Gaunt

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[9] She cut her beautiful locks short / Like a boy's and tonsured her crown / She wore a good pair of leggings / And likewise a tunic and robe, and, like a man's, the front stayed open, with stitching in back and in front'.

[10] 'He gave her the robe of the Order / And gave her a large tonsure'.

[11] 'A little girl'. The costume change also corresponds to Judith Butler's theory of gender performativity, implying 'the stylization of the body' via 'bodily gestures, movements and enactments' on the narrative plane and the oral delivery of the lines to spectators (Butler 519).

[12] 'She dressed her before she went to bed'. 'My lady Denise'.

[13] 'Habit'.

235). The instances of role-play in these narratives also echo those of public performances like the *festum fatuorum* in which priests 'dressed as women […] or minstrels' (Gilhus 24).

Other *fabliaux* exhibit theatricality through costume changes that extend beyond the religious–lay binary into the realm of the supernatural. In *Crucefié*, the priest's depiction as an actor contrasts with *Denise* since he removes, rather than puts on, clothing, and poses as a naked Christ on a Crucifix to evade the attention of Rogier the sculptor. However, the priest, like Denise, is ordered to adopt a new identity by Rogier's wife, before the role change is actualised in performance by the *jongleur* through polyptoton (a form of repetition) of the verbs 'despoilliez' and 'estendez' and the *jongleur*'s exaggerated tone. Although Alison Williams suggests that this is 'not a staged event' because the wife reacts to her husband's unexpected return, the combination of her performative language and the priest's literal performance nevertheless emphasises how this moment of transformation becomes one of dramatic improvisation (Williams 52).

> Despoilliez vous, et si alez
> Leënz, et si vous estendez
> Avoec ces autres crucefis (vv. 35-37).[14]
>
> Toz s'est li prestres despoilliez ;
> Entre les ymages de fust
> S'estent, ausi con s'il en fust.' (vv. 40-42).[15]

Medieval audiences might also have noticed a thematic parallel between narrative and drama: this costume change reverses the direction of Saint Nicolas' transformation from a wooden statue into an embodied holy figure to convert the Saracens in Bodel's drama *Le Jeu de Saint Nicolas*. Indeed, *Crucefié* was composed in the early 13th century just after or while Bodel was working on the play and on his own *fabliaux*, 'quite plausibly' in tandem (Taylor 142). For modern audiences, a theatrical interpretation of *Crucefié* illustrates how composers of narratives formalised elements of performance, such as visual spectacle. However, this effect could not be

[14] 'Strip off / and go into that room / and lie down with the other crucifixes'.

[15] 'The priest quickly stripped off / and lay down with the other wooden statues / as if he was one of them'.

achieved by a single *jongleur* in the same way as a larger theatrical production, like the farce version of *Crucefié* (c. 1490-1520), in which the priest cries out upon climbing the cross (Levy, 'Du fabliau à la farce: encore la question performancielle?' 97).

A work that mirrors *Crucefié* but diverges from *Denise* is Bodel's *Bailleul*. It too concerns the orchestration of a male character's reluctant costume change by a female figure, Dame Erme:

> Une part li fist en un angle
> Un lit de fuerre et de pesas
> Et de linceus de chanevas ;
> Puis le despoille, si le couche ;
> Les ieus li a clos et la bouche ;
> Puis se lest cheoir sor le cors
> 'Frere, dist ele, tu es mors :
> Dieu ait merci de la teue ame ! […]' (vv. 54-61).[16]

Dame Erme's skill as a dramaturge is evidenced by the way she prepares a convincing representation of her husband's death through the scenery of 'un lit de fuerre et de pesas' and 'de linceus de chanevas'; her manipulation of his clothes ('le despoille'), face ('Les ieus li a clos et la bouche') and body ('Puis se lest cheoir sor le cors'), as well as her performative deployment of language through the statement 'tu es mors' and use of the optative subjunctive 'ait'. The theatrical overtones of this moment are complemented by a narrative intervention that would have been uncharacteristic of a strictly 'dramatic' performance back then: the narrator reports the thoughts of the *vilain*, who has been persuaded a little too forcefully of the *vraisemblance* of his new role: 'entresait cuide mors estre' (v. 65).[17] As the *vilain* later watches his wife and the priest copulating, he shifts from actor to audience member – or 'dramatised observer' in Lacy's terms (Lacy 19), thus joining external spectators in a metatheatrical moment that enables us 'to fully appreciate its comedic potential' (17).

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[16] 'On one side, she made up in a corner / A bed of fur and a straw mattress / And linen sheets / Then she made him strip off and lay down / She closed his eyes and mouth / Then she let his body fall / 'Brother', she said, 'you are dead:' / May God have mercy on your soul!'

[17] 'He immediately believed that he was dead.'

Whilst the wife's transformation of her husband into a corpse implies her directorial qualities in the *fabliau*, the narrative description of her actions also bears some linguistic similarity to the stage directions at the start of *Le Jeu d'Adam*. Despite the differences in how action is represented in profane narratives compared to religious drama, these verbal parallels suggest how readily characters from the *fabliaux* may be reimagined in a theatrical context. Both texts use temporal conjunctions to evoke the stages of this dramatic ritual – 'Puis le despoille, si le couche' in the former and 'Tunc incipiat lectio' for the latter – and to highlight a particular location: 'Une part li fist en un angle' (v. 54) and 'Constituatur paradisus loco eminenciori' (Aebischer 1964).[18] Rogier's wife may ultimately be following (stage) directions from the narrator.

Overall, both women in *Crucefié* and *Bailleul* are portrayed as stage managers whose actions divide the narrative into scenes. The women's organisation of other characters' costume changes is aligned with their goals of deceiving male authority figures and enacting their own transitions from lover to wife. A theatrical reading of Lyons' 'avoir et savoir' approach to the *fabliaux* (Lyons 1992) here links the 'savoir' of these female characters to their dramaturgical skill in the physical shaping of the domestic sphere.

Crucially, the *fabliaux* do not only contain elements of theatricality within the text-world. Audiences of these works also encounter metatheatrical reflections on the moral judgements of the *fabliaux* and the links between deception, theatre, and gender. The success of the *dupeur* – trickster – in driving the narrative forward leads spectators to appreciate the *dupeur*'s dramaturgical flair, couched in pejorative terms of duplicity. At the beginning of *Boivin*, the *jongleur* becomes a character who is himself involved in deceitful dressing 'por ce que mieus samblast vilain' (v. 16), as highlighted by a list from lines 5-19 describing Boivin's costume as Mabile's uncle Fouchier de la Brouce.[19]

Williams' vision of the prankster as 'an actor whose existence depends upon the presence of an audience' cements this metatheatrical valuation of

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[18] 'Then let the lesson begin'. 'May Paradise be located in a prominently high place'.

[19] 'In order to better seem like a peasant'.

the *jongleur* (Williams 2). A tension arises between the harmful artifice of the characters depicted by the *jongleur* and a rejection of actors' association with immorality from Graeco-Roman drama. This interpretation requires spectators to adopt the *jongleur*'s mindset despite the narrator's discouragement of such an approach. For example, in Bodel's *Barat*, Travers complains about the believability of Haimet's imitation of his wife:

> Dieus! Comment pot il resambler
> Si bien fame en fet n'en parole (vv. 374-375) ?[20]

Despite the audience's instinct to wait for the epilogue's judgement of the two thieves, the final proclamation on Barat and Haimet obfuscates the success of the deceivers and seems ill-matched with the story in which Travers was also initially a robber:

> Por ce fut dit, segnor baron,
> Mal conpeignon a en larron (vv. 517-18).[21]

This works against the pattern observed by Marnette, where 'les dupeurs masculins qui réussissent sont habituellement présentés de façon neutre ou parfois même positive, mais jamais de manière négative comme les femmes' (Marnette 111).[22]

However, a clearer sense of the relationship between the thieves and the *jongleur* can be derived from the main narrative. Haimet's technique of vocal mimicry features in Bodel's *Gombert* and is an essential skill for any *jongleur*, especially the one performing in *Barat*. The moral condemnation of the epilogue must be tempered by the audience's own complicity in deriving pleasure from vocal manipulations inside and outside the text-world.

Contrastingly, *Berengier* provides an example of the narrator somewhat praising the female deceiver, described by Jean-Claude Aubailly as the quintessential comic hero within the *fabliaux*, who has most consciously acted within the plot (Aubailly 117). This diverges from epilogues railing against 'dupeuses', such as in *Bailleul*. In *Berengier*, the wife performs her

[20] 'God! How can he imitate his wife so well in speech and action?'.

[21] 'So it is said, lords and barons / That thieves make for bad companions'.

[22] 'Male tricksters who succeed are commonly presented in a neutral, or sometimes even positive, manner but never in a negative manner as with female tricksters'.

own costume and register change into that of a 'chevalier' (v. 177) to tackle the embarrassment of her husband's pretend encounters with other knights.

Given the prologue's apparent courtly bias in judging those who 'se marient bas por avoir' (v. 27), theatricality in the form of disguise allows the wife to remedy the mistakes of her father who arranged her marriage to the son of his creditor the *vilain*.[23] The epilogue of Version I of the tale offers the cagey compliment or even resounding litotes that the wife 'ne fu sote ne vilaine' (v. 299); this is further undermined by the proverb '[a] mol pastor chie lous laine' (v. 300).[24] However, as Lisa Perfetti comments, the anonymous Version II ends with a warning to the audience about the dangers of boasting. Moreover, 'twenty lines are devoted to how the wife ponders ('porpensse') the best way to verify her belief that her husband is lying' (Perfetti 21), showing a rare principled basis for the wife's artifice, which is neither motivated by sexual desire – as in *Bailleul*, *Crucefié,* and *Denise* – nor greed – in the case of *Barat*. Version II of *Berengier* thus implies a model of ethical theatricality which coheres less with the *jongleur*'s tactics than in *Barat*.

Objects transformed into props

While characters may be transformed into actors and directors, objects in the *fabliaux* become props through narrative attention from the *jongleur* and performance possibilities, as imagined by modern audiences.

In Rutebeuf's *Pet*, the bag attached to the *vilain*'s behind experiences its own narrative development alongside the fart it contains. It is first described as 'un sac de cuir' (v. 29) before 'li saz emplit' (v. 46), and is tied by a devil.[25] The *fabliau*'s climax occurs when the apparently innocuous bag is thrown into hell and the personified fart escapes:

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[23] 'Marry below their station for greed'.

[24] 'Was neither idiotic nor a peasant'. 'When the shepherd is weak, the wolf excretes wool'.

[25] 'A leather sack'. 'The sack is filled up'.

Tant ala cil qu'il vint a porte
Atot le pet qu'en sac aporte.
En enfer gete sac et tout,
Et li pez en sailli a bout (vv. 51-5).[26]

The bag is key to the scenes which compose the *fabliau*, making it suitable for farce, as evidenced by the work it inspired: André de la Vigne's 1496 *Le Meunier de qui le diable emporte l'âme en enfer*. The quotidian nature of the bag would have made it an easy visual aid for a medieval *jongleur* to present repeatedly to spectators. An olfactory imitation of 'buef aux aux' (v. 35) and 'graz humei' (v. 36) would have also rendered the invisibility of the fart within hell more concrete – though in the farce version the fart was replaced by wine.[27]

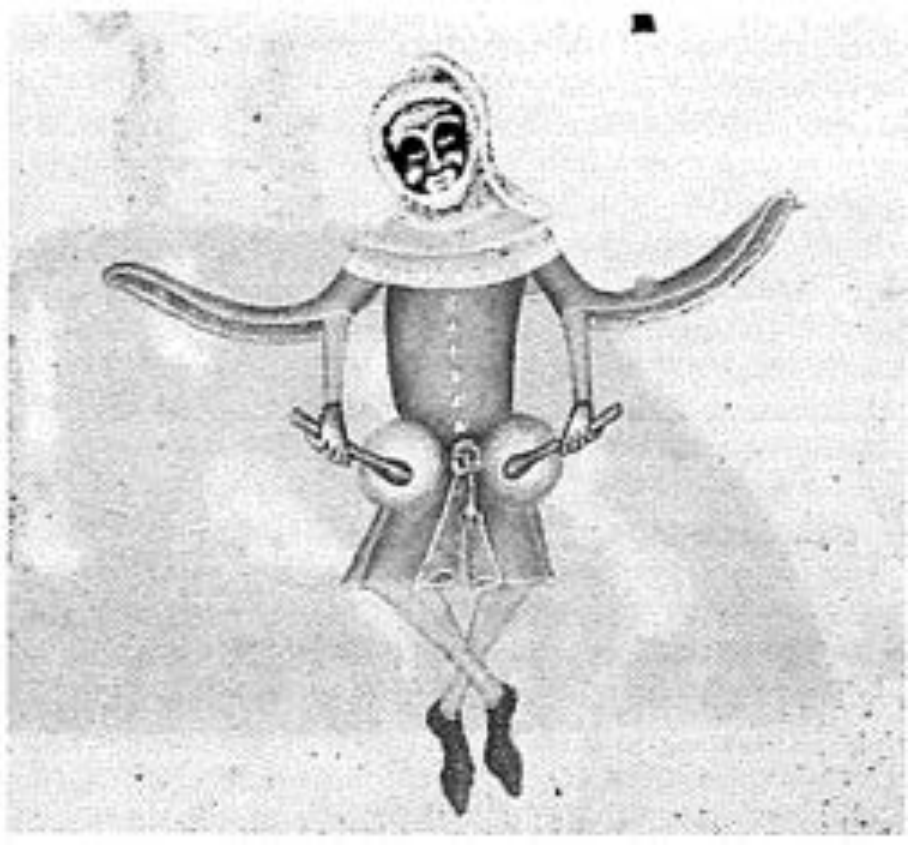

Figure 1: Luttrell Psalter, London, British Library,
Additional ms. 42130, fol. 176 (Levy, 'Performing fabliaux' 138)

In a more tangible manner, we can link a potential prop for Bodel's *Sohait* to the costumes worn by medieval English musicians. For Levy, the drawing of a kettledrummer from the early 14th-century Luttrell Psalter

[26] 'The devil went away and came to the entrance to Hell / With the fart which he carried in his bag / He threw the whole thing into Hell: the bag / And the fart came out in one go'.

[27] 'Garlic beef' and 'fatty broth'.

(see Figure 1) 'conveys (in its own musical medium) […] the comic performance potential of the narrative fabliau' (Levy, 'Performing fabliaux' 138). Bodel emphasises the magnitude of certain 'coilles et viz' (v. 83) at the market in the wife's dream by repeating the adjective 'gros' and employing a simile comparing the size of the testicles to the blade of a spade:[28]

> Li meillor erent li plus gros,
> Li plus chier et li miauz gardé (vv. 98-99).[29]
>
> C'a un estal est asenee
> Qu'ele en vit un gros, un lonc (vv. 102-103).[30]
>
> Gros fut darriere et gros par tot (v. 105).[31]
>
> De la coille, que il ot tele
> Com lo paleron d'une pele (vv. 111-112).[32]

A theatrical interpretation of these passages suggests performance possibilities that correspond to the *fabliau*'s narrative focus. A *jongleur* could initially show the different market produce on offer with virtual props by using their hands or miming going from stall to stall. Later in the narrative, the account of the wife hitting her husband (vv. 137-142) is underpinned by verbs in the semantic category of beating: 'esmee', 'ferir', 'fiert', 'l'asene' as she imagines herself still in the dream-world, about to buy a particularly impressive penis.[33] The position of 'esmee', 'l'asene', and 'fiert' at the end of the octosyllables could be emphasised by the *jongleur* striking the concrete prop of drums or 'nakers', which resemble large testicles, to communicate the wife's release of sexual frustration.

The entertainment provided by *Sohait* derives both from the wife's actions on the narrative plane and the metatheatrical drag of a male *jongleur* portraying her on stage. However, a drawback to interpreting *fabliaux*

[28] 'Testicles and penises'.

[29] 'The best were the largest / The most expensive and best preserved'.

[30] '[The wife] came to a table / Where she saw a large and long penis'.

[31] '[The penis] was large from the back and all over'.

[32] 'Testicles which were as big / As the blade of a spade'.

[33] 'Beat', 'to strike', 'lashes', 'hits him'.

narratives through a theatrical lens also emerges here: the miming of virtual props in a *jongleur*'s presentation of the marketplace of penises suggests that the comedy of the *fabliaux* may at times derive from the imaginative defying of physical possibilities and the limits of performability, rather than in the literal spectacle conveyed to the audience.

The consideration of these items as props, both virtual and physical, which change function like their human counterparts further reveals how the *jongleur*'s delivery may have explored narrative tensions through these objects, creating a kind of excitement for the audience that would have been less attainable in private reading.

Nevertheless, such hypotheses are limited by the historical uncertainty around the use of props in *fabliaux* recitations and the difficulty for a single *jongleur* to handle multiple objects simultaneously.

Overt references to the *jongleur* as a performer

Whilst theatrical deception connects performers to the *fabliaux* characters they depict, additional aspects of metatheatricality emerge through the *jongleur*'s self-conscious relationship to spectators via addresses in the narrative, as well as prologues and epilogues. Such addresses are signalled through the first-person plural (as in the phrase 'Rutebues nos dist et enseigne' at the end of *Asne*), the second-person plural ('Vos conterai briement la some' at the start of Bodel's *Sohait*) or the appellation 'Seignor' at the beginning of *Covoteus*.[34] Moral judgements, proverbs, and advice from the narrator to the audience also feature more prominently in the *fabliaux* than the lais (Marnette, 'L'énonciation féminine' 102). Metatheatricality thus manifests itself in the corpus through reflections on the realities of working as a *jongleur*, contested claims to authorship of the *fabliaux*, and the encouraged engagement of the audience.

Rutebeuf's *Charlot* highlights the *jongleur* profession, showing how a *jongleur* could embody the spirit of the prankster just as much as the characters of the *fabliaux* themselves, despite the *jongleur*'s own awareness

[34] 'Rutebeuf tells and informs us'. 'I will briefly recount the summary'.

of their separation from the narrative world. This *fabliau* opens with an extradiegetic warning to medieval audiences to oblige the *jongleur* with renumeration after the performance or be forced to do so through the menacing reference to 'sa bource vuide' (v. 6):[35]

> Qui menestreil vuet engignier,
> Mout en porroit mieulz bargignier;
> Car mout soventes fois avient
> Que cil por engignié se tient
> Qui menestreil engignier cuide,
> Et s'en trueve sa bource vuide (vv. 1-6).[36]

The setting of Guillaume's cousin's wedding reflects the historical reality of minstrels – semi-permanently employed *jongleurs* at court – like those present at the wedding of Matilda of Brabant and Robert I, brother of Rutebeuf's patron Louis IX (Faral 99). The marginal figure of Charlot, who meditates on how to punish the squire for his underpayment for four lines (v. 108-112) before 'fist en la pel la vilonie' (v. 114) reinforces the threats of the prologue, underscoring the power of the *jongleur* inside and outside the text-world.[37] Charlot's status is all the more liminal because of religious factors: as a Jewish *jongleur*, we may see him as an *exemplum* of Gaunt's general observation about 'the mobility the *fabliaux* impute to other hierarchical structures' (Gaunt 275). In particular, Charlot overcomes the antisemitic measures of Louis IX's reign and his financial dependency on his royal patron to have the last laugh. Drawing on Daron Burrows' analysis of priests in the *fabliaux* (Burrows 2005), James R. Simpson has observed the relative rarity of Jews in this genre compared to their presence in *dits*, which meant that 'features elsewhere associated with them [were] mapped onto corrupt priests' (Simpson 446). Once again, we encounter the deceptive nature of the *jongleur* as a trait for the audience to be wary of, but also to celebrate.

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[35] 'His empty purse'.

[36] 'Whoever wants to deceive a minstrel / Ought to think twice / Because many a time has it happened that / He who acts as a trickster / He who desires to deceive a minstrel / Finds his purse empty'.

[37] 'He defecates into the hare skin'.

As Noomen suggests, the paratexts of prologues and epilogues were often amended in writing by scribes, or in speech by *jongleurs*, reflecting Paul Zumthor's concept of *mouvance* (Zumthor, *Essai de poétique médiévale* 84-96). For example, the ending of *Charlot* highlights how *jongleurs* not claiming to be authors faced the dual difficulties of navigating their relationships with the composer and audience:

> Rutebuez dit, bien m'en sovient,
> Qui barat quiert, baraz li vient. (vv. 131-2).[38]

Concerns around authenticity emerge here regarding the manuscript itself. Noomen deliberates as to whether the coda was written by Rutebeuf 'en vue de la récitation par un autre diseur' or even 'plus tard par un exploitant de l'œuvre de Rutebeuf' (Noomen, 'Auteur' 331).[39] Likewise, in terms of the *jongleur*'s self-presentation to spectators, the comment 'bien m'en sovient' could be delivered to imply a conversation with Rutebeuf or simply an understanding of the proverb as common knowledge.[40]

These prologues and epilogues, as well as the self-representation of *jongleurs* in the *fabliaux*, would have enabled performers to define their mediation between authors and audiences, as well as their profession and personas in the 'increasingly competitive' world of 13th-century literature and entertainment (Levy, 'Performing' 127). Despite Noomen's argument that the paratexts of *fabliaux* – such as *Charlot* and *Chevaus* – are superfluous to the actioned performance, or may have been excluded after the author's death, these works nonetheless remain crucial in challenging modern spectators to question the claims made about truthfulness by both characters inside the narrative world and *jongleurs* positioned at its limits.

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[38] 'I remember well how Rutebeuf says / Deception finds those who desire it'.

[39] 'Given its recitation by another speaker', 'later by a plagiarist of Rutebeuf's work'.

[40] 'I remember well'.

Conclusion

In response to the questions this paper has sought to interrogate, *les fabliaux se réalisent* in live performance, compared to private reading, through the *jongleur*'s vocal and bodily characterisation; through the thematisation of spectatorship, orchestration, and disguise; and through the audience's interaction with the *jongleur*. This 'être multiple' is no passive vehicle for the narrative, but rather a figure with significant control over spectators' interpretations of both text and paratext (Faral 1).[41] Theatricality, and by extension metatheatricality, is manifested in these narratives through the devices employed by the *jongleur* – a personal claim to authorship and self-promotion – which resemble those of the characters the *jongleur* depicts. Consequently, we encounter the *jongleur* as both a mediator of characters in these narratives and an individual concerned with social mobility and financial security, who provokes suspicion, moral debate, and amazement amongst modern and medieval audiences. A closer consideration of the role of the *jongleur* as both narrator and performer does not distance us from the text-world. Rather, this lens beneficially instigates a re-examination of the defining thematic features of the *fabliaux*, such as their focus on domestic objects and the humorous fleshing out of social classes by register and costume.

The *fabliaux* in question have been considered as dramatic performances in relation to the *jongleur*'s visual and aural amplification of the texts. A theatrical approach to the *fabliaux* comes with the risks and difficulties of historical uncertainty and a need to avoid both conflating narrative with drama and romanticising the *jongleur*. Nevertheless, performances of the *fabliaux* can be creatively imagined and acted out in a manner that is tied not only to medieval sensibilities but also to a transhistorical sense of the body's capacity for dramatic expression.

Beyond their own delivery by *jongleurs*, the *fabliaux* have entered other performative and dramatic contexts, from the similar folkloric sources – drawn on in both Bodel's *Covoteus* and *exempla* from Jacques de Vitry's preaching manuals – to the farces based on *Crucefié* and *Pet* (Levy 124). Theatrical readings may equally enter *fabliaux* scholarship to provide new

[41] 'Multifaceted being'

interpretations of Lyons' 'avoir et savoir' dynamic in relation to deceivers' dramaturgical skills and Simon Gaunt's considerations of the mutability permitted within the narrative, but also by the very performance of the *fabliaux*.

If the *fabliaux* are to remain a source of 'inextinguishable laughter' for McGibbon and his peers, then we must continue to embrace the *jongleur*'s dramatic instinct (Levy 140). This instinct suited the structure, language, and preoccupations of the *fabliaux* more than any other type of narrative in early medieval French literature.

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Turmoil within and without: Modes of Human Resistance in Aravind Adiga's *The White Tiger* and Rukhsana Ahmad's "Appearances"

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Abstract – 'Stories of rottenness and corruption are always the best stories, aren't they'? Traditionally depicting a system or a figure the reader can object to, these stories offer readers the opportunity to identify with the undermined victim, and to applaud their resistances to oppression. Narratives of such kinds seemingly require acts of defiance from the characters, paving the way for their resistance against the abuse of power. In *The Epistemology of Resistance*, José Medina defines 'resisting' as 'contending with, and not exclusively or fundamentally as contending against' structures of power. He presents it not merely as a reflexive response to subjugation, but one that is also deeply emotional, embedded in the nuances of choice and the lack of it. This essay analyses how Rukhsana Ahmad's short story, "Appearances", and Aravind Adiga's novel *The White Tiger* – two works that tackle the complex realm of servitude in the South Asian diaspora – explore the more familiar notion of resistance as one of contending *against* a structure of power, yet also interrogate Medina's idea of resistance as a way of contending *with* one's situation. Notions of inequality, social expectations, and the awareness of personal worth are explored as tools that characterise a specific culture of servitude in these works, as well as the abuse of power on domestic and macrocosmic scales.

Keywords: resistance, abuse of power, South Asian diaspora, culture of servitude, domestic inequality

Introduction

'Stories of rottenness and corruption are always the best stories, aren't they'?[1] Traditionally depicting a system or a figure the reader can object to, these stories offer readers the opportunity to identify with the undermined victim and to applaud their resistances to oppression. Narratives of such kinds seemingly require acts of defiance from the characters, paving the way for their resistance against the abuse of power. In Rukhsana Ahmad's short story, 'Appearances'[2], and Aravind Adiga's novel, *The White Tiger* – two works that tackle the complex realm of servitude in the South Asian diaspora – the concept of resistance is one that morphs and shifts, eluding any proper definition or representation.

The White Tiger is written in the form of a letter by its protagonist, Balram Halwai, to the visiting Chinese official, Premier Wen Jiabao. In acerbic detail, Balram recounts the history of his life as a self-made entrepreneur, depicting his rise from sweet-maker in the rural village of Laxmangarh, his formative interlude as a chauffeur in Delhi, and his current position as a businessman in Bangalore. Ahmad's story "Appearances" is subtler in tone. Its plot about a disenchanted chauffeur, Safdar Khan, and his struggle to leave his implicitly exploitative job, unfolds in only 17 pages. Reading Ahmad's understated short story alongside Adiga's incendiary novel makes for not only an enjoyable reading experience, but also a valuable literary comparison, the texts' formal and tonal differences emphasising their thematic similarities. Whether wryly or sympathetically, both works depict the insidious interplay of domestic servitude and emotional manipulation in the contemporary South Asian diaspora with deftness and an alertness to cultural sensitivities. A comparative reading allows the texts' differences to collude productively with one another: Ahmad's pensiveness teasing out the compassionate nuances in Adiga's excoriating prose, while the latter's unremitting critique emphasises and engages with the flares of rebellion in Ahmad's tale.

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[1] Adiga, Aravind. *The White Tiger*. London, Atlantic Books, 2008: p. 50. All further references to the novel will be cited within the essay in brackets as (*TWT*) with the corresponding page number.

[2] Ahmad, Rukhsana. "Appearances." *The Gatekeeper's Wife and Other Stories*. Lahore, ILQA Publications, 2014. All further references will be cited as (*A*) with the corresponding page number.

It is significant to note that both *The White Tiger* and "Appearances" are written by anglophone writers, neither of whom live in South Asia. Although this is an important point to recognise, the discourse on anglophone writing is a complex one that deserves more space for discussion than can be afforded here. In relation to their broader academic contexts, Adiga and Ahmad have also chosen to interrogate the internal domestic realm rather than the external political sphere. While Barbara Harlow's (1987) exemplary writings have focused on resistance literature from territories of profound political subjugation, these works of fiction centre around the social hierarchies within the orderly structures of the home. Elleke Boehmer (2013) has also written cogently on the external practice of postcolonial resistance; by contrast, this essay is a foray into the internal landscapes of Adiga and Ahmad's oppressed subjects. Resistance in these two texts takes the form of psychological inward turns instead of outward action.

Complexifying resistance

In *The Epistemology of Resistance*, José Medina defines 'resisting' as 'contending with, and not exclusively or fundamentally as contending against' structures of power. By his conceptualisation, resistance 'should not be understood exclusively, or even primarily, in oppositional terms' (Medina 14); it can be both a reflexive response to subjugation and a response that is deeply emotional, embedded in the nuances of choice and the lack of it. Resistance, he writes, 'can feel more like being pulled in different directions from the inside, like being torn from within' (16). The shapes resistance takes, therefore, are not only those of action. Outward acts of resistance deal with revolt and uprising, where subjects actively desert unfair structures of power. The subject of this essay, however, is resistance of the inward kind: the quieter and more complex resistance of finding ways to withstand unfair situations – small inward epiphanies that can lead to outward action. Seen in this light, resistance is also an act of resilience.

While Medina is writing about a real-life need for resistance in epistemic interactions, his ideas are wielded here to discuss the realm of fictional

representation. The questions he poses are still pertinent to these texts: 'what are the responsibilities of a resistant subjectivity? And do all subjects have an *obligation to resist*?' (16). The heroism of both Adiga and Ahmad's protagonists, I would argue, is that they resist their structures of dominance without necessarily needing to. Balram Halwai is well-equipped to follow in his father's footsteps as a sweet-maker instead of embarking upon the riskier task of being a social entrepreneur; Safdar Khan's anger at his employer stems from their lack of respect for him rather than any physical maltreatment. The two heroes resist the psychological systemic exploitation of knowing one's place in a caste- and servant-based society, simply by having higher aspirations for themselves.

And, just as victims of oppression are under no obligation to resist, literature, of course, is not obliged to be didactic. Yet the searing social critiques of unequal structures of dominance in these two texts make them into works that depict ameliorating alternatives to the societies they criticise, moral or otherwise. In her essay "The Language of Literature", Arundhati Roy writes about the difficulty of characterising her authorial position as a writer of fiction and nonfiction, and her subsequent label as a 'writer-activist'. 'Implicit in this categorization,' she notes, 'was that the fiction was not political and the essays were not literary' (78). Perhaps that 'battle for suzerainty' (79), as she puts it, between fact and fiction, the political and the creative, and the attempt to reconcile them, constitutes its own kind of resistance.

Both "Appearances" and *The White Tiger* explore the subtleties and smaller instances of resistance, as well as how they denote an internal struggle between loyalties (whether towards one's employer, one's family, or other actors), cultural expectations, and an awareness of personal worth. These challenges are complexified further by what Raka Ray and Seemin Qayum define as 'the rhetoric of love': a complex discourse 'that encompasses employer claims of affection and familial relationships that bind servants and employers to each other' (Ray and Qayum 537). In Ahmad and Adiga's works, the rhetoric of love is that which hides the nature of exploitation under the insidious guise of familiarity and complicates the protagonists' relation to the realities of their labour in a process of social interpellation. Through this discourse, the authors

illustrate the more familiar notion of resistance as one of challenging a structure of power externally; and yet, they also interrogate Medina's concept of resistance as a way of contending with one's situation rather than against it – internally, as well as outwardly.

The idea of internal resistance may be interpreted as a sign of resignation, even one of obliviousness. *The White Tiger*'s protagonist, Balram Halwai, criticises this disposition as an unchangeable facet of Indian society in his 'Rooster Coop' metaphor (*TWT* 173). The roosters, a zoomorphism of the poor, 'see the organs of their brothers lying around them. They know they're next. Yet they do not rebel'. His ominous statement implies a wilful ignorance, one that understands the severity of the situation yet chooses bleakly to accept it. Balram puts this down to the 'perpetual servitude' (176) ingrained into those who populate the inland villages of India, or the 'Darkness' (14): 'a servitude so strong that you can put the key of his emancipation in a man's hands and he will throw it back at you with a curse' (176).

In "Appearances", however, Ahmad proffers a less cynical reason for these passive forms of resistance: her protagonist, Safdar Khan, observes the source of resistance as the curbed circulation of information from a government that acts purposefully opaque. 'No one knows who's running the show,' Safdar narrates, 'no one knows what's going on here' (*A* 13). However, Kammu, who works with Safdar for the same family, always insists on the luck of their situation. A naïve but perceptive character, Kammu is the vehicle through which Ahmad proposes that it is internalised emotional manipulation (as well as an employee's reliance on their source of income, however pitiful the stipend) which blinds people to their exploitative circumstances. 'Our wages are just pocket money,' Kammu reminds Safdar, 'we have no expenses for food, shelter, clothing' (19). Basic needs, swathed in packaging that distinguishes them as luxuries, are provided by employers as part of their service. Without explicitly saying so, Kammu implies that this meagre provision is enough of a reason for them to stay.

The characters' awareness of their exploitation and their inward sense of conflict are magnified as modes of resistance while they contend with their

plight. In that light, Safdar's small epiphanies, or age-old displeasures that are only now bubbling to the surface – '*I've got to leave*' (*A* 13) – attain a qualitative significance. His awareness of the subtle oppressions that domestic workers are subjected to is in fact a monolithic obstacle to overcome: this awareness itself is a novel form of resistance. Ray and Qayum write: 'In societies like India, with long and unbroken histories of domestic servitude, the institution is central to understanding self and society' (537). Here, there is an implicit reference to Althusser's theory of interpellation – internalising cultural values of conflating the domestic and the familiar. For Balram and Safdar, contending with these situations and understanding their internalised exploitation are central to their processes of liberation, allowing them to fully form their identities.

In *The White Tiger*, the identity of the employee is unconsciously tethered to that of their employer. Our protagonist Balram describes the ragtag fraternity of the drivers' circle, and how one driver's status in it 'had been low', because 'his master drove only a Maruti-Suzuki Zen' (*TWT* 153). When his 'master' gives him a mobile phone, however, the social politics shift in his favour. The culture of servitude is felt profoundly even in this minute example of one's personal worth becoming intertwined with that of one's employer. The most degrading – if ironic – part is that this shiny symbol of newfound respect is a device designed to fortify the driver's servitude: 'it's a one-way phone,' he explains, 'so that my master can call me and give me instructions' (152). As Hegel once wrote, self-consciousness can only be formed when 'the pure undifferentiated "I" is its first immediate object', not a latent self-identification with another (*Phenomenology of Spirit* 110). His renowned master–slave dialectic has been described as 'the spine of [Adiga's] novel' where 'the servant kills the master to achieve his freedom' (Jeffries). Yet Balram never fully shakes off the yoke of servitude and tethered identity; despite all his successes, he continues to think of himself in terms of his ex-employer, imitating him so assiduously that he adopts his name when he starts his own taxi company: 'Ashok Sharma, North Indian entrepreneur' (*TWT* 302). This ongoing cross-identification (Tickell 162) serves to reinforce rather than resist the structure of domestic dominance; and it seems significant that Balram continues to work in the chauffeur business as another kind of

servant, even after killing his master and becoming ostensibly 'a free man' (*TWT* 285).

The rhetoric of love

Adiga toys with irony throughout *The White Tiger*. While Balram derides Hanuman as a god 'foisted on' India's working class – he being the 'shining example of how to serve your masters with absolute fidelity, love, and devotion' (19) – the novel's epistolary form insinuates that this is a scourge the narrator himself has not escaped. While writing to Mr Jiabao, the Chinese official – and voiceless recipient of his life's story – Balram addresses him with all the accoutrements of respect: 'Do you know about Hanuman, sir?', the last word latched onto the sentence like a head nodding in instinctive deference, even when one 'didn't want it to' (*TWT* 16). To whom is Balram really speaking? Adiga's utilisation of the epistolary form is perhaps an illuminating act of resistance on its own: by fictionally addressing a Chinese politician to 'reveal the truth about Bangalore' through Balram, when Adiga is really writing for anglophone readers, he manipulates the novel's form to imbue the act of composing it with a kind of interpellated deference.

In "Appearances", Ahmad's characters also question this nature of servitude. 'Where does it come from,' her protagonist Safdar muses, 'that servant's voice?' Alone in his narrative, Safdar seems to be aware of the uncomfortable expectations of the domestic worker, of not only loyalty, but of genuine love[3], too, observing that this is what ties Kammu to the 'high-blooded' (18) family they serve. Kammu recounts one occasion when his employer struck him and the only form of apology he received was: 'Maybe that was a bit harsh, boy, but you don't run away from your own family, do you?' (21). Kammu finds himself seduced by that word 'family' and tells Safdar that the idea of his boss seeing him as one of his own 'touched [his] heart'. Safdar notices how his employers use these terms of endearment – the 'rhetoric of love', as per Ray and Qayum (537) – in their interactions with him, too: 'Sorry, Safdar Bhai,' (*A* 18) says his mistress,

[3] Ray and Qayum 536: 'If loyalty is one measure of a servant's worth, their love is another.'

Zari, calling him Bhai, or 'brother', to soften the fact that she has again kept him waiting. 'I hate the false note,' he registers, 'that's no real apology'. He knows that she insists on his calling her Baji, or 'sister', to blur the lines between paid labour and the voluntary favours between siblings; it is, after all, far more inconsiderate to keep a stranger waiting than an intimate member of one's family. Equally, he notices that Zari's mother addresses him as Beta, or 'son', when she wants something from him: 'she never does that' (25) usually.

Ahmad deftly presents Safdar's awareness of the pernicious effects of this rhetoric of love: a discourse that 'hides exploitation' (Ray and Qayum 537). If Safdar's employer is seen as a maternal figure, she is also then within her rights to discipline him as would a mother: to dictate what he wears and how he comports himself, and to punish him. As Ray and Qayum write: 'Domestic servitude confuses and complicates the conceptual divide between family and work' (537). Safdar says, 'Out here, we're groping in the dark. Limping along the best we can. Like bats, we cling to the caves we know' (*A* 13). This culmination of awareness, of contending with one's situation in a 'half-irritated, half-resigned' state (12), is emboldening for Safdar and subversive of a culturally expected attitude of meek servitude.

The rhetoric of love is in Adiga's consciousness as well. In *The White Tiger*, much of Balram's affection for his employer lies in how Ashok speaks of him like family, despite how he may treat him: 'This fellow, we can trust him. He's from home' (*TWT* 122). The process of battling instilled ideals and unquestioned facts of social life is the first necessary step towards expressing outward resistance. One cannot help but notice this insidious rhetoric working on a macrocosmic scale outside the realm of fiction. In her recent essay on Prime Minister Narendra Modi's calamitous lockdown of India, Arundhati Roy wrote that '[Modi] said he was taking this decision not just as a prime minister, but as a family elder' (208). How else, she observes, would one person be able to single-handedly sanction 'that a nation of 1.38bn people should be locked down with zero preparation and with four hours' notice' (208)? Roy writes that of all the people she spoke to following Modi's announcement, the words of one man, 'a carpenter called Ramjeet', were particularly discomfiting.

'Maybe when Modiji decided to do this, nobody told him about us,' he tells her, 'maybe he doesn't know about us', the other half of India. But 'us', writes Roy, 'means approximately 460m people' (211).

Playing the game: servants against servants

Balram's psychology is one that views the 'ethically-suspect method' of violence as 'the only viable option for a subaltern' (Khor 44). He suggests that 'no normal human being' (*TWT* 176) is able to break out of the Rooster Coop; it would take only 'a freak, a pervert of nature' (67), 'a White Tiger' (177). His dialect is divisive, but more peculiarly, it dehumanises not the rich, but the poor – and, by an additional metaphorical extension, himself. The wealthy, present in the figure of the 'grinning young butcher' (173), are the only human beings in the conjured scene. As a subaltern who sees himself faced with either the fatal option of being a rooster destined for the butcher's knife or the monstrous glory that comes with being a genetically-perverse monster – 'a social entrepreneur' (177) – he views his subjugation primarily in oppositional terms, conceptualising resistance as a form of contending against, not with, his structure of dominance.

It is also significant to think about who it is that Balram really views as his oppressor. Despite persistent lamentations about the unfairness of the Indian social structure, his argument is not *against* the system that facilitates a nationwide culture of servitude per se; it is aimed more specifically at his own employer. He is neither interested in righting 'the wrongs of class apartheid' (Khor 44), nor claiming to do so; his complaint seems to exist on a purely personal scale. While Balram excoriates the unjust social hierarchy, his plan is not to improve the system, but to manipulate it and wrangle his way to the top. This is glaringly obvious in his lack of compassion for other members of the serving classes: against his better conscience, he declines to show mercy to Ram Persad after forcibly ejecting him from his position, and his only friend is never described by any name but 'Vitiligo-Lips' (*TWT* 153). Balram's tone of absolute conviction can be problematic, and it has also, notes Megha Anwer, earned Adiga his own share of contention, in the manner of focussing almost solely on the

negative aspects of India (Anwer 306). Balram's claim that 'servants need to abuse other servants', that it is something 'bred into us' (*TWT* 130), is not as universal as Balram imagines it, when the *The White Tiger* is read in conjunction with "Appearances".

In "Appearances", the relationship between Safdar and Kammu is vastly different to the 'servant-versus-servant' (*TWT* 109) mentality in *The White Tiger*. Safdar refers to Kammu as his only form of comfort in their employer's house: 'Every single time Baji annoys me, I talk to Kammu. That's how I've lasted in this job' (*A* 20). Their relationship is one of solidarity and counsel. Balram and Safdar are individual products of their environments of servitude, fictional proof that within the same structure of dominance, there exist different types of oppression and individual embodiments of resistance to these oppressions. Safdar's concerns, unlike Balram's, are not personal: 'I'm angry some,' he says of Zari, 'not with her so much as her kind' (*A* 21).

Balram's unpunished murder of Ashok panders to the system of rottenness more than defies it. Adiga's greatest joke, and his novel's greatest tragedy, is that his subaltern figure trumps his oppressive structure by complying with its demands of moral corruption. By taking the fall for his employee, Asif, when he accidentally kills a boy in a subversion of Pinky's hit-and-run, Balram reinforces rather than undermines the corrupt system, even as he tries to change it for the better. His intentions may be different – he confronts the family and owns up to his employee's mistake: 'I accept my responsibility. I ask for your forgiveness' – but the sentiment of throwing money at a problem to make it disappear – 'That is the way of the jungle we live in' (*TWT* 312) – is much the same as the rooster-coop system he criticises.

This is not to say that Balram is a wholly reprehensible character, but rather one who is propelled by 'entrepreneurial self-advancement' (Tickell 155). He displays moments of tenderness for his subaltern class and a burgeoning hatred of Ashok when his employer mistreats not only him, but other subalterns as well. When Ashok sees an autorickshaw driver coughing violently, Balram silently bristles at his careless comment – 'It's like we're at a concert of spitting!' (*TWT* 138) – by thinking: '*Well, if you*

were out there breathing that acid air, you'd be spitting like him too'. This is reminiscent of a scene in Bong Joon-ho's 2019 film *Parasite*: what ultimately spurs employee Kim Ki-taek to kill his employer – the straw that broke the camel's back, idiomatically speaking – is the supercilious disgust on his boss' face when he sees the housekeeper's husband bleeding to death on his lawn.

Defying the systems of oppression

Safdar is a subordinate who stands his ground in the face of implicit exploitation. He feels 'resigned but brittle' (*A* 21); his small ways of contending with his plight manifest into a greater resistance altogether. He takes his fate into his own hands, learning to entrust his destiny neither to the invisible leaders of the country[4] nor to any heavenly powers.[5] Safdar attempts small, resistive acts to cope with his dissatisfaction – 'when I'm seething inside, I refuse to call her Baji' (18) – reclaiming, at least for himself, a separation between work and life. When his objection leaves scant impression on his oppressor – 'she ignores my little protest' (18) – he realises he will have to contend with his situation in a more confrontational manner. A recurring symbol for Safdar's deterioration of self are his hands, which he feels have 'been swapped with someone else's' (12). They stare at him throughout the story 'like a hostile neighbour' (17), a physical sign of resistance that reminds him constantly of his need to escape. He can no longer find 'the black mole' on his left forefinger, the 'visible identifying mark' (12) listed on his passport that he would need to present if he wanted to travel, or flee. Later, in the moments culminating towards his seminal act of resistance, he feels, 'with a pang of horror', that his feet have been swapped, too. This seems to be a moment when the somatic realm interacts with the linguistic. In a psychoanalytic sense, Safdar's hands and feet manifest his burgeoning sense of self-alienation, and his desire to escape his circumstances.

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[4] Ahmad, "Appearances" 13: 'Kammu worries and asks me at times if I think anyone is running the country or not? I shrug and say nothing. I don't think anyone is, but I don't like to worry him.'

[5] Ibid 14: 'I say a little prayer: 'Yaa Allah, if You won't end this chaos and confusion, then at least get me out of here, before I turn into someone I don't recognise."

When Safdar hands in his notice, he performs two triumphs of resistance: decisively flouting Zari's 'automatic' (28) correction to call him Baji – '"Begum Saab," I repeat'; he also resigns from his post by supplying a reason – 'I'm leaving for Dubai' – that will propel him to do what he has wanted to from the beginning: 'to go somewhere, anywhere, out of here' (13). He drives with alien feet, which feel like 'claws ripping through [his] white socks' (28); the claws, one might say, of a newly-freed white tiger. These are not acts of disobedience, but decisive moments of invoking his rights. In a similar vein, although *The White Tiger*'s plot is centred around a chauffeur murdering his exploitative employer, the most satisfying resistance is Balram's implicit relinquishment of the ugly spectre of caste. Throughout the novel, he manages to defy the occupation presaged by his name. 'That's what you people do,' one man sneers at Balram early on in the novel, 'You make sweets. How can you learn to drive?' (*TWT* 56). 'Halwai, my name, means "sweet-maker",' Balram offers, by way of explanation. 'That's my caste—my destiny' (63). His strongest act of resistance is not, ironically, killing the man who sees him only as his driver, but of indirectly defying caste-based expectations.

Conclusion

As Medina puts it, resistance is not exclusively about contending against structures of dominance. Indeed, "Appearances" and *The White Tiger* demonstrate how the protagonists' greatest feats of resisting unjust authority are found, first and foremost, in their efforts to contend with their internal dissatisfaction and to obtain firm recognition of their own personal worth. Their most triumphant resistance is obtaining a rebellious understanding of their entitlement to a better life. Adiga gives away clues to this concept of resistance in Balram's description of *Murder Weekly*, a magazine popular 'among all the servants' (*TWT* 125), which the government supposedly uses to play on the employee's secret fantasy of murdering their employer. Instead of giving the magazine the allure of contraband, Adiga takes a perverse move by awarding it the cheap accessibility of religious parables, spewing a strange moral lesson where the murderer is always eventually caught, and is 'so mentally disturbed and

sexually deranged that not one reader would want to be like him'. Here, Adiga punctuates the novel with its most thrilling irony: Balram is aware that violence, the ultimate display of contending against power, is not necessarily the wisest 'way out of individual poverty' (Khor 49). He believes that knowledge and awareness are the better weapons: 'it's when your driver starts to read about Gandhi and the Buddha that it's time to wet your pants, Mr Jiabao' (*TWT* 126).

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Viral-Mediated Gene Therapies for Paediatric Neurological Diseases

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Abstract – Several therapeutic approaches using viruses as delivery platforms are emerging for the treatment of diseases of the central nervous system. Gene therapy bears promise for the treatment of several paediatric neurological conditions, especially those associated with a single gene. Onasemnogene abeparvovec-xioi, a gene therapy product for the treatment of spinal muscular atrophy is already approved for clinical use. Several other gene therapy products are in clinical trials for conditions including, but not limited to, other neuromuscular disorders, lysosomal storage diseases, and leukodystrophies. Many more gene therapy programmes are currently in preclinical development. Viruses as vectors aim to deliver therapeutic protein coding sequences, small RNAs, or tools of genome engineering in the non-dividing cells of the central nervous system. Among those, adeno-associated viruses are becoming increasingly popular vectors, especially for *in vivo* gene therapy. For *ex vivo* gene therapy, lentiviruses are more commonly used. During both preclinical and clinical stages, several pitfalls related to the safety or efficacy of such treatments need to be addressed. Improved vectors and gene therapy constructs are being developed and challenges associated with the host's immune reaction to the vector, transduction capability, and long-term expression of the transgenes are being tackled by scientists and investigators worldwide. A new era for gene therapy lies ahead, which holds the potential to revolutionise clinical care. Overall, there is need for readiness in light of the rising number of clinical trials; validation of outcome measures and sensitive biomarkers will contribute to the successful assessment of the efficacy of gene therapies in clinical testing.

Keywords: Adeno-associated virus, adenovirus, cell therapy, central nervous system, gene therapy, lysosomal storage disorders, neuromuscular diseases

1. Introduction

The concept of introducing genetic material into a patient's cells to treat a disease dates back to the 1960s [1]. Over the years, the term 'gene therapy' has expanded to include a significant number of therapeutic modalities and approaches; the fruits of breakthroughs in the field of biomedical research. Even though gene therapies were a novel concept only a few decades ago, these innovative approaches have now reached the bedside of patients and are presently being used to treat devastating genetic diseases. Genetic therapies have the potential to revolutionise healthcare practices, cure rare diseases, and make personalised medicine a reality. However, their development holds several pitfalls and challenges.

After Theodore Friedman introduced them in 1972 [2], the first human trials took place using viruses as delivery platforms to introduce the genetic material into patients' cells. The results were mostly encouraging, with the exception of two serious adverse events. The first of these was the death of an 18-year-old boy who was treated with gene therapy for ornithine transcarbamylase deficiency, an enzyme deficiency which leads to hyperammonaemia (increased ammonia in the blood). His death was attributed to a virus-triggered exacerbated inflammatory response and multiorgan failure. The second event was the discovery that patients treated for a condition called X-linked severe combined immunodeficiency were developing leukaemia, which was attributed to the insertion of the viral genome into their own genome [3]–[6].

However, major breakthroughs in the intervening years have dramatically improved the safety and efficacy profile of gene therapies. A new era of clinical development lies ahead. These therapeutic approaches bear promise for the treatment of several devastating paediatric genetic diseases.

There is an unmet need with regards to the treatment of several paediatric genetic diseases. Some of these diseases – which also affect the nervous system – have a known genetic cause that is sometimes associated with only a single gene. Gene therapy has the potential to provide a disease-modifying effect for such conditions in contrast to the symptom-alleviating therapies presently applied to them. Nevertheless, despite recent breakthroughs in biomedical research, gene therapies are not largely

available to patients. Applications of gene therapies in human clinical trials have raised concerns about both short-term and long-term safety and revealed several challenges related to application and efficacy. Only a small number of drugs has been approved.

Nevertheless, clinical data suggest that gene therapies still hold promise. In this article, I review the viruses being used as vectors in gene therapy and the challenges associated with this type of treatment. I also present key results from the clinical development of gene therapy products – approved or under assessment – for paediatric neurological conditions.

2. Gene therapies: principles and current landscape

2.1 Principles of gene therapies and viral vectors

As per the European Medicines Association definition, the term 'gene therapy' refers to the introduction of recombinant genetic material to a patient's cells to replace, regulate, modify, or add to a genetic sequence, with a view to treat, prevent, or even diagnose a disease [7]. Mechanisms by which gene therapies aim to treat diseases include, but are not restricted to [8], [9]:

> (a) Gene replacement, in cases where deficiency or loss of function of a gene product is the cause of the disease;
>
> (b) Gene silencing, in cases where the product of a gene is toxic or alters the normal cellular physiology;
>
> (c) Gene editing, in cases where modifications of a specific area of a patient's genome can lead to a functional gene product and restoration of cellular function;
>
> (d) Gene addition, in cases where (over)expression of the transgene product can restore cellular function.

The delivery of this therapeutic genetic material to the patient's cells can be mediated by various vectors (i.e. delivery systems), which can be viral or

non-viral (e.g. DNA plasmids, liposomes). This review focuses on the viral vectors used for the treatment of paediatric neurological diseases.

Viral-mediated gene therapies can be divided into two main categories: *in vivo* (Latin: 'within the living organism') and *ex vivo* ('outside the living organism'). For *in vivo* gene therapy, the viral vector carrying the transgene (the genetic material of interest) is administered into the patient via the most appropriate route of administration; sometimes, this entails delivering the transgene directly into the tissue of choice e.g. intramuscularly (in the muscle) or intrathecally (directly into the cerebrospinal fluid of the patient) [9, 10]. In *ex vivo* gene therapy, extracted patient or donor cells undergo programming outside the body by a viral vector carrying the therapeutic transgene. The cells are then re-introduced to the patient via autologous transplantation when the cell source is the patient or allogeneic transplantation if the source is the donor [11, 12].

A viral vector with a gene therapy construct consists of three components: the capsid and/or the envelope of the viral vector (i.e. external part of the virus); the transgene of choice; and the 'regulatory cassette' which may include the promoter, the enhancer, or other auxiliary regulatory elements [9]. These components bear distinct characteristics, which can account for both the safety and the efficacy of a gene therapy product. For example, the capsid of a viral vector can determine the cell/tissue specificity of a vector, as well as its immunogenicity – meaning the ability to trigger the host immune response. In contrast, the promoter, together with the other regulatory elements, can create spatial and temporal control over the expression of the transgene.

Several types of viruses have been investigated as candidate vectors to deliver gene therapies in the central nervous system [13]. Amongst the most commonly used viruses in the preclinical (animal studies) and clinical (human studies) development of gene therapies are adenoviruses, adeno-associated viruses (AAVs), and lentiviruses, as detailed below:

Adenoviruses. Adenoviruses are viruses with a linear double-stranded DNA. Adenoviruses are known to cause human infections, usually of the respiratory system. They have a genome of 26 to 45 Kb depending on the serotype, and they can incorporate large transgenes in their genome.

Adenoviruses can transduce both diving and non-diving cells at high transduction rates due to the existence of cell surface receptors that facilitate their internalisation into human cells. Their genome gets stabilised to become extrachromosomal episomes; episomes which do not integrate into the host DNA. This stabilisation is favourable from a safety perspective when compared to the viral vectors whose DNA integrates into the host genome, sometimes in an uncontrolled way, which might affect significant coding areas. The main disadvantage of adenoviruses is their immunogenicity; however, this characteristic favours other applications of adenoviruses, like vaccines and anti-cancer therapies [9], [14]–[17].

Adeno-associated viruses. AVVs, on the other hand, are not known to cause human disease and they are included among the most promising viral vectors, mostly because of their better safety profile. AAVs are helper-dependent viruses, meaning that they require the presence of helper viruses (e.g. adenoviruses, herpes simplex viruses) to enter a productive infection. In the absence of helper virus, they enter the so-called 'latent phase' during which AAVs can also integrate into a genomic locus known as AAVS1 on chromosome 19 in human cells. AAVs have a small, single-stranded DNA which limits their packaging capacity to approximately 4.7 Kb. Unfortunately, this can be a limiting factor for the treatment of many diseases, such as the neuromuscular disease Duchenne muscular dystrophy (DMD) which is caused by mutations in the *dystrophin* gene, one of the largest of the human genome [18]. They can transduce both dividing and non-dividing cells.

The AAV genome is flanked by two T-shaped inverted terminal repeats (ITRs), which act as self-priming areas for the replication. Lab-modified AAVs, also called recombinant AAVs (rAAVs), are usually deficient for all the viral coding sequences except for the ITRs and carry only the coding sequence of interest and the other regulatory elements. By removing the other viral coding elements, the proteins required for integration of the AAV into the host genome are no longer present, adding an advantage to their safety profile. AAVs modified to carry the transgene are recognised by cell surface receptors and get internalised in the cells by a process called endocytosis. They are then trafficked intracellularly in vehicles called endosomes and lysosomes, before entering the nucleus. After uncoating,

their genome gets released and undergoes second strand synthesis (the conversion of single-stranded to double-stranded DNA) using the host's cellular machinery; second strand synthesis is required for gene expression. Self-complementary AAVs (scAAVs) have been engineered to expedite the step of second strand synthesis, which can be rate-limiting for rAAV transduction. The double-stranded genome of rAAVs is usually stabilised as non-replicating extrachromosomal episomes, which are gradually lost with cell divisions. However, at very low frequencies, rAAVs integrate into the host genome [10], [16], [19], [20]. Different rAAVs serotypes have different transduction efficiency or cellular tropism. As shown by studies in animal models, rAAV9 has the greatest transduction efficiency for neurons throughout the brain after both intraparenchymal (directly in the brain) and intravenous administration [21].

Lentiviruses. Lentiviruses are single-stranded RNA retroviruses, which can transduce both dividing and non-dividing cells. A well-known virus of this category is the human immunodeficiency virus (HIV), known to cause acquired immune deficiency syndrome (AIDS). Inside the host cell, the genome of lentiviruses undergoes reverse transcription to produce double-stranded DNA by an enzyme coded from the viral genome, called 'reverse transcriptase'. This double-stranded DNA can integrate into the host genome facilitated by another enzyme, called 'viral integrase'. The integrated viral genome replicates, together with the host genome, and this allows long-term (sustained) expression of the transgene. However, the former comes with safety concerns; integration in the host genome can cause insertional mutagenesis of unknown significance depending on the site. This, in combination with the difficulty in producing the high titre required for body-wide application, makes them less preferred vectors for *in vivo* gene therapy compared to AAVs. Some lentiviruses are non-integrating, e.g. integration-deficient lentivirus vectors, and they have been investigated as vectors of a better safety profile. Nevertheless, lentiviruses are commonly used in *ex vivo* applications due to their ability to permanently integrate in the host cell genome with low risk of inducing genotoxicity [8]–[10], [22].

Adenoviruses, AAVs, and lentiviruses have different profiles of advantages and disadvantages (e.g. safety, transduction ability,

immunogenicity [8]). Overall, in clinical trials of gene therapies for paediatric neurological diseases, AAV vectors prevail. In other fields like oncology and vaccines, adenoviruses are by far the most utilised vectors [9], [19].

2.2 Clinical development: the current landscape

Currently, gene and cell therapies using viral vectors are in clinical development for several types of paediatric neurological disorders including neuromuscular diseases, lysosomal storage diseases, leukodystrophies, neurotransmitter diseases, and epilepsy. Overall, genetic disorders associated with a single gene (monogenic disorders) can be a feasible target for gene therapies [19]. This section of the article describes some key clinical developments.

The recent approvement of onasemnogene abeparvovec-xioi (brand name: Zolgensma®) by both the US Food and Drug Administration and the European Medicines Association for the treatment of **spinal muscular atrophy (SMA)**, a rare genetic neuromuscular disease that leads to motor neuron death and muscle atrophy, has raised hope for the treatment of other rare genetic neurological disorders. Onasemnogene abeparvovec-xioi uses a scAAV serotype 9. In the human trial that led to the approval of onasemnogene abeparvovec-xioi, the gene therapy product significantly improved patient survival rate and motor function, and reduced the need for respiratory and nutritional support, especially for the high dosage schemes. However, some safety concerns arose during both the clinical trials and the post-marketing surveillance of adverse events observed in treated patients; these include transient elevation of liver enzymes, transient decrease in platelet number, and thrombotic microangiopathy [23].

Another example disease is **Duchenne muscular dystrophy (DMD)**, also a rare neuromuscular disease caused by a lack of the protein dystrophin in muscles, which ultimately results in muscle degeneration, loss of ambulation, cardiomyopathy, and premature death in patients. Several isoforms of dystrophins are expressed in the central nervous system, and a

large proportion of patients have cognitive involvement [24]. The dystrophin coding gene is one of the largest genes in the human genome, which renders its packaging into a viral vector challenging. However, researchers found an opportunity in **Becker muscular dystrophy**, another dystrophy caused by mutations of the *dystrophin* gene, with the difference that a shorter, still partially functional protein is naturally produced. Inspired by this natural variation, they created the so-called *micro-/mini-dystrophins*, which are smaller in size but still code for the critical parts of the dystrophin.

The first clinical trials of AAV-mediated delivery of the *micro-/mini-dystrophins* directly into patients' muscles or intravenously demonstrated increased dystrophin production and improved motor function for DMD patients, but larger trials with a higher number of participants and a longer duration will be required to affirm these findings [17], [25]. For DMD, another three alternative gene therapy approaches are being developed; these aim to deliver genes of proteins (GALGT2 and follistatin), which can ameliorate DMD pathology if their levels are increased, and sequences for skipping the mutated part of the *dystrophin* gene and restoring the reading frame (i.e. exon skipping approaches) (review, manuscript under peer-review).

Other neuromuscular disorders for which gene therapies have reached human trials are **limb-girdle muscular dystrophy** and **X-linked myotubular myopathy (XLMTM)**. In a clinical trial for XLMTM, three patients died from liver failure and sepsis, which raised major concerns with regards to the safety of viral vectors. All three patients were older, and therefore required higher doses [26].

Lysosomal storage diseases are a group of diseases caused by deficiency of a protein, usually an enzyme, which results in toxic accumulation of metabolic products and progressive disease. This category of diseases includes late infantile neuronal ceroid lipofuscinosis, mucopolysaccharidoses, and gangliosidosis. Therapies for this category of diseases are already in clinical development [27].

Canavan disease is a leukodystrophy caused by deficiency of the aspartoacylase enzyme required for myelination, which results in

accumulation of N-acetylaspartate and leads to spongiform degeneration of the central nervous system. It was one of the first leukodystrophies treated with an AAV serotype 2 (AAV2)-mediated gene replacement with intraparenchymal delivery. Data from the five-year follow up of treated patients suggest a decrease in N-acetylaspartate levels and slower progression or stability of the otherwise observed brain atrophy, with some improvement or stabilisation of clinical features. The biggest effect was observed for patients treated early on, as compared to those with significant brain atrophy at the start of the treatment [28].

For leukodystrophies, both *in vivo* and *ex vivo* gene therapies have been applied. *Ex vivo* lentiviral programming of haemopoietic stem cells and autologous transplantation has been attempted for both **X-linked adrenoleukodystrophy (X-ALD)** and **metachromatic leukodystrophy (MLD)** [29], [30]. MLD is a fatal demyelinating lysosomal disease, caused by deficiency of an enzyme called arysulfatase A. Based on the data of an interim analysis of a phase I/II trial, patients treated with *ex vivo* gene therapy for MLD had the needed enzyme expressed in both the haemopoietic stem cells and the cerebrospinal fluid. However, the therapeutic benefit was seen with patients who had not developed symptoms or were at early stages of MLD [30], indicating again the importance of early intervention, which in the first place required methods for early detection.

Gene therapies are now in clinical development for several other types of diseases including epilepsy or neurotransmitter diseases. For a full review of ongoing clinical trials please refer to **Table**.[6] Gene therapy is also at the preclinical stages for many other rare neurogenetic diseases, like Angelman syndrome [31].

3. Challenges of genetic therapies

The ideal viral vector is one that is safe and transduces the target cells with high specificity and at adequate rates via the less invasive route of administration. Additionally, the viral vector should allow sustained

[6] This Table can be found in Theodora's article published online: www.stannesacademicreview.com.

expression of the transgene over time with absent or minimal 'off-target' effects or other adverse events. Several aspects of viral vectors affect the safety and efficacy of gene therapies [13]. Some of the main challenges of viral-mediated gene therapy are presented below:

Immunogenicity, cytotoxicity, and adverse events. The host immune reaction against the viral vectors, the gene therapy constructs, and the transduced cells is one of the main limiting factors of efficacy and can also raise major safety concerns. Adenoviruses, for which high percentages of immunity exist in the general population, can trigger an intense inflammatory response. In contrast to adenoviruses, AAVs have a better profile with regards to immunogenicity. Ways to tackle immune responses include dose-control, modifications of viral capsids and genome, choice of serotypes known to be less immunogenic, as well as the inclusion of patients with no developed immunity against the used vector. Immunosuppression (reducing the activity of the immune system, e.g. via corticosteroids) has been used for patients in clinical trials and in clinical settings before the administration of the gene therapies [32].

'Off-target' effects. One of the biggest safety concerns associated with the use of viral vectors for genetic therapies is the possibility of the so-called 'off-target' events caused by the integration of the viral genome into the host genome. Uncontrolled integration (i.e. insertional mutagenesis) can lead to severe consequences, as critical areas of the human genome can be affected by these events. From this perspective, viral vectors which remain as extrachromosomal episomes (like the adenoviruses and the AAVs) present an advantage. Researchers are looking into the possibility of creating vectors with controlled insertional sites. The long-term off-target effects will need to be carefully considered; therefore, close follow-up of treated patients is of utmost importance [33].

The route of administration and cell/tissue specificity. The route of administration is very much dependent on the anatomical area of the cells, which require to be transduced. In some neurological diseases, the transgene is required by only a subset of cells in the nervous system (e.g. SMA). For others, transduction throughout the brain is required, as multiple cells in different areas of the central nervous system are affected

(as in the case of Angelman syndrome). Some AAV serotypes can cross the blood–brain barrier; therefore, they can be administered intravenously, which is a more appealing route of administration especially in cases where re-dosing is required. However, intravenous administration entails other manufacturing disadvantages, as well as the need for higher doses for adequate levels to be achieved. For central nervous system diseases, direct routes of administration include intraparenchymal (directly into the brain), subarachnoid, or intraventricular (in the cerebrospinal fluid). For the stereotactic intraparenchymal, it is common that vectors remain around the area of the needle. Distinct types and serotypes of viruses have different specificity or affinity for different cells. For example, AAV-9 is known to transduce neurons throughout the brain; therefore, it is a preferred vector for central nervous system diseases [34]. **Figure 1** shows the different modes of administration for different diseases:

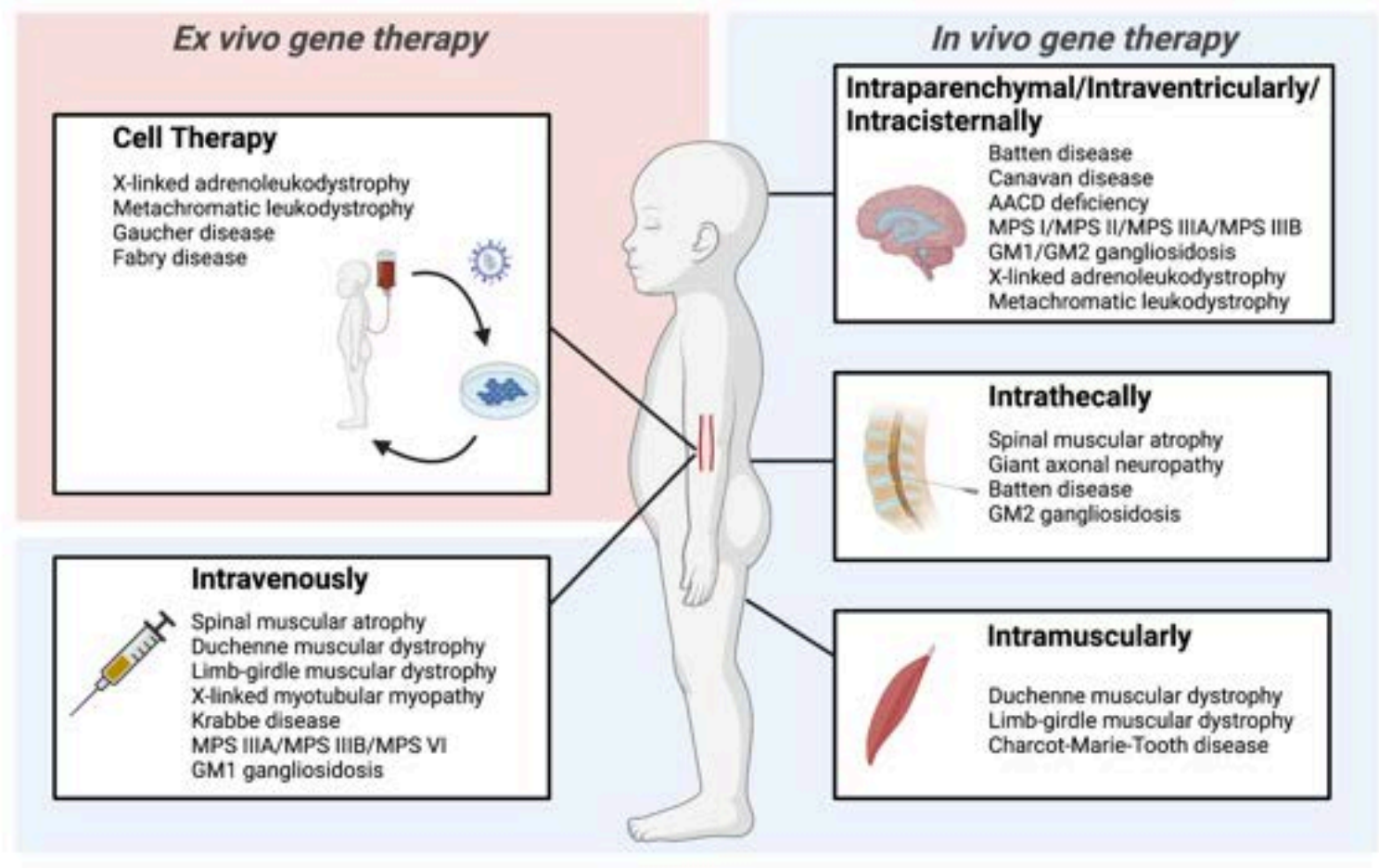

Figure 1. Route of administration for the different gene therapy products in clinical development. Created with BioRender.com.

Stability of expression over time and the issue of re-dosing. The duration of transgene expression in host cells is one of the determining factors of efficacy. Overall, chromosomal integration of the transgene in

the chromosomes (patient's genetic material) is associated with a more stable long-term expression of the transgene. Non-sustained expression and need of re-dosing with the same vector can be challenging due to the already developed immune response by the host [13], [32].

4. Conclusion

Several viral-based gene therapies for paediatric neurological diseases have reached clinical trials. There is a substantial number of preclinical developments for many paediatric neurological diseases, many of which are rare diseases. The clinical data we have in our hands so far, especially from trials on neuromuscular diseases and leukodystrophies, demonstrate that gene therapies can be an efficacious and promising treatment for many more paediatric neurological conditions. However, human applications of gene therapies have taught researchers several lessons on the characteristics of the vectors and the gene therapy constructs, as well as on the practical and clinical aspects of delivery to patients. Several pitfalls in the preclinical and clinical phases of development of these treatments need to be addressed to ensure their safe application.

Meanwhile, in clinical development, there is an unmet need for the design of more effective clinical trials, especially for rarer diseases. Decisions of efficacy need to be based on sensitive and disease-specific outcome measures, which are both assessor-objective and meaningful for the patients and their families. The same outcomes are those which will facilitate approvals from regulatory authorities, as well as compensations for all patients when a treatment is approved. Additionally, the first clinical data from human trials of genetic therapies for paediatric neurological diseases demonstrate the need for intervention within a critical 'time-window', during which interventions have the most impact [28], [30], [35]. Towards this direction, the community of researchers should be highly aware of the need to plan the development of newborn screening methods for the early detection of diseases, for which treatments will be available.

Gene therapies hold promise for the future of clinical medicine in the field of Paediatric Neurology. Despite the optimism following the positive

results of the first bedside applications, researchers must remain critical of these approaches and united in their efforts to address the existing pitfalls and challenges.

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Are basic emotions ingrained in the brain's architecture?

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Abstract – Emotions are a series of functional states that promote specific action tendencies. Classical theorists postulated that individual emotions are ontologically distinct, and that as such, they are associated with specific sets of mental, behavioural, and physiological manifestations. However, inconsistencies in these phenomenological patterns have led some researchers to question whether instead, the distinctness lies on the broad dimensions of affect such that underpin emotions. Does the neurological evidence suggest that emotions are fundamentally different? In this essay, I take stock of neurological research on emotions and evaluate the extent to which current theory can help us answer this question. To do so, I first outline the fundaments of the classical and social-constructionist views of emotion, then explore a lesion case study and review neuroimaging evidence, and finally integrate these findings to shed light on the conceptual and empirical complexities underpinning the nature of emotions. Ultimately, I conclude that there is enough evidence to suggest that some aspects of emotion are fundamentally distinct.

Keywords: emotion, basic emotions, social constructionism, lesion, neuroimaging

Two Perspectives

Every day, we, as humans, automatically combine stimuli, life experience, and billions of years of evolution to satisfy our biological and psychological needs. During infancy, reflexes guide reactions to basic stimuli that human evolution has determined beneficial or harmful, and during childhood and adolescence, ambiguous or neutral stimuli become associated with positive or negative outcomes (e.g. Skinner, 1984). Over time, we develop increasingly nuanced responses and gain the ability to act volitionally, yet we never decide how to behave in a vacuum (Bullock & Lütkenhaus, 1988; Izard, 2007). We perceive the world in relation to our

needs, and from the moment we are born, functional states create evolutionarily adapted *tendencies* that help us to navigate complex environments in need of fast, self-relevant decisions (Frijda, 1986).

The classical view of emotion posited that these tendencies are basic emotions; discrete, functional affective states that can be differentiated through sets of recognisable, observable properties (Adolphs, 2017a). According to this perspective, emotions are biologically driven affective states (Frijda, 1986) that provide intermediate flexibility for complex behaviour (Adolphs, 2017a). Unlike reflexes, which create a direct connection between input and output, and volitional behavior, in which motor output is independent from sensory input, emotions encourage evolutionarily adapted action tendencies that influence cognition and predispose certain behavioural outputs (Izard, 1992; Adolphs & Anderson, 2018). Thus, classical theorists propose that emotions are tendencies that allow us to deal with environmental challenges in an efficient and context-sensitive manner.

Basic emotions could have evolved from reflexes as action tendencies due to their utility in addressing recurring problems faced by our ancestors (Frijda, 1986; Tooby & Cosmides, 1990). Indeed, they motivate and regulate both cognition and action in order to achieve an adaptive advantage (e.g. Ekman & Davidson, 1994; Öhman & Mineka, 2001). For instance, Panksepp (1998) found that all mammals share seven innate 'primary emotional systems' that predispose action related to competence, reproduction or self-preservation. The neurobiological systems responsible for such affective expression appear early in development (Buck, 1999), and many of these systems become functional during the first few years of age (Camras et al., 1998). Together, the existence and early development of a neurobiological system that fosters emotional reactions before higher cognition matures is a strong indicator that we have a basic set of evolutionarily determined affective responses.

However, mounting evidence of overlapping phenomenological properties has led some researchers to hypothesise that this might not be the case. Specifically, the behavioural characteristics that were previously thought to universally represent individual emotions seemed to be

impacted by cultural differences (Gendron et al., 2014); scales that were built to measure different emotions showed high correlations between similar basic emotions (e.g. anger and fear; Barrett, 2006); the autonomic manifestations of basic emotions reveal no distinctive patterns[1] (Kreibig, 2010); and initial meta-analyses of neurological bases of basic emotions proved to be inconsistent (e.g. Murphy et al., 2003 vs. Phan et al., 2002). Thus, the inability to differentiate emotions on the basis of mental, behavioural, and physiological properties led some researchers (e.g. Barrett, 2006) to depart from the classical view of emotion and question whether there are any bases to believe that individual emotions are fundamentally different.

The theory of socially constructed emotion postulates that our brains and bodies evolved to experience broad dimensions of affect, and that emotions per se are better defined as the internal interpretation of these dimensions (Barrett, 2006). As an analogy, we might think of emotions as colours: our eyes and brain work in tandem to sense varying wavelengths of light, but we interpret and communicate our appraisal of a particular wavelength by categorising colours on the basis of our previous experience and cultural preferences (Davidoff, 2001). Similarly, Barrett (2006) proposes that we can interoceptively sense varying degrees of an affective predisposition to certain events, but we classify these experiences into discrete emotions based on past experience, cognitive schemas, and culture. This view can explain cultural differences in emotion (e.g. Gendron et al., 2014), and why scales built to measure basic emotions showed high correlations between similar emotions (cf. Barrett, 2006); being exposed to similar categories of events throughout our lifespan and experiencing similar affective responses to those events may promote the impression that all humans experience discrete categories of similar emotions. However, according to this theory, emotions per se do not have evolutionarily pre-determined neural circuits responsible for producing

[1] For instance, anger, disgust and fear (three of the six basic emotions) share similar changes in most psychophysiological measures (i.e. heart rate, heart rate variability, systolic and diastolic blood pressure, electrodermal activity, respiratory rate, and even the adrenergic receptors they activate). Aggravatingly, happiness and anticipatory sadness (theoretically very different emotions) share more changes in common (heart rate, heart rate variability, respiration rate, systolic and diastolic blood pressure, skin conductance level, alpha adrenergic receptors) than anticipatory and acute sadness (different states of the same emotion; only respiratory rate; cf. Kreibig et al., 2010).

specific emotional experiences. Instead, social constructionists propose that these circuits belong to broader dimensions of affect, and emotions are more akin to cognitive concepts such as money (Barrett, 2017).

Indeed, it is also possible that nature selected for a more elementary affective system in the brain. Approaching what benefits us, and shunning away from what harms us, are the guiding principles of all human behaviour (Schneirla, 1959), so rather than discrete emotional states, evolution could have promoted the development of *broad affective systems* that use sensory systems and mental schemas to inform the organism whether a stimulus is harmful (i.e. good or bad; valence) and to prepare the organism for action if an immediate response is required (i.e. arousal; cf. Russell, 1980; cf. Chikazoe et al., 2014). According to this view, the behavioural direction of the action could be informed by both *behavioural inhibitory systems* (BIS), responsible for sensitivity to punishment and avoidance motivation, and *behavioural approach systems* (BAS), responsible for sensitivity to reward and approach motivation (Gray, 1981). In line with this idea, Barrett (2006) proposes that the brain represents broad dimensions of valence, arousal, and BIS/BAS generally referred to as core affect – not individual emotions.

Specifically, Barrett (2017) proposes that self-referential systems transform core affect into individual emotions. To accomplish this, the default mode network, a series of regions associated with self-referential processing and autobiographical memory retrieval and imagining the future (Ekhtiari et al., 2016) first forms an interoceptive sensation in the form of valence and arousal. Then, the salience system, a network of regions that perceives and responds to homeostatic demands (Seeley, 2019) matches our current goals with relevant sensory information about the world. Lastly, the frontoparietal control network, a system involved in sustained attention, problem solving, and working memory (Menon, 2015) creates a simulation of the expected sensations as well as the best action plan to maintain physical and psychological equilibrium. Together, these systems create individual mental states that drive specific action plans, and with experience, Barrett argues, we learn to categorise these mental states into distinct concepts we perceive as emotions.

The fundamental difference between these two perspectives is that classical theorists see emotions as *adaptive functional states* that arise in response to specific events, whilst constructionists argue that emotions are *predictive concepts* that prospectively regulate behaviour in the service of allostasis. The former explore whether there are discrete affective states that drive biological tendencies; the latter posit that the biological differences are limited to broad dimensions of affect and provide a framework explaining how emotion-concepts emerge.

Yet, there is no conclusive evidence on the ontological nature of emotions. The data suggest that emotions cannot be reliably dissociated on the basis of self-reported or behavioural measures, but studies investigating the peripheral profiles of individual emotions (e.g. heart rate variability, skin conductance level) have not found consistent evidence for or against either position. For instance, happiness and anticipatory sadness, two emotions that live at opposite sides of the valence spectrum, share more peripheral correlates than anticipatory and acute sadness (see Footnote 1; cf. Kreibig et al., 2010), which are merely two different forms of the same emotion. This evidence violates the classical assumption that basic emotions have distinct physiological manifestations. However, it is also incongruent with constructionist claims that the biological bases of emotion are grounded on basic forms of affect, since oppositely valenced emotions appear to have more in common in terms of peripheral correlates than two forms of an emotion with identical valence, arousal, and VIS/VAS profile.

Thus, to explore whether there are any biological grounds to believe that emotions are ontologically distinct, we must resort to extant evidence on the last frontier of biology: the human brain. Due to its role in giving birth to emotions and its structural complexity, the brain is uniquely poised to answer this question. If emotions have clearly dissociable structural and functional neurological substrates, then there would be biological grounds to claim that emotions are ontologically distinct – and vice versa. In the next sections, I discuss a lesion case study and review recent neuroimaging evidence to shed some light on the conceptual and empirical complexities underpinning this foundational debate.

A case study

Patient S.M. is a woman born with a particularly severe case of Urbach-Wiethe disease, an extremely rare genetic condition in which hyaline deposits build up on skin, mucosa, and internal organs (Hofer, 1973). One of the mysterious effects of this mutation is the selective calcification and consequent bilateral destruction of the amygdala – a lesion that has prevented S.M. from experiencing fear but not any other emotion. The severity of her lesion – alongside her willingness to collaborate with researchers – has enabled the scientific community to expand our understanding of the amygdala's role in experiencing fear, and exemplified the vital role individual neural structures can play in emotion (Feinstein et al., 2016).

S.M.'s condition developed throughout her childhood. She claims to have autobiographical memories of being afraid as a child, before the disease had fully affected her amygdala; but now, as an adult, the only way she can experience an emotional state similar to fear is by breathing in air with higher concentrations of carbon dioxide (Feinstein et al., 2011, 2013). S.M. has accumulated a wealth of conceptual knowledge of fear through books, movies, and conversations to the point where she can recognise fear in bodies and voices, correctly use the concept of fear in conversation, and tell you about the causes and manifestations of experiencing fear (Feinstein et al., 2016); yet despite exhibiting normal skin conductance responses to unexpectedly loud noises, her brain does not use arousal as a learning cue in fear-learning paradigms, nor show loss aversion when gambling, nor indeed show any of the normal physiological manifestations of fear (Feinstein et al., 2011, 2016; Barrett, 2017). S.M. appears to have successfully developed a *concept* of fear, but her ability to experience emotion-state fear as an adult is, at least, extremely limited.

There are, however, some facets of fear that S.M. might be able to experience without the amygdala. For instance, after a traumatically painful visit to the dentist, S.M. experienced anticipatory anxiety and strong feelings of worry at the thought of experiencing similar pain upon returning to repeat the procedure (Feinstein et al., 2016). Additionally, she asked the experimenters not to repeat the CO2 experiment because she

had experienced a very unpleasant flashback to the time her ex-husband choked her after she tried to confront him about an infidelity (Feinstein et al., 2016). In both situations, she denied feeling scared both during the events (instead experiencing pain or anger, respectively) and at the prospect of repeating the procedures. However, the fact that she exhibited avoidance behaviour to highly arousing, negatively valenced events shows that she could in fact experience key properties of emotion-state fear, even if she did not associate those properties with her concept of experiencing fear.

This raises an important question about the relationship between emotion-states and our subjective emotional experiences. S.M. appears to be capable of experiencing key aspects of the emotion-state society has agreed to name 'fear' (i.e. avoidance behaviour to highly arousing, negatively valenced events), but she denies *feeling* scared despite having a well-constructed emotion-concept of fear. Thus, could S.M. be, in fact, misidentifying the emotion-state she was experiencing? The neuroscientific literature does not support this view. Her neural lesion extends to regions that have reciprocal relationships with the amygdala such as the ventromedial prefrontal cortex, which is strongly related to the processing of risk and fear (Motzkin et al., 2015), and the enthorhinal cortext, a region that is associated with the ability to condition temporally separated stimuli (Ryou et al., 2001; cf. Feinstein et al., 2016; cf. Barrett, 2017). These functions lie at the core of the ability to experience what we know as 'fear', so it seems unlikely that without them S.M. can experience emotion-state fear.

Broadly, evidence from S.M. reveals three important facts:[2]

1. First, state-fear is distinct from other emotional states. It appears that the complete calcification of S.M.'s amygdala prevented her from experiencing fear, but it did not impact her ability to experience any other emotions.

[2] In a related example, there is evidence that lesions to the insula and basal ganglia prevent people from selectively experiencing disgust, but not any other emotion (Calder et al., 2000). Similar evidence on other emotions is yet to arise, but together, evidence on the role of the amygdala in fear, and the insula and basal ganglia in disgust, reveal in a promising pattern.

2. Second, state-fear is distinct from the concept of fear. S.M. had no trouble *understanding* the concept of fear, identifying it in others, or even mentalising it, but her experience with state-fear is anecdotally limited to memories from her early life.

3. Finally, fear can be divided into different components. S.M. seems to experience fear-related concepts and feelings, but even if she is in a highly aroused, negatively valenced state, she does not consciously experience fear.

Neuroimaging Debate

Interpreting neuroimaging data can be tricky. Unlike lesion studies, which allow us to draw causal inferences about whether neural structures are necessary for emotions, neuroimaging studies attempt to find the areas that are related to emotion from fully correlational data while using a technology that is vulnerable to sporadic correlations (Bennett et al., 2009; LeDeux, 2012). Thus, when assessing neuroimaging studies, it is particularly important to have a clear understanding of how the data could support a hypothesis. Initially, theorists hypothesised that emotions lay within specific regions of the limbic system (e.g. MacLean, 1952), but subsequent neuroimaging evidence revealed that no specific brain region is uniquely activated for each emotion (c.f. Murphy et al., 2003; Vytal & Hamann, 2010). Some theorists claimed that disproving the lack of one-to-one correspondence between brain regions and emotions nullified one of the main characteristics of basic emotions (Barrett, 2017; cf. Ekman, 1999) and that as such, emotions were not likely to be ontologically different. However, one-to-one correspondence is not the only way emotions could manifest neurological uniqueness. Classical and constructionist theorists agree that the word 'emotion' should be used in the same way we use the words 'vision' or 'memory' (Barrett, 2017; Adolphs, 2017a). Yet there is no strict one-to-one relationship between brain regions and vision (Hubel & Wiesel, 1979; Pitzalis et al., 2018) or memory (e.g. Anderson, 1972), and the neurological uniqueness between vision and memory have yet to be questioned. Thus, lack of one-to-one correspondence between emotions and brain regions alone should not automatically preclude individual

emotions from being distinct (cf. Anderson, 2016). Instead, to identify whether basic affective operations in the brain are best represented by basic emotions or broad affective dimensions, we must look beyond the phrenological study of emotion and seek whether there are unique *patterns* in neural activation that represent emotional states.

Multi-voxel pattern analysis (MVPA) techniques have made great progress in finding such patterns (Vytal & Hamann, 2010; Saarimäki et al., 2016; Celeghin et al., 2017; Kirby & Robinson, 2017). By comparing data from more than one voxel at a time, MVPA has the power to analyse broader patterns of activity and can achieve a higher sensitivity than conventional univariate analysis (Mahmoudi et al., 2012). A significant problem in the study of the neural bases of emotion is that the methodologies used to induce emotions were responsible for a significant amount of variability across studies (Barrett & Wager, 2006), but studies using MVPA techniques have found unique neural signatures for each emotion that are independent from how the emotions were induced (Saarimäki et al., 2016; Celeghin et al., 2017; Bush et al., 2018). Through the lens of MVPA, the initially surprising findings that the amygdala is not only related to fear but also to anger, disgust, sadness, and joy (Sergerie et al., 2008; Lindquist et al., 2012; Tettemanti et al., 2012; Kirby & Robinson, 2017) can be explained by the idea that emotions reside not within specific regions, but within specific *interactions* between regions (Pessoa, 2014). For instance, amygdala activity has been found to correlate with posterior visual areas during the processing of fear and with the dorsomedial prefrontal cortex during the processing of happiness (Diano et al., 2017). The idea of emotions residing in networks of regions as opposed to specific regions in the brain, has opened up the door to new possibilities, and is helping us make sense of previously incongruent findings.

However, Clark-Polner and colleagues (2016; including Barrett) interpret this evidence differently. They argue that biological categories involve highly variable individuals, and statistical patterns that distinguish one category member from another do not necessarily exist in nature. They take the lack of one-to-one consistency between categories and their members to mean that emotions are highly variable across individuals, and while categorising emotions in networks can provide a valid statistical

summary, the authors counterargue that it does not prove that emotions are naturally distinct. In fact, they argue that this view aligns best with Barrett's theory of constructed emotion. Barrett hypothesised that the medial prefrontal and posterior cingulate cortices worked alongside limbic regions to produce allostatic predictions that we interoceptively perceive as emotions (see the Embodied Predictive Interoception Coding model; Barrett, 2012; Barrett & Simmons, 2015); Saarimäki et al.'s (2016) findings reinforce Barrett's hypotheses by showing that there are cortical and subcortical interactions during the experience of emotion, and that the medial prefrontal and posterior cingulate cortices are two key regions for the subjective experiences of most emotional states. Thus, instead of interpreting Saarimäki et al.'s results as evidence that basic emotions lie within specific interactions, constructionists specifically argue that these data reflect a *combination* of neural networks involved in affective interoception and emotion-concepts, rather than specific networks that represent basic emotions (Clark-Polner et al., 2016).

Nevertheless, there is a significant limitation to Barrett's arguments. The claim that statistical patterns do not reflect natural entities supports the idea that the classic view of emotion may have fallen into essentialism, but it neglects alternative explanations. Most notably, it is possible that the lack of one-to-one consistency observed in neuroimaging studies is related to individual differences in the emotional concepts that are automatically activated alongside emotions (Panksepp, 1994; Damasio, 1999; Izard, 2007). While constructionists group together emotions and emotion-concepts, classical theorists point out that in the same way 'concepts of planets are not planets, concepts of emotions are not emotions' (Adolphs, 2017b); emotions and emotion-concepts are fundamentally different things. Emotion-concepts are theorised to be primarily distributed across cognitive or perceptual areas, the regions that show most inconsistencies between emotion categories (Izard, 2007; cf. Saarimäki et al., 2015; cf. Kirby & Robinson, 2017), whereas emotion-states are thought to lie within networks of subcortical regions and possibly driven by a key subcortical structure (e.g. the amygdala for S.M.'s experience of fear; cf. Feinstein et al., 2016). Hence, while the inclusion of emotion-concepts in the definition of emotion might create a lens through which emotions do not have

identifiable neural underpinnings, there are theoretical and empirical grounds on which to separate the two, and not enough evidence to show that the neurological networks associated with emotion-states are not distinct.

In fact, Saarimäki and colleagues (2016) did find that unique networks were associated with individual emotions, and a recent study combining MVPA with magnetoencephalography (MEG; a nascent technology with greater temporal resolution than fMRI) showed that individual emotions also exhibit unique temporal patterns (see Grootswagers et al., 2021). Thus, while the activation of the medial prefrontal and posterior cingulate cortices with every emotion may reflect the interoceptive systems hypothesised by Barrett (Barrett, 2012; cf. Clark-Polner et al., 2016), it seems that this network is merely assisting with the interoception of individual emotions. In other words, Saarimäki and colleagues' (2016) data does support Barrett's (2012) hypothesis, but it *also* provides evidence that individual emotions are associated with unique networks of regions. Future research using MVPA and MEG technologies should continue to disentangle the seemingly overlapping patterns of activity in the limbic system and ultimately dissociate the neural substrates of emotion-states from emotion-concepts. For now, however, it would be premature to preclude the existence of individual emotion-states that exist independently from emotion-concepts (Izard, 2007; c.f. Wager et al., 2015).

Discussion

Emotion is a rapidly evolving concept. Evidence from lesion studies reveals that certain brain regions are fundamental for experiencing certain emotions, but neuroimaging technology shows that the neural representations of emotions are more variable than previously envisioned. Although this understanding has outdated Ekman's (1999) definition of basic emotions, theorists have struggled to encompass extant evidence on the nature of emotion in a single framework. Contrary to the classical view of emotion, it seems that basic emotions can be dissociated into more elementary facets of those emotions (see the case of S.M. section above; cf. Feinstein et al., 2016; cf. Adolphs, 2017a), and contrary to social

constructionist views, there is enough evidence to suggest that emotions are mental states that are neurologically different from each other, and that – as a whole – these functional states are qualitatively different from mental concepts that can be compared to 'money' (Barrett, 2017).

Lesion studies provide strong evidence for the classical view of emotion. S.M. is a clear example of 1) the extent to which fear concepts are different from state-fear; 2) the fact that fear is distinct from other emotions; and 3) the fact that fear can be separated into different sub-components. If we considered emotions as concepts, we could argue that the fear-related concepts S.M. has acquired throughout the years constitute an emotional experience, but electrophysiological data from fear-learning paradigms, behavioural data in loss-aversion tasks, and self-report data clearly indicate that she does not experience many of the markers that differentiate fear from other emotions (Feinstein et al., 2016). To be sure, the fact that she can experience negative valence, high arousal, and avoidance behaviours (i.e. at the prospect of going to the dentist, or breathing air rich in carbon dioxide) indicates she can still experience some of its physiological aspects, but the fact that in those scenarios S.M. reports feeling pain or anger due to the neurological damage she has experienced speaks to the importance of the amygdala and complimentary regions (e.g. ventromedial prefrontal cortex and enthorhinal cortex) in producing *state* fear. Thus, because a lesion to the amygdala prevents S.M. from experiencing state-fear, but not other aspects of fear (e.g. fear concepts) or indeed other emotions, it is likely that the neural substrates of fear are biologically unique.

Other non-neuroimaging approaches also support the importance of specific neural regions to emotion. S.M.'s case study is unique in that she suffers from a particularly severe case of a rare disease, but the data from this study are only part of the broader literature showing the importance of specific brain regions in relation to emotions. For instance, researchers have found that lesions to the insula and basal ganglia prevent people from selectively experiencing disgust, but not any other emotion (Calder et al., 2001); specific neural populations can produce specific-emotion behaviour (Lin et al., 2011); fear does not rely on cognitive processes for its activation (Öhman & Mineka, 2001; Mineka & Öhman, 2002); and direct brain stimulation can elicit discrete emotions (e.g. Krack et al., 2001; Okun et al.,

2004). Together, these non-neuroimaging findings suggest that there is indeed a strong relationship between brain regions and individual emotions, meaning that the neurological substrates of individual emotions are sufficiently unique that – in theory – if we mapped all of these regions and stimulated the appropriate areas, we should be able to artificially induce the functional state that underpins each emotional experience.

Neuroimaging evidence presents a slightly different picture. Based on current data, Barrett (2017) builds a compelling case that limbic regions govern elementary functions related to arousal, saliency, and relevance, and cortical regions help shape these emotional states into emotions (Barrett, 2017). However, her argument falters when she interprets this as evidence that emotions do not have specific neurological underpinnings. Neuroimaging evidence does suggest that becoming cognitively aware of our emotion-states involves interoceptive processes that make use of systems such as the default mode, salience, and frontoparietal control networks (Damasio & Carvalho, 2013; Kragel & LaBar, 2014; Barrett, 2017), but there is little evidence indicating that emotion-states do not have distinguishable neural systems beneath the neural representations of these emotion-concepts. In fact, there is some evidence from MVPA studies suggesting that emotion-states lie *within* specific interactions in the brain (Saarimäki et al., 2016; Celeghin et al., 2017; Bush et al., 2018). Additionally, there is nascent evidence from an MEG study using MVPA that different emotions exhibit unique temporal dynamics (Grootswagers et al., 2021), which suggests that the nature of these interactions may not only be physical, but also temporal. As things stand, constructionists have interpreted the current lack of one-to-one consistency found in neuroimaging studies as proof that significant findings are but statistical summaries, and that emotions are not to be found in nature. However, given most interpersonal differences are found in cortical regions that are also associated with emotion-concepts, and that there is evidence linking emotion-states to unique physical and temporal representations in the brain, it is possible that emotion-states (but not emotion-concepts) consistently rely on unique patterns of neurological activity.

Together, lesion and neuroimaging evidence suggest that core affect is probably a reducible reality in the brain. Lesion studies have shown that

damage to the amygdala can prevent people from selectively experiencing state-fear (Feinstein et al., 2016) and damage to the insula can impair people's ability to experience state-disgust (Calder et al., 2000). Neuroimaging research shows that these regions are vital to the salience (Ekhtiari et al., 2016) and default mode (Seeley, 2019) networks, respectively, which – as previously explored – play a key role in interocepting emotions from core affect (Barrett, 2017). If broad affective systems were the fundamental reality of the brain, and emotions were best described as mentalisations of such core affect, a lesion to one of these systems should damage at least whole clusters of similar emotions – but this is not what the data show. Despite fear and disgust being extremely similar by all measures of core affect (i.e. both are negatively valenced, high arousal, BIS-driven emotions), lesions to the amygdala exclusively impact people's ability to experience state-fear and lesions to the insula exclusively impact people's ability to experience state-disgust (cf. Calder et al., 2000; cf. Feinstein et al., 2016). Thus, given that there are key regions without which people can experience all emotion-states but one, and there is not such known relationship between brain regions and emotion-concepts, it seems likely that emotion-states are affective experiences qualitatively different from emotion-concepts that merit individual distinction.

Conclusion

Early theorists postulated that emotions are evolutionarily adapted affective states that promote specific action tendencies. Inconsistent evidence concerning their neurological underpinnings prompted some theorists to hypothesise that perhaps emotions were better construed as mentalisations of core affective states. Based on neuroimaging data, Barrett (2006, 2017) makes a compelling argument that subcortical regions might govern elementary aspects of emotion such as arousal, saliency, and relevance while cortical regions help to shape these emotional states into the emotion-concepts we experience. However, recent neuroimaging findings indicate that emotions are underpinned by unique physical and temporal patterns of region-activation. Additionally, lesion evidence indicates that certain subcortical brain regions are vital to the proper

experiencing of emotion-states. Thus, it is possible that individual regions are responsible for different *aspects* of the emotion, and that basic emotion-states are found within unique but overlapping networks of regions. In this manner, our emotional experiences could arise from a unique collection of properties, with emotion-states eliciting consistently distinct combinations of neural networks, and emotion-concepts activating highly variable representations in cortical regions that allow us to create, update and implement allostatic schemas. Future research should aim to delineate the exact relationship between emotion-concepts and emotion-states and continue to explore the unique dynamics underpinning individual emotion-states, but as things currently stand, there is enough evidence to suggest that emotion-states are grounded in the brain's architecture.

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Social Determinants of Health and the COVID-19 Pandemic: An Evidence-Based Approach to Health Equity

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Abstract – Disparities in the provision of healthcare have a negative impact on socially vulnerable populations, both nationally and internationally. During the COVID-19 pandemic, social determinants of health (SDHs) have played a significant role in COVID-19 incidence and fatality. It is necessary to understand the full impacts of social vulnerability and government intervention on COVID-19 outcomes. Here, we show the correlation between the twin pandemics of adverse SDHs and COVID-19 on the one hand, and the efficacy of public health intervention in mitigating this double hit on vulnerable communities on the other. Utilising the United States Centers for Disease Control and Prevention's Social Vulnerability Index (SVI), we categorised New York City counties into three vulnerability cohorts. We then performed an analysis and fitted a Susceptible-Infected-Recovered-Deceased (SIRD) model to daily cases, deaths, and hospitalisation data reported by the New York City Department of Health and Mental Hygiene and the SIRD model for the months of March and May 2020. Our results demonstrate that more socially vulnerable populations appear to experience greater COVID-19 cases and deaths and that specific city, state, or US federal government intervention correlated with reduced disparities in COVID-19 outcomes. Moreover, moderately vulnerable communities observed the greatest rate of COVID-19 cases and deaths and highly vulnerable communities exhibited the greatest cumulative number of COVID-19 cases and deaths. These findings may encourage public health interventions which can increase health equity in various settings.

Keywords: COVID-19, pandemic, Social Determinants of Health, health inequality, emergency preparedness

1. Introduction

Socially vulnerable groups including low-income communities, minority groups, immigrants, refugees, children, and the elderly are historically prone to public health emergencies such as disease outbreaks and natural disasters – as are individuals who lose family members in those crises. The disparities in risk are heavily influenced by social determinants of health (SDHs): non-biological conditions such as socioeconomic class, political and cultural factors; and accessibility to nutrition, healthcare, education, housing, and employment that impact health – or, in simpler terms, the conditions in which people are born, grow, live, work, and age (World Health Organization, 2008). The effects of SDHs, in turn, are mediated by the allocation of power, resources, and money within society (New England Journal of Medicine Catalyst, 2017).

1.1 SDHs and Emergency Preparedness

The disparities in SDHs between social groups have been shown to correlate with disparities in health outcomes. Countries and regions with limited-capacity public health and medical infrastructure are particularly vulnerable to poor health, due to lack of access to quality healthcare – for geographic or financial inaccessibility – or a lack of medical provision; accessing quality healthcare is even deemed unacceptable by certain cultures (Figure 1) (Lee et al., 2015; Preda & Voigt, 2015; Pheage, 2017; Baah et al., 2018; Compton et al., 2018; Palmer et al., 2019). Historically, vulnerable health systems such as that of Sierra Leone and Myanmar have been susceptible to pandemics, natural disasters, and other health emergencies, and often encounter such barriers as improper equipment, inadequate numbers of basic and specialised staff, and a lack of facility capacity and equipment (Mills, 2011; Scheffler, 2018; Ma & Vervoot, 2020).

Figure 1. The framework of factors that affect healthcare accessibility (Peters et al., 2008).

1.2 COVID-19 Disparities in the United States

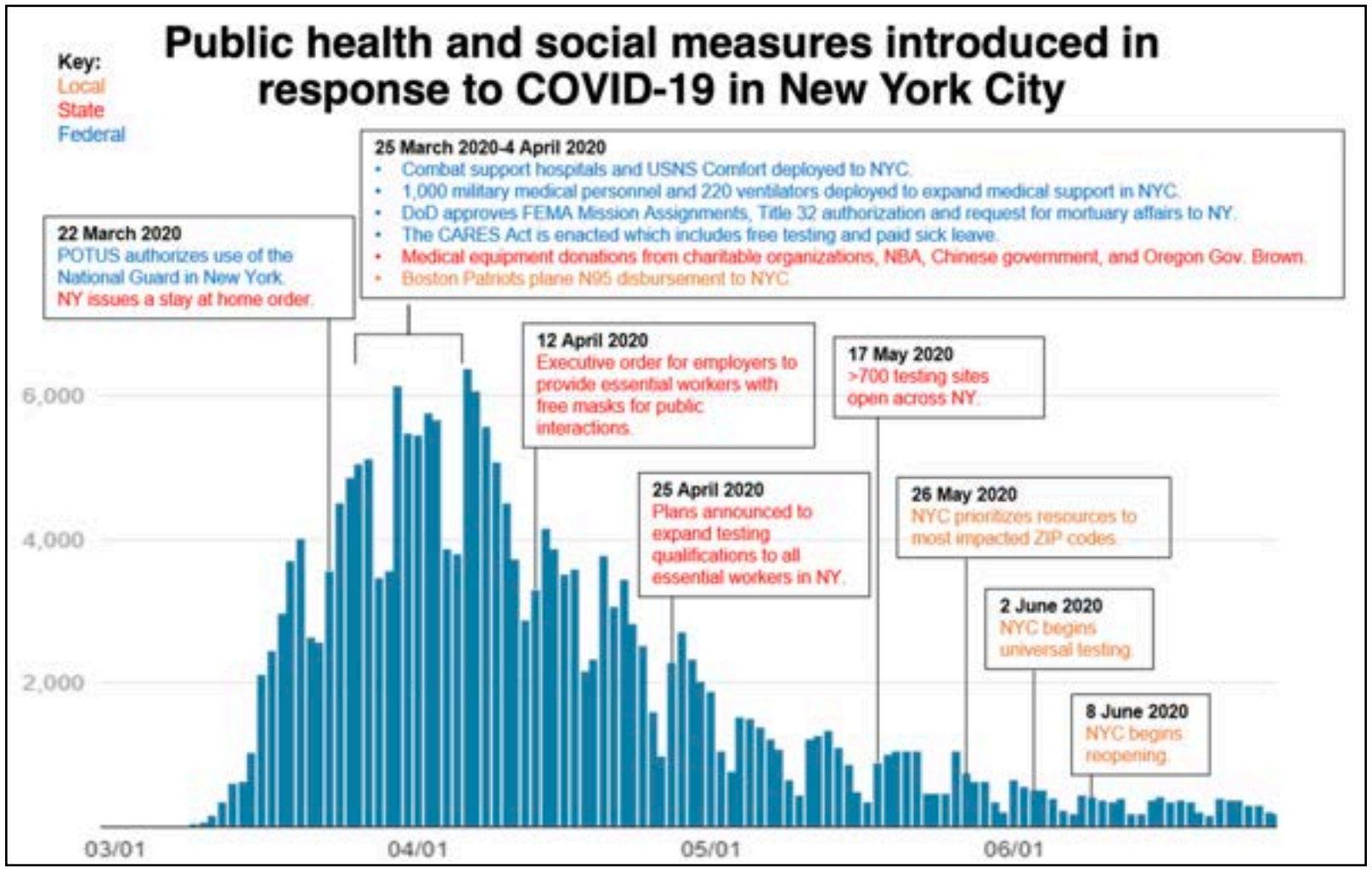


Figure 2. Timeline of pertinent COVID-19 public health interventions and correlating daily case counts in NYC. Compiled from Intarasuwan et al. (Source: NBC News).

While countries with limited public health capacity tend to be – though are not always – more vulnerable to pandemics, the COVID-19 pandemic has also demonstrated that countries with higher gross domestic products (GDPs), like the United States, do not adequately protect against severe impacts of health emergencies. There are disparities in the availability of hospital beds, treatments, critical care, medical staff, and the types of medical conditions across neighbourhoods; countries also have differing susceptibilities and ways of responding to health emergencies. (Rosenthal et al., 2020; Schellekens & Sourrouille, 2020). In some cases policy interventions have sought to increase accessibility to healthcare in the COVID-19 pandemic, yet there is a lack of understanding of how these interventions have impacted COVID-19 outcomes such as disparities in COVID-19 cases and deaths between communities (Figure 2) (Viner et al., 2020; Weible et al., 2020).

2. Materials & Methods

2.1 NYC as a Microcosm – and categorising counties by SVI

We chose NYC as the region of focus for this study. The once epicentre of the American COVID-19 outbreak provides some of the strongest data sets of COVID-19 in the US: the counties within NYC observe the same social distancing policy and data collection techniques, and NYC is noted for its socioeconomic diversity, which is pivotal to this study of SDHs (Furman Center for Real Estate and Urban Policy, 2011; Economic Policy Institute, 2018). The socioeconomic variation in NYC allows for consideration of a greater range of social vulnerability backgrounds.

To measure social vulnerability, the United States (US) Centers for Disease Control and Prevention (CDC) has crafted a metric called the Social Vulnerability Index (SVI), which accounts for 15 social factors observed to affect health and wellbeing (Flanagan et al., 2018). The CDC assigns each county a numerical indication of social vulnerability to health complications (Figure 3).

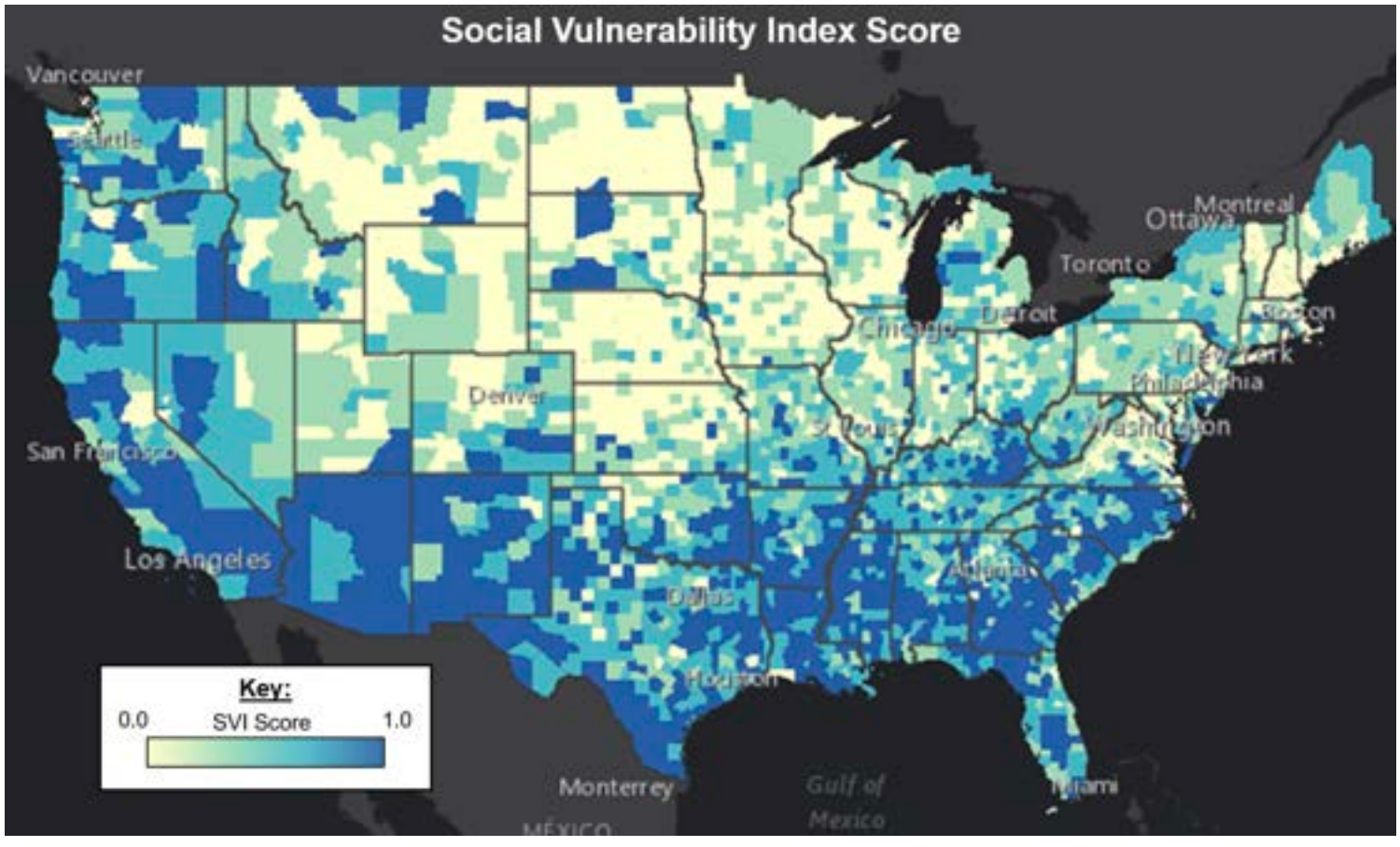


Figure 3. Map of Social Vulnerability Index of US counties (Flanagan et al., 2018).

In this article, we study the implications of SDHs on COVID-19 transmission and mortality rates in reported data and SIRD model simulations, which use the SVI to account for predispositions that might affect health outcomes. Where the majority of previous studies focuses only on one single indicator, the use of the SVI here produces a greater analysis of overall social vulnerability at a county level, by accounting for 15 social factors (Flanagan et al., 2018; Hendryx & Luo, 2020; Chowkwanyun & Reed, 2020; Rosenthal et al., 2020; Schellekens & Sourrouille, 2020). Specifically, we analyse COVID-19 cases, deaths, and hospitalisation data in different counties to model the spread of COVID-19 within counties in New York City (NYC), grouped by SVI. To explore the significance of local, state, and federal responses to minimise inequality in COVID-19 outcomes in NYC, we compare COVID-19 trends in March 2020 and May 2020 to analyse the evolution of the disease.

The CDC's SVI was employed to categorise NYC counties; its 15 social factors are categorised into four tracts (Figure 4). The SVI was chosen because it is the most comprehensive and well-established metric for social vulnerability. This metric is reported on a county level, and it has been tailored for use in public health (Flanagan et al., 2018).

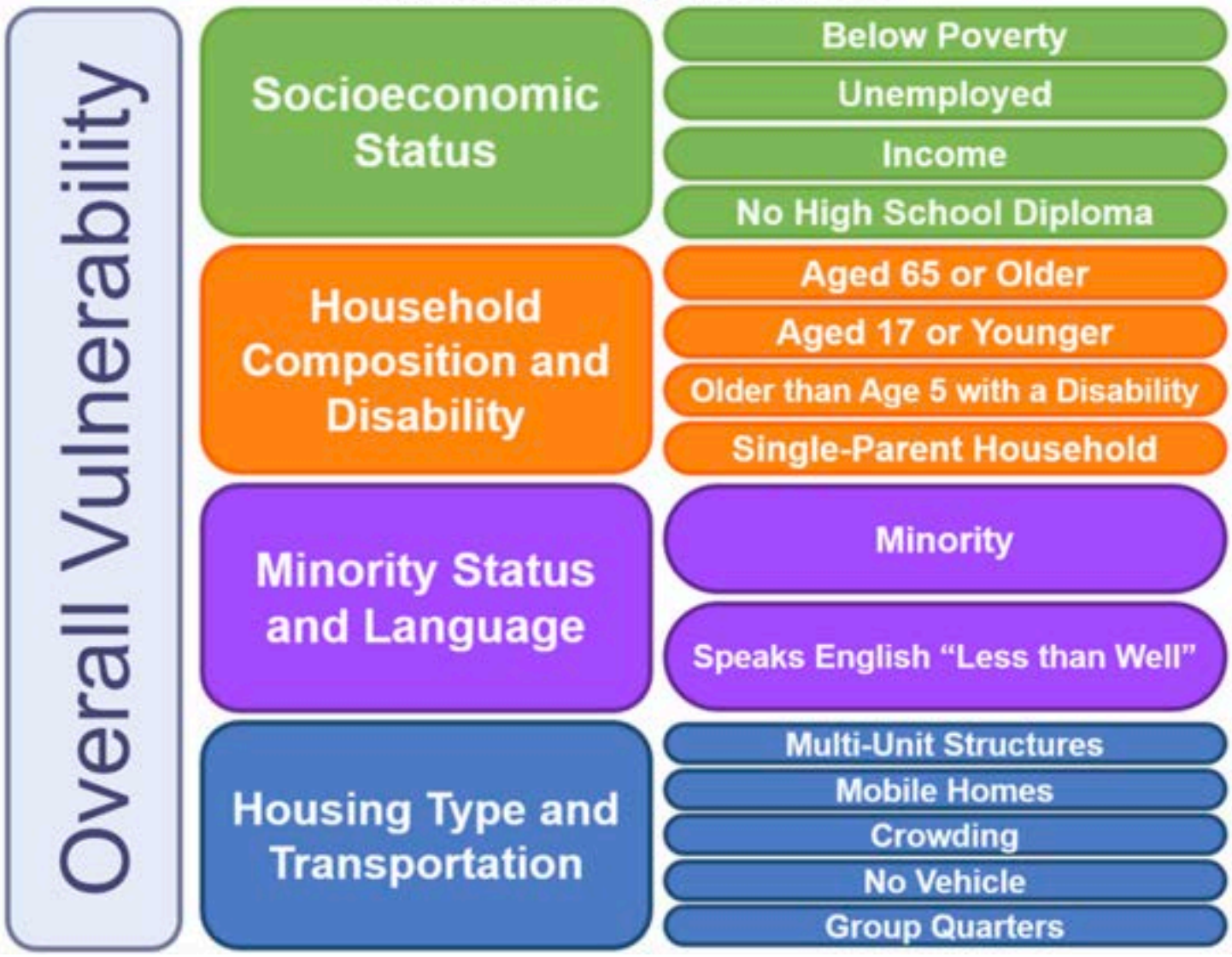


Figure 4. Factors that affect Social Vulnerability Index (Flanagan, 2018).

The NYC counties were grouped into three categories – low vulnerability (LV), moderate vulnerability (MV), and high vulnerability (HV) – based on their reported SVI (Figure 5). This was accomplished by taking the range of SVIs per NYC borough and dividing the range into three equivalent groups. The population of each county is as follows: 2,736,074 (Kings County), 2,405,464 (Queens County), 1,694,251 (New York County), 1,472,654 (Bronx County), and 495,747 (Richmond County).

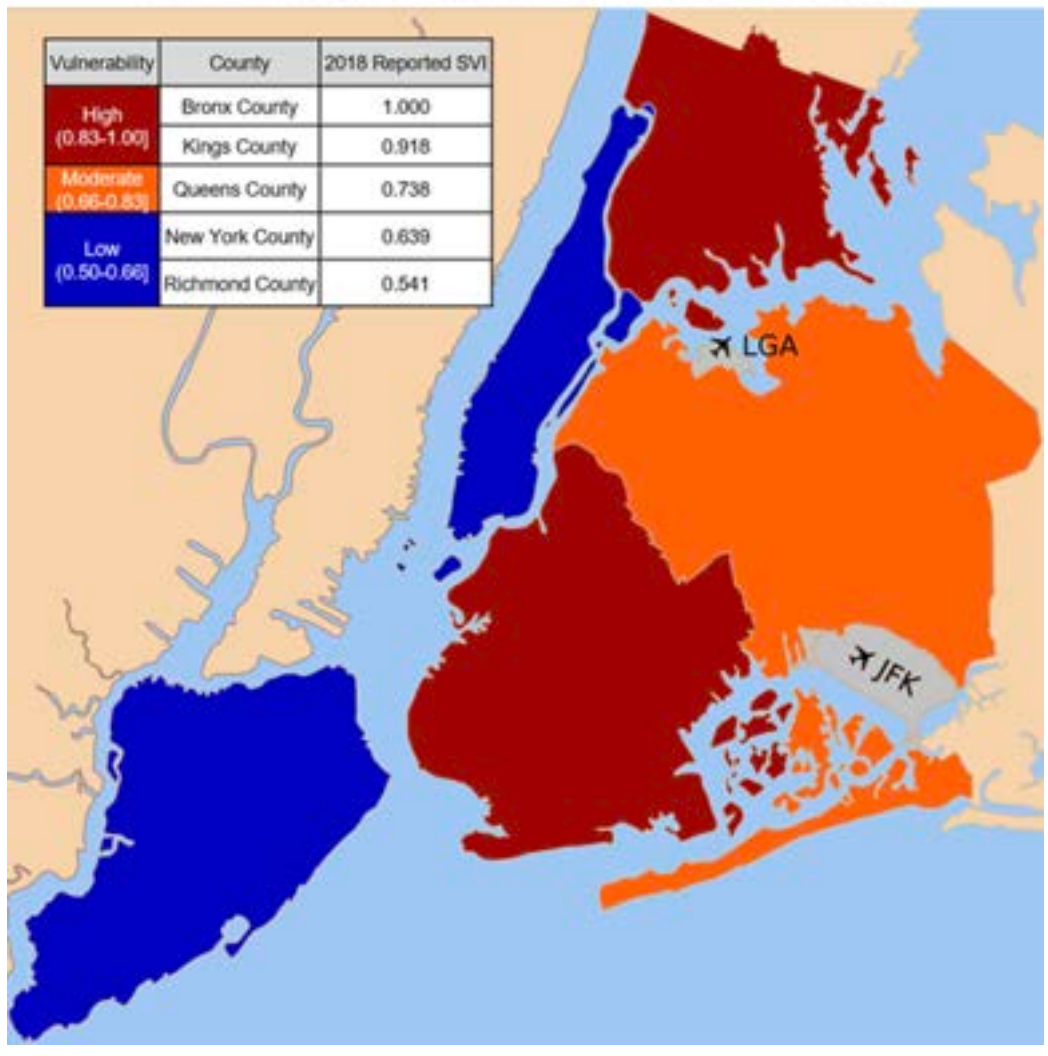


Figure 5. NYC counties categorized by SVI. The most vulnerable NYC boroughs are prominently characterised by socioeconomic strife and marginalised demographics.

2.2 Time Period Stratification and Determination of Trends in Reported Data

We evaluated the impacts of federal resources, of changes in infrastructure capabilities and in healthcare accessibility, and of social distancing measures on the course of COVID-19 in these counties, during the months of March and May 2020. NYC COVID-19 response capabilities evolved significantly between these months. In March 2020, federal resources were deployed in NYC, and the Coronavirus Aid, Relief, and Economic Security Act (CARES) was enacted (Trump, 2020; United States Department of Treasury, n.d.). By May 2020, NYC reported 28,490 COVID-19 cases, a decrease from 109,432 in the previous month (New York City Department of Health and Mental Hygiene, 2020; Siedner et al., 2020). Differences in COVID-19 transmission and mortality rates between

the cohorts during this period may indicate whether the public health interventions were more helpful for certain social groups than for the socially very vulnerable.

To analyse trends in COVID-19 outcomes between cohorts, we compiled data from the NYC Department of Health (DoH) on the daily number of new cases, daily deaths at any location following a positive COVID-19 laboratory test, and daily hospitalisations during March and May 2020 (New York City Department of Health and Dental Hygiene, 2020). The number of daily deaths was subtracted from the number of daily hospitalisations on the same date to estimate daily recoveries as data on recoveries from COVID-19 infection were not reported (Martin, 2020; White, 2020; Hall, 2020). This method relies on the assumption that those who are hospitalised but do not succumb to COVID-19 have recovered. COVID-19 data collected by the NYCDoH are noted to be robust and having a three-day lag time (New York City Department of Health and Dental Hygiene, 2020). We calculated the daily cases per 10,000 people, and daily deaths and daily recoveries per 100,000 people, to examine variations in the populations. GraphPad Prism was used to plot the data; we graphed the linear line-of-best fit using the least-squares method, and computed the Pearson correlation coefficient (r) and p-value to determine the strength of the linear fit.

2.3 SVI-Stratified SIRD Model: An Innovative Approach

To model the evolution of COVID-19 spread within the vulnerability cohorts, we applied the SIRD model. The SIRD model contains the compartments susceptible (S), infected (I), recovered (R), and deceased (D) (Figure 6). This specific model was chosen because it was appropriate for the type of data we collected from the NYC DoH on daily cases, deaths, and hospitalisations.

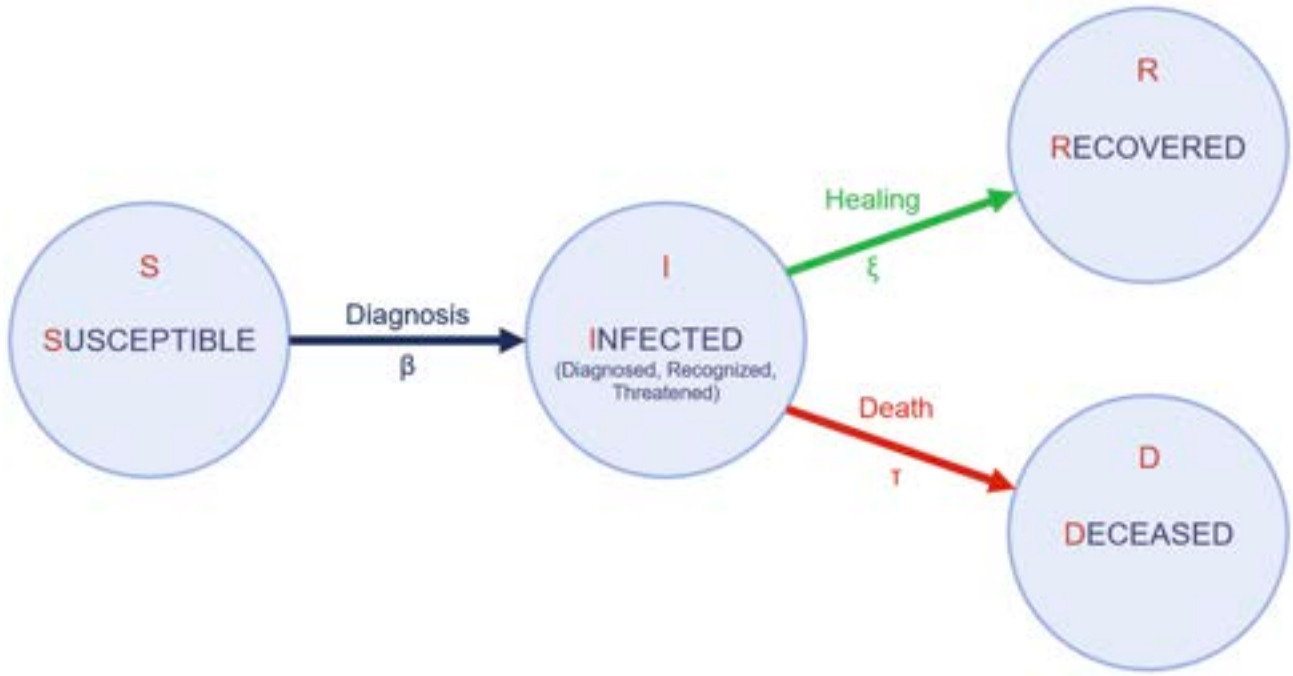


Figure 6. Graphical representation of the interaction between different stages of the SIRD model.

Equations (1–4) are the SIRD differential equations:

$$S'(t) = -\beta S(t)I(t) \quad (1)$$

$$I'(t) = \beta S(t)I(t) - (\tau + \xi)I(t) \quad (2)$$

$$R'(t) = \xi I(t) \quad (3)$$

$$D'(t) = \tau I(t) \quad (4)$$

S(t), I(t), R(t), and D(t) represent the fraction of the total population within the compartment. The parameters denoted by Greek letters are as follows: β denotes the transmission rate for susceptible individuals; ξ denotes the recovery rate for identified individuals; and τ denotes the mortality rate for identified individuals.

2.4 Fitting the Parameters for NYC Vulnerability Cohorts

The model parameters were determined using data from March and May 2020 from the NYC DoH and Rt.live, a COVID-19 transmission tracker that analyses data from the Covid Tracking Project (New York City

Department of Health and Dental Hygiene, 2020; Systrom & Vladeck, 2020). We determined the population of each cohort with 2019 US Census data (United States Census Bureau, n.d.). The transmission coefficient (β) was calculated with a sub-sampling technique developed by Kirkeby et al. (2017). This method estimates the transmission coefficient with greater accuracy than the traditional Poisson distribution method and only requires sub-samples for linear epidemiological models (Kirkeby et al., 2017). The mortality coefficient (τ) and recovery coefficient (ξ) were estimated using a data-based method for the SIRD model derived by Anastassopoulou et al. (2020). The Fourth Order Runge-Kutta method with a step size of one day was used to solve the differential equations to determine the number of individuals within a specific compartment on a given day. The fractions of the population within each compartment are converted into actual population numbers to account for variation in cohort populations. The initial parameters calculated with the above methods are put into the model for each simulation (Table 1).

		Day 1	β	τ	ξ	S(1)	I(1)	R(1)	D(1)
March	LV	3/1/2020	0.2626	0.0064	0.1408	0.9999995	0.0000005	0.0000000	0.0000000
	MV	3/3/2020	0.3578	0.0114	0.1891	0.9999996	0.0000004	0.0000000	0.0000000
	HV	3/3/2020	0.3607	0.0111	0.1911	0.9999998	0.0000003	0.0000000	0.0000000
May	LV	5/1/2020	0.0065	0.0038	0.0048	0.9839861	0.0119096	0.0028667	0.0012376
	MV	5/1/2020	0.0065	0.0045	0.0041	0.9760473	0.0174430	0.0044235	0.0020862
	HV	5/1/2020	0.0075	0.0039	0.0060	0.9781670	0.0160680	0.0038530	0.0019120

Table 1. Calculated SIRD model parameters and initial values for each SIRD model simulation.

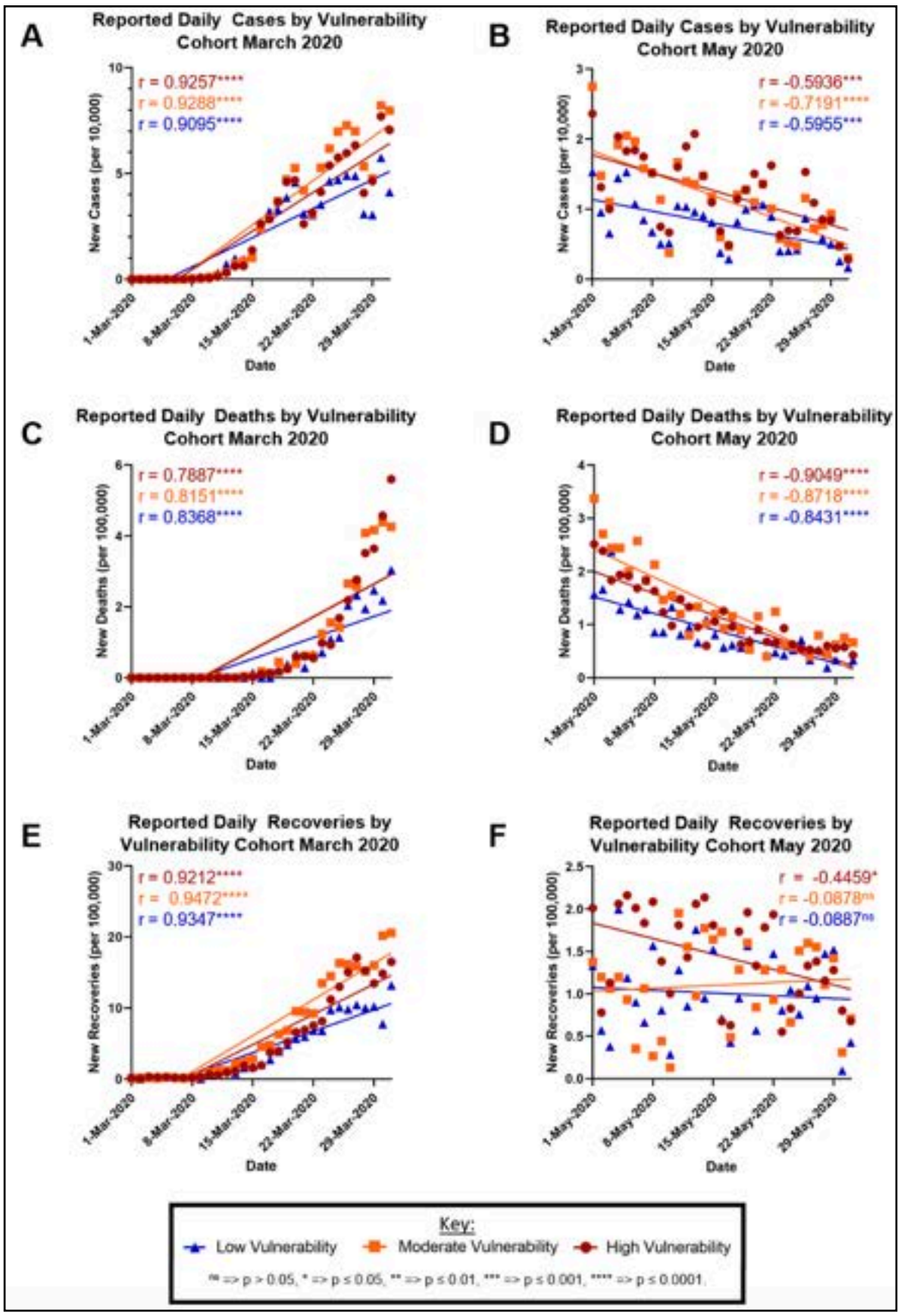
3. Results

3.1 Reported COVID-19 Cases and Deaths

The data for the daily cases per 10,000 individuals, deaths per 100,000 individuals, and recoveries per 100,000 individuals related to COVID-19 were compiled for each vulnerability cohort and graphed (Figure 7).

Figure 7. (below) COVID-19 cases and deaths in low, moderate, and high vulnerability groups:

A. Reported daily cases by vulnerability cohort March 2020
B. Reported daily cases by vulnerability cohort May 2020
C. Reported daily deaths by vulnerability cohort March 2020
D. Reported daily deaths by vulnerability cohort May 2020
E. Reported daily recoveries by vulnerability cohort March 2020
F. Reported daily recoveries by vulnerability cohort May 2020



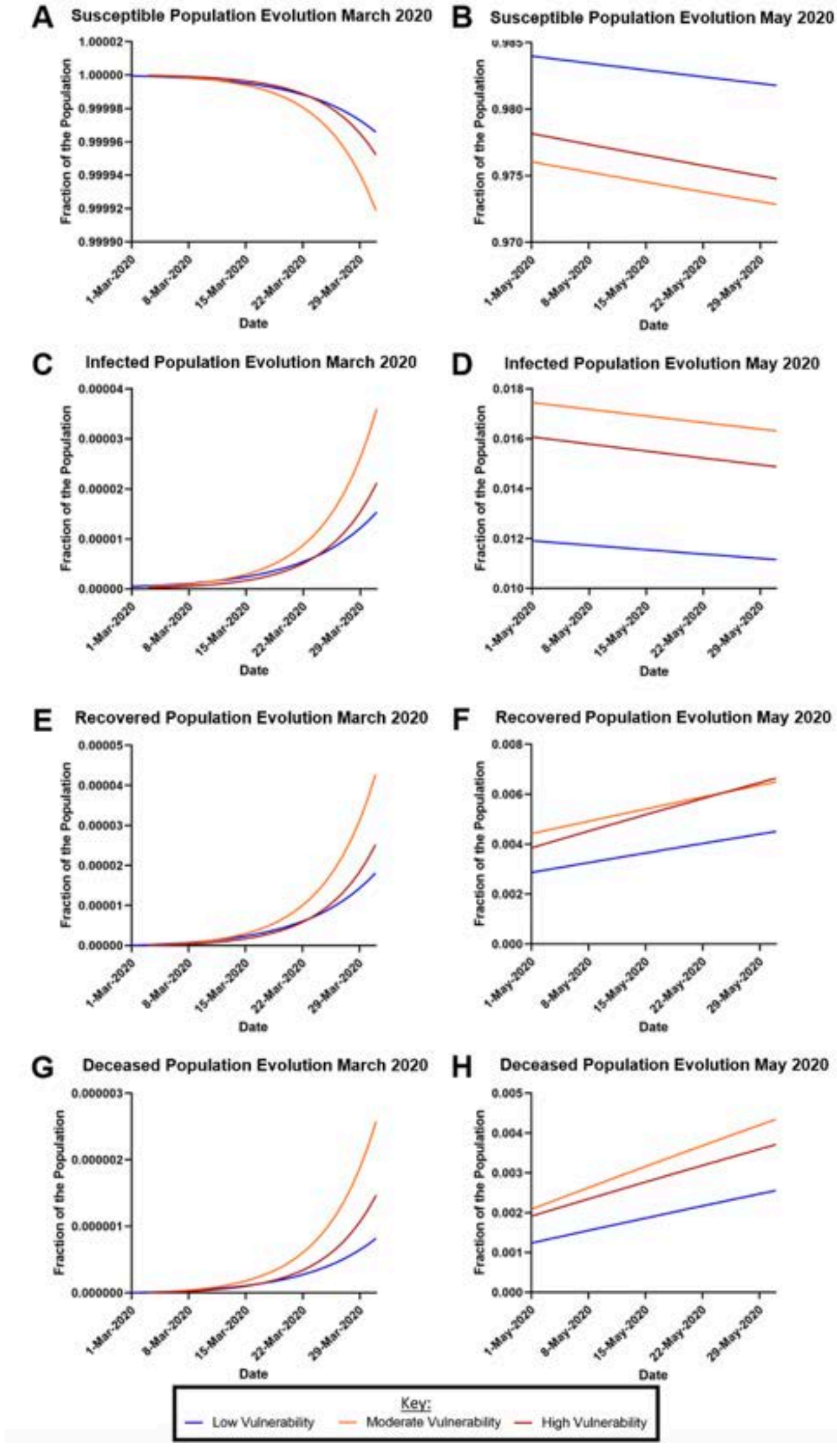
In March 2020, the three vulnerability groups (LV, MV, HV) displayed an increasing trend in daily COVID-19 cases per 10,000 people, daily COVID-19 deaths per 100,000 people, and daily COVID-19 recoveries per 100,000 people (Figures 7A, 7C, and 7E). In May 2020, figures for cases and deaths decreased for all three vulnerability cohorts (Figures 7B and 7D). It is important to note that the lack of correlation between vulnerability level and daily recoveries may by impacted by the techniques utilised to estimate recovery rate as opposed to a true weakening in relationship. The average numbers of daily COVID-19 cases, deaths, and recoveries in the MV and HV groups were greater than those of the LV group, suggesting that more socially vulnerable communities were disproportionately affected by COVID-19.

3.2 Moderate Vulnerability Population

Applying the SIRD model, the MV cohort was the most affected by COVID-19 across the infected, recovered, and deceased compartments compared with the other LV or HV cohorts (Figure 8). Evidence of this can be seen in the changes in the fraction of the population within each compartment. In the simulation, the MV group had the greatest percentage of the susceptible population that would contract and perish from COVID-19 (Figures 8A, 8B, 8G, and 8H).

Figure 8. (below) SIRD models:

A. Susceptible population evolution March 2020
B. Susceptible population evolution May 2020
C. Infected population evolution March 2020
D. Infected population evolution May 2020
E. Recovered population evolution March 2020
F. Recovered population evolution May 2020
G. Deceased population evolution March 2020
H. Deceased population evolution May 2020


A
Susceptible Population Evolution March 2020
Fraction of the Population
1.00002
1.00000
0.99998
0.99996
0.99994
0.99992
0.99990
1-Mar-2020
8-Mar-2020
15-Mar-2020
22-Mar-2020
29-Mar-2020
Date
B
Susceptible Population Evolution May 2020
Fraction of the Population
0.980
0.975
0.970
1-May-2020
8-May-2020
15-May-2020
22-May-2020
29-May-2020
Date
C
Infected Population Evolution March 2020
Fraction of the Population
0.00004
0.00003
0.00002
0.00001
0.00000
1-Mar-2020
8-Mar-2020
15-Mar-2020
22-Mar-2020
29-Mar-2020
Date
D
Infected Population Evolution May 2020
Fraction of the Population
0.018
0.016
0.014
0.012
0.010
1-May-2020
8-May-2020
15-May-2020
22-May-2020
29-May-2020
Date
E
Recovered Population Evolution March 2020
Fraction of the Population
0.00005
0.00004
0.00003
0.00002
0.00001
0.00000
1-Mar-2020
8-Mar-2020
15-Mar-2020
22-Mar-2020
29-Mar-2020
Date
F
Recovered Population Evolution May 2020
Fraction of the Population
0.008
0.006
0.004
0.002
0.000
1-May-2020
8-May-2020
15-May-2020
22-May-2020
29-May-2020
Date
G
Deceased Population Evolution March 2020
Fraction of the Population
0.000003
0.000002
0.000001
0.000000
1-Mar-2020
8-Mar-2020
15-Mar-2020
22-Mar-2020
29-Mar-2020
Date
H
Deceased Population Evolution May 2020
Fraction of the Population
0.005
0.004
0.003
0.002
0.001
0.000
1-May-2020
8-May-2020
15-May-2020
22-May-2020
29-May-2020
Date
Key:
Low Vulnerability
Moderate Vulnerability
High Vulnerability

In addition, the calculated modelling parameters provided valuable information on rates of infection, mortality, and recovery. In March 2020, the LV observed the smallest transmission, mortality, and recovery rates of the three vulnerability cohorts (Figure 9). All parameters decreased in May 2020 with MV and HV nearing LV parameters. Thus, this suggests that the disparities in COVID-19 transmission and mortality were greater in March 2020 than in May 2020. Examining outcomes for the two time periods, we note the success of treatment and public health measures in not only minimising the spread of COVID-19, but also in reducing discrepancies between the different cohorts.

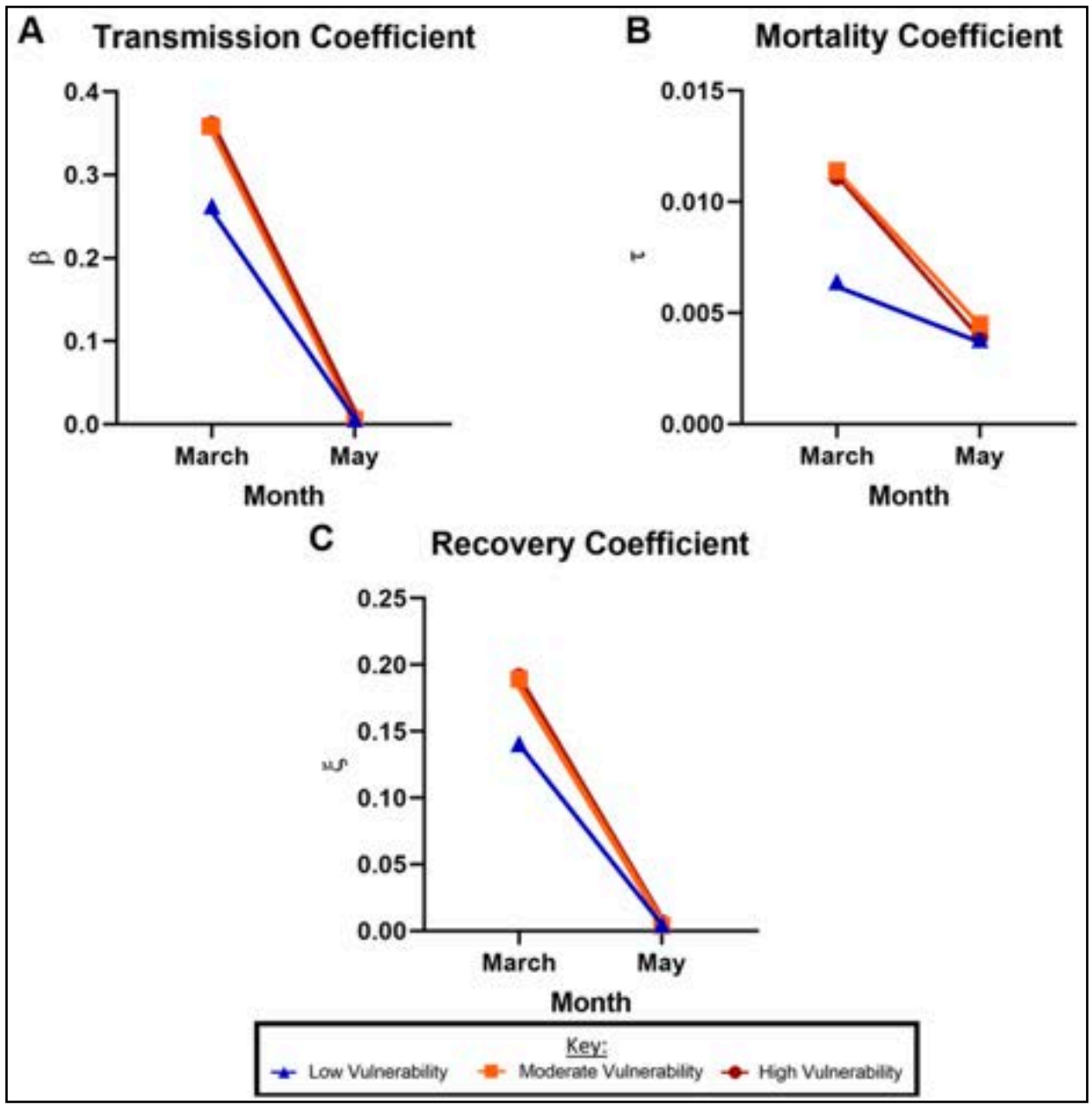


Figure 9. Calculated transmission, mortality, and recovery rates for SIRD model runs for low, moderate, and high vulnerability cohorts:

A. Transmission coefficient
B. Mortality coefficient
C. Recovery coefficient

3.3 High Vulnerability Cohort

Across all simulated months for cases and deaths, the HV group had the greatest cumulative number of cases and deaths followed by MV and LV groups (Figures 10A and 10B). By 31 May 2020, the cumulative numbers of COVID-19 cases for each of the vulnerability groups, in descending vulnerability order, were 100,352 (HV), 61,185 (MV), and 38,346 (LV). The cumulative numbers of COVID-19 related deaths, in descending vulnerability order, were 14,754 (HV), 9,788 (MV), and 5,378 (LV) (Figure 9C). The more vulnerable groups are simulated to experience the greatest number of cases and deaths due to the respective populations of each vulnerability group.

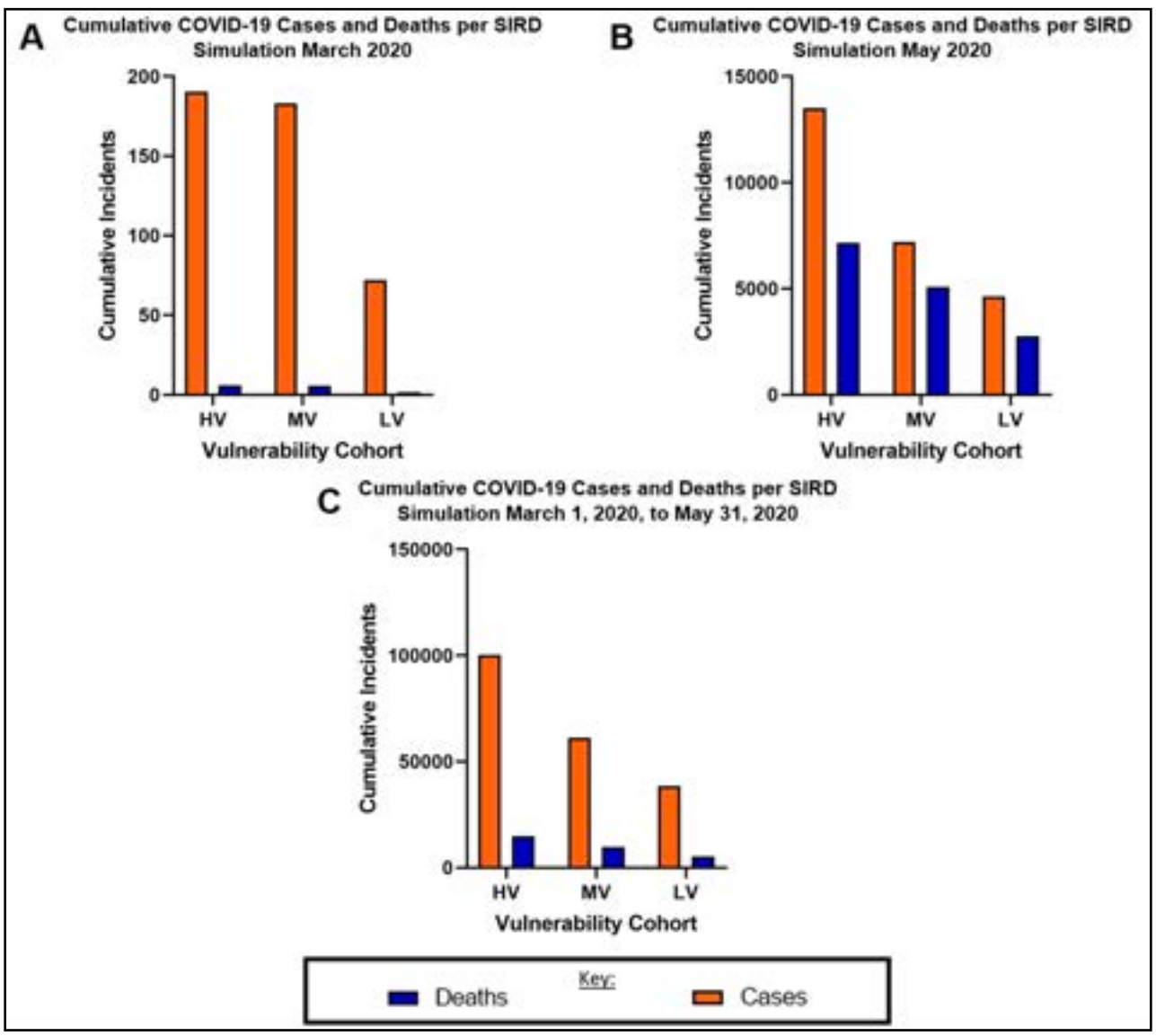


Figure 10. SIRD model cumulative cases and deaths:

A. Cumulative COVID-19 cases and deaths per SIRD simulation March 2020
B. Cumulative COVID-19 cases and deaths of per SIRD simulation May 2020
C. Cumulative COVID-19 cases and deaths of per SIRD simulation March 1, 2020, to May 31, 2020.

4. Discussion

The objective of this study was to utilise data on COVID-19 cases, deaths, and recoveries in NYC counties grouped by SVI to model trends in disparities of COVID-19 transmission and mortality rates. We found that socially vulnerable communities are more prone to COVID-19, as demonstrated by the higher rates of COVID-19 transmission and mortality. The MV appeared to exhibit the greatest percentage of individuals falling ill and perishing to COVID-19, and the HV observed the greatest cumulative COVID-19 death toll. Additionally, the differences in data for March 2020 and May 2020 suggest that government intervention on a local, state, and federal level helped to reduce inequality in COVID-19 outcomes between vulnerability cohorts. This data utilising a social vulnerability index, however, must be viewed with the understanding that environmental factors – such as air quality, availability of public green spaces, and other factors which are distinct from social factors – can potentially have an impact on COVID-19 transmission and mortality rates.

4.1 Social Vulnerability and Trends in COVID-19 Outcomes

Our study builds upon previous publications that have drawn connections between individual social vulnerability indicators and the efficacy of COVID-19 testing, treatment, and government assistance, by employing the CDC's SVI to account for 15 social vulnerability factors (Flanagan et al., 2018; Chowkwanyun & Reed, 2020; Han et al., 2020). Significant r-values and p-values indicate that the most vulnerable communities experience the worst outcomes (Figure 7). As noted, more vulnerable communities lack access to preventative healthcare resources; individuals in these communities are therefore more susceptible to chronic disease, novel pathogens, and severe COVID-19 infection and comorbidities (Figure 11) (Oates et al., 2018; Newman et al., 2019; Abrams & Szefler, 2020).

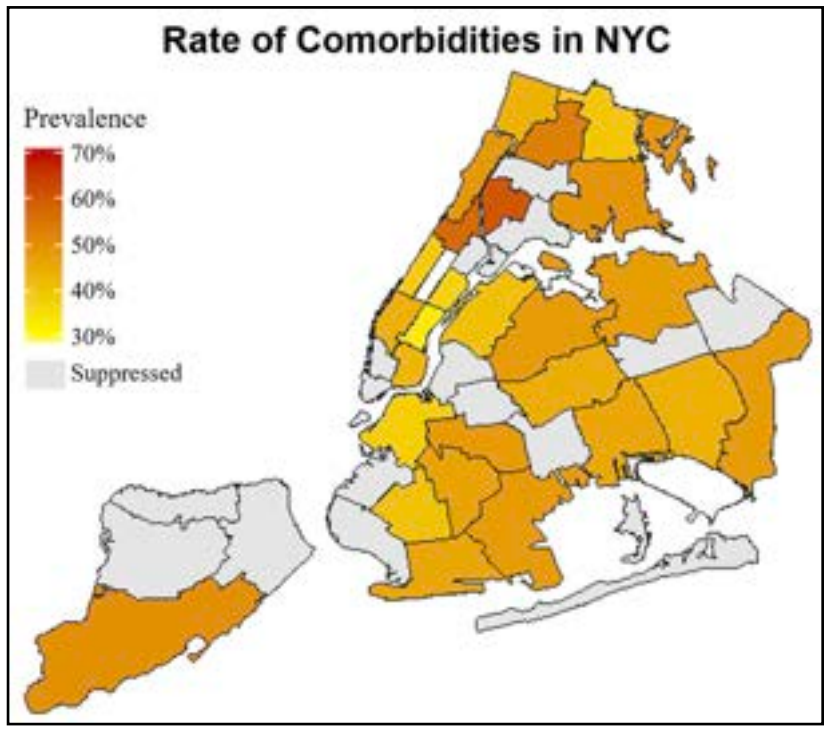


Figure 11. Prevalence of adults with two or more chronic conditions in NYC from 2011-2016 (Newman et al., 2019).

Highly vulnerable populations are also more likely to receive poorer COVID-19 treatment; this was evident in the disparities in COVID-19 mortality within our simulations (Finch & Finch, 2020). As such, individuals in the most vulnerable communities are more likely to contract COVID-19 through community transmission, to develop a severe infection due to comorbidities, to receive poorer care at under-resourced local healthcare facilities, and, subsequently, to die of COVID-19.

4.2 Health Burden on MV Cohort

Our data suggest that in NYC, the MV group saw a greater percentage of its population affected by and perishing from COVID-19 (Figures 7 and 8). This may be due to the fact that Queens County, one of the MV group, has the greatest percentage of individuals in NYC with no health insurance, who are therefore more likely to suffer from poorer health (United States Census Bureau, n.d.). Health insurance coverage is not captured by the SVI. While the most vulnerable groups may receive health insurance coverage through government welfare programs such as Medicaid, recent trends suggest that the number of moderately vulnerable individuals who are uninsured is growing (Tanne, 2006; Komisar, 2013). The lack of healthcare coverage for moderately vulnerable communities means that they will struggle to access adequate healthcare, and this may drive the trend in high COVID-19 incidence and morbidity within these

communities (Figures 7 and 8). The reasons for this trend are multifactorial and influenced by the unique circumstances and aspects of the microcosm, such as age structure, lifestyle, and attitude toward the pandemic. Additionally, this moderately vulnerable group may be composed of individuals just above the Medicaid qualification threshold, but less likely to have access to employer-based health insurance. This could present a barrier and/or deterrent to accessing care.

4.3 Health Surveillance Limitations

Data collected by the NYC DoH and SIRD simulations suggest that the impact of COVID-19 on the HV is less severe than what we had hypothesised (Figures 7 and 8). We offer one possible explanation for this: that the lack of health surveillance mechanisms made it difficult to collect data on COVID-19 cases and deaths in the most vulnerable cohort (Magnusson, 2017). In addition to this lack of infrastructure, shortages in COVID-19 testing equipment have disproportionately impacted under-resourced communities (Finch & Finch, 2020; Vesoulis, 2020). Testing costs, limited testing capabilities, slow result returns, inaccuracy of early tests, and the lack of health education may have contributed to cases and mortalities in the HV group going underreported (Lazar & Davenport 2018; Goldstein et al., 2020). Recent efforts to use antibody testing to retroactively determine the COVID-19 death toll have found that COVID-19 infections in New York may have been ten times higher than reported (Syal, 2020). Underreporting is no doubt a serious concern. If significant portions of the most vulnerable communities are unaccounted for, healthcare organisations, politicians, and the public will not be able to visualise the full extent of the inequality now pervading the healthcare system.

4.4 Public Health Intervention on Healthcare Inequality

Our investigation provides unique insights into the effects of healthcare interventions on COVID-19 transmission, mortality, and cumulative

caseload in different populations in NYC; it examines figures before and after these interventions were implemented – figures in March 2020 and May 2020 respectively (Figure 2). Our analysis of NYC reported data and of SIRD model simulations revealed that the disparities in COVID-19 outcomes decreased from March 2020 to May 2020, particularly in mortality rates (Figures 7 and 8). At the early stages of the pandemic, socially vulnerable communities lacked crucial access to adequate COVID-19 testing and treatment facilities (United States Department of Health and Human Services, 2020). This is reflected in the changes in the SIRD model coefficients: the month of March 2020 saw significantly greater rates of COVID-19 transmission and mortality in the MV and HV cohorts when compared to the LV cohort (Figure 9). Several interventions in NYC sought to address this disparity. These included federal support for the overburdened healthcare system, and legislation that allocated greater resources to more vulnerable communities. Results from May 2020 indicate that individuals in the MV and HV were no more likely than LV to perish from COVID-19 – evidence that the public health interventions were successful in reducing caseload (Figures 9 and 2).

4.5 Limitations

Three limitations in this study should be noted:

1. First, the discrepancies between the cumulative case and mortality numbers of the SIRD model simulations, and the actual data for March 2020, may be attributed to inadequate testing capabilities at the early stages of the outbreak; the U.S. government did not have the means to gather sufficient data on the spread of COVID-19. Testing shortages in NYC has led to inconsistent data on cases, deaths, and recoveries. Indeed, the government's subsequent attempts to increase testing capabilities, coupled with a heightened awareness of COVID-19, has led to an increase in reported cases, which cannot be explained by one single transmission probability (Global Change Data Lab, 2020).

2. The second limitation is that the SVI can only measure social vulnerability at the county-level; it is not able to measure differences between smaller geographical areas, such as neighbourhoods, even though heterogeneity does exist within. In addition, the variation in population size between the three cohorts may impact the given results. We note that ecological fallacy may be at play by which the larger the geographical region examined, the greater chance that the correlations noted may not necessarily result from the independent variable examined but perhaps other factors at play (Robinson, 1950; Selvin, 1958).

3. The New York City Department of Health and Mental Hygiene did not report daily recoveries from COVID-19 infection. In addition, there are also many limitations to estimating this value such as asymptomatic infection and lack of access to health surveillance infrastructure. For this reason, our ability to estimate this value was hindered.

4.6 Future Work

We make four points on how research could be developed in this area:

1. The approach we took of grouping communities by vulnerability and SIRD model compartments could be applied to future studies of COVID-19 – or of other diseases resurging in the US and beyond.

2. Research could also be directed towards analysing the impact of COVID-19 on smaller geographical regions, such as sub-boroughs and zip codes, between which disparities in outcomes have been found.

3. As more data on COVID-19 transmission, infection, mortality, and recovery become available, the accuracy of the SVI-stratified SIRD model and its parameters will improve.

4. This study focused on social vulnerability rather broadly through SVI. Future studies could analyse social vulnerability at the granular level, by examining individual factors in the SVI.

5. Conclusion: an action plan for critical healthcare and equity

This study presents evidence that disparities in COVID-19 health outcomes are linked to social vulnerability and that public health interventions can successfully minimise these disparities. Given these findings regarding social determinants of health, it is important to note that adverse social determinants of health can be directly combatted with effective public health intervention. We call for more preventative mechanisms to combat the higher rates of disease transmission in vulnerable communities. Beyond basic healthcare access, it is necessary to consider such mechanisms can include disease surveillance, healthcare education, and community outreach; the provision of food, housing, and sanitary resources to vulnerable populations would also help to improve people's health and material circumstances. In particular, a more robust health surveillance system would enable actors to respond to health emergencies in good time. This could be achieved by improving the infrastructure of critical care and increasing people's access to this care. By increasing equity of health infrastructure and reallocating resources to resource-poor settings, we are able to reduce population vulnerability to disease outbreak like COVID-19. Below we suggest ways in which healthcare might be improved.

5.1 Critical Care Facilities

Constructing primary and critical healthcare infrastructures is necessary if we are to be prepared for public health emergencies. As this study has shown, the lack of critical care facilities and expertise in resource-poor settings correlates with greater COVID-19 morbidity. Building trust between healthcare professionals and underserved patients, basic healthcare centres and adequate intensive care unit (ICU) beds in moderate and highly

vulnerable communities may help better prepare these communities for future disease outbreaks. This need for more critical care facilities extends beyond the United States; it is felt on a global scale where greater disparities exist. In countries and regions that lack public healthcare infrastructure, critical care is uncoordinated, poorly funded, and in many cases non-existent. For example, each of the Sub-Saharan African nations, besides South Africa, has just over 2,000 ICU beds (Ma & Vervoot, 2020). Critical care infrastructure could drastically reduce the numbers of deaths from critical illness.

5.2 Equitable Health Surveillance

Our study identified that weak health surveillance prevented the accurate tracking of disease spread and its impact on marginalised communities. The lack of rigorous health surveillance in the US (i.e. testing) at the early stages of the COVID-19 pandemic resulted in increased numbers of infections and deaths (Rosenthal, 2020). Using health surveillance infrastructure in moderate and highly vulnerable communities would enable policymakers to gather more reliable data. In turn, this data could help to inform public health interventions, model disease spread, and thereby minimise the impacts of health emergencies. The data might also reveal inequalities in healthcare as between vulnerable communities and less vulnerable communities.

5.3 Develop and Deliver Vaccines

The socially vulnerable groups identified in this study are often underrepresented in vaccine trials. This has already been noted in many COVID-19 clinical trials, including the Moderna vaccine, which saw a lack of minority group participants (Cerullo, 2020; Chastain et al., 2020). To engineer effective vaccines, vaccine trials must involve participants that are representative of the population, including those who come from historically marginalised communities (Clark et al., 2019). The distribution of vaccines must be equitable, too, if a government wishes to achieve herd

immunity (Schmidt et al., 2021). Policymakers should therefore establish an infrastructure to ensure that the vaccine is made accessible to all citizens. Policymakers should also consider how they might finance and deliver these vaccines, identify high-risk groups, and establish a sustainable supply chain for an effective vaccination campaign (Weintraub et al., 2020).

5.4 Provide Community Outreach and Education

Another barrier to COVID-19 testing and treatment in socially vulnerable communities is the lack of health education: knowledge of what resources are available and how they can be utilised. The lack of education, and distrust towards public health entities, may negatively influence the effectiveness of interventions to quell disease spread (Corbie-Smith & Ford, 2006). Education is vital for ensuring that vulnerable groups have ready access to healthcare resources. Outreach programmes can help to engage these groups and build trust between them and public health organisations. In turn, this will lead to vulnerable communities being able to access health resources. Policymakers ought especially to prioritise working with local leaders and community organisations that can advise on and promote the implementation of COVID-19 campaigns in those vulnerable communities.

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A. Graphs of Simulated Daily COVID-19 Cases and Deaths

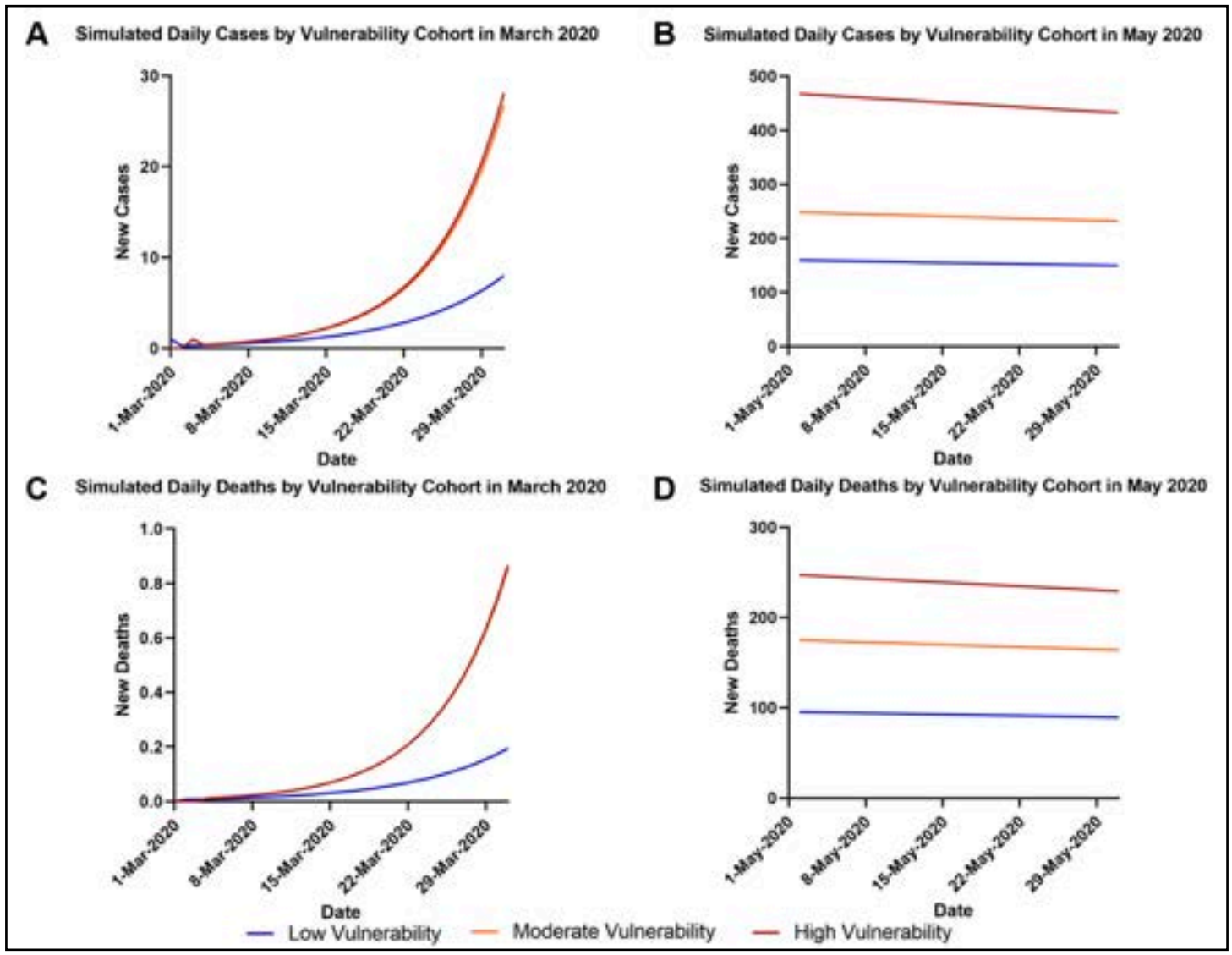

Figure 12.

A. Simulated daily COVID-19 cases by vulnerability cohort March 2020
B. Simulated daily COVID-19 cases by vulnerability cohort May 2020
C. Simulated daily COVID-19 deaths by vulnerability cohort March 2020
D. Simulated daily COVID-19 deaths by vulnerability cohort May 2020

B. Graphs of Simulated Daily COVID-19 Cases per 10,000 and Deaths per 100,000

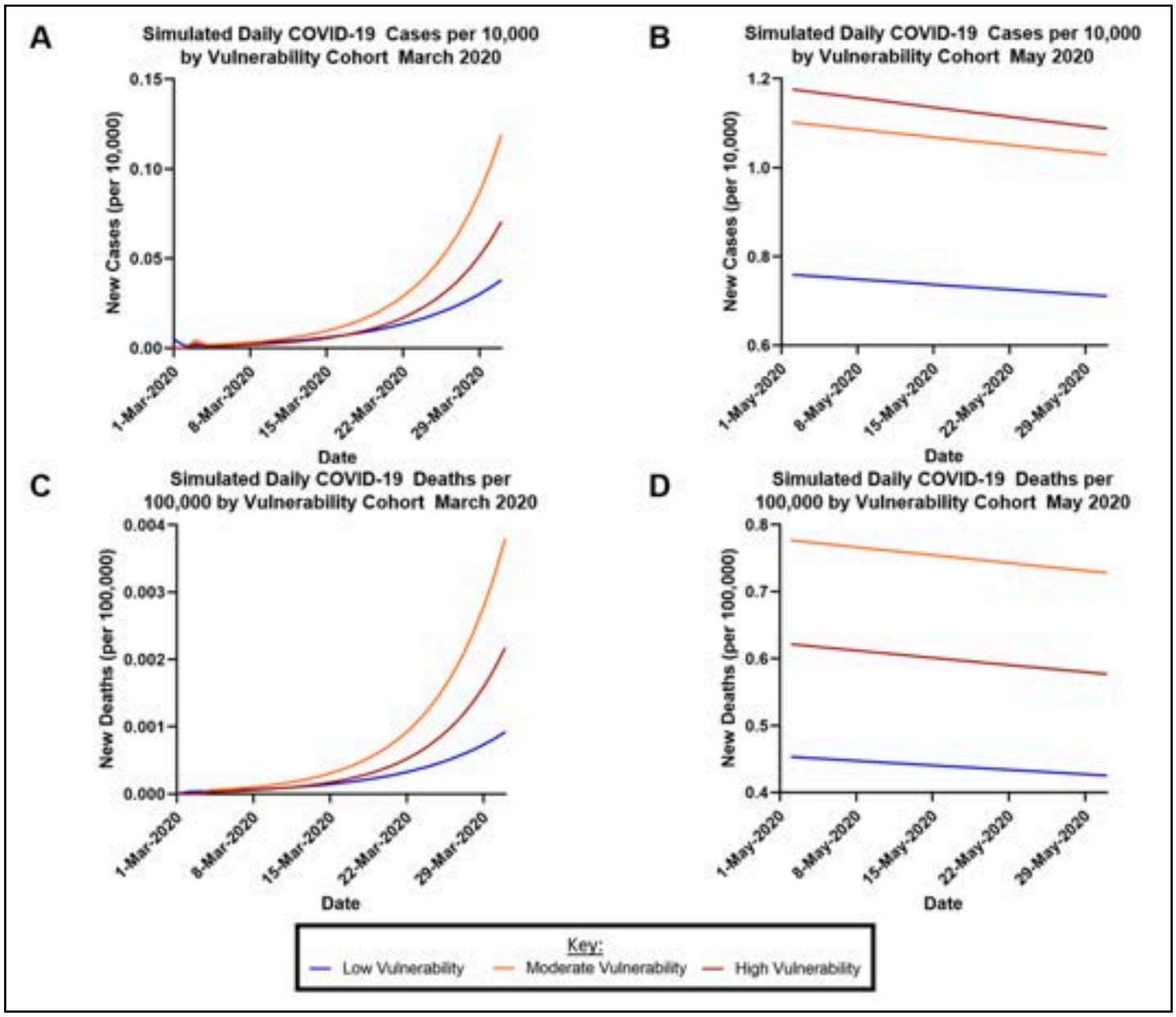

Figure 13.

A. Simulated daily COVID-19 cases per 10,000 by vulnerability cohort March 2020
B. Simulated daily COVID-19 cases per 10,000 by vulnerability cohort May 2020
C. Simulated daily COVID-19 deaths per 100,000 by vulnerability cohort March 2020
D. Simulated daily COVID-19 deaths per 100,000 by vulnerability cohort May 2020

C. Simulation of May 2020 More Accurately Reflects Reported Case and Death Data than March.

To evaluate the efficacy of our model runs on estimating cumulative cases and deaths, the simulated data were plotted against reported data from the NYC DoH. Findings indicate that model runs of May 2020 more closely modelled the actual evolution of COVID-19 than runs in March 2020 (Figure 14).

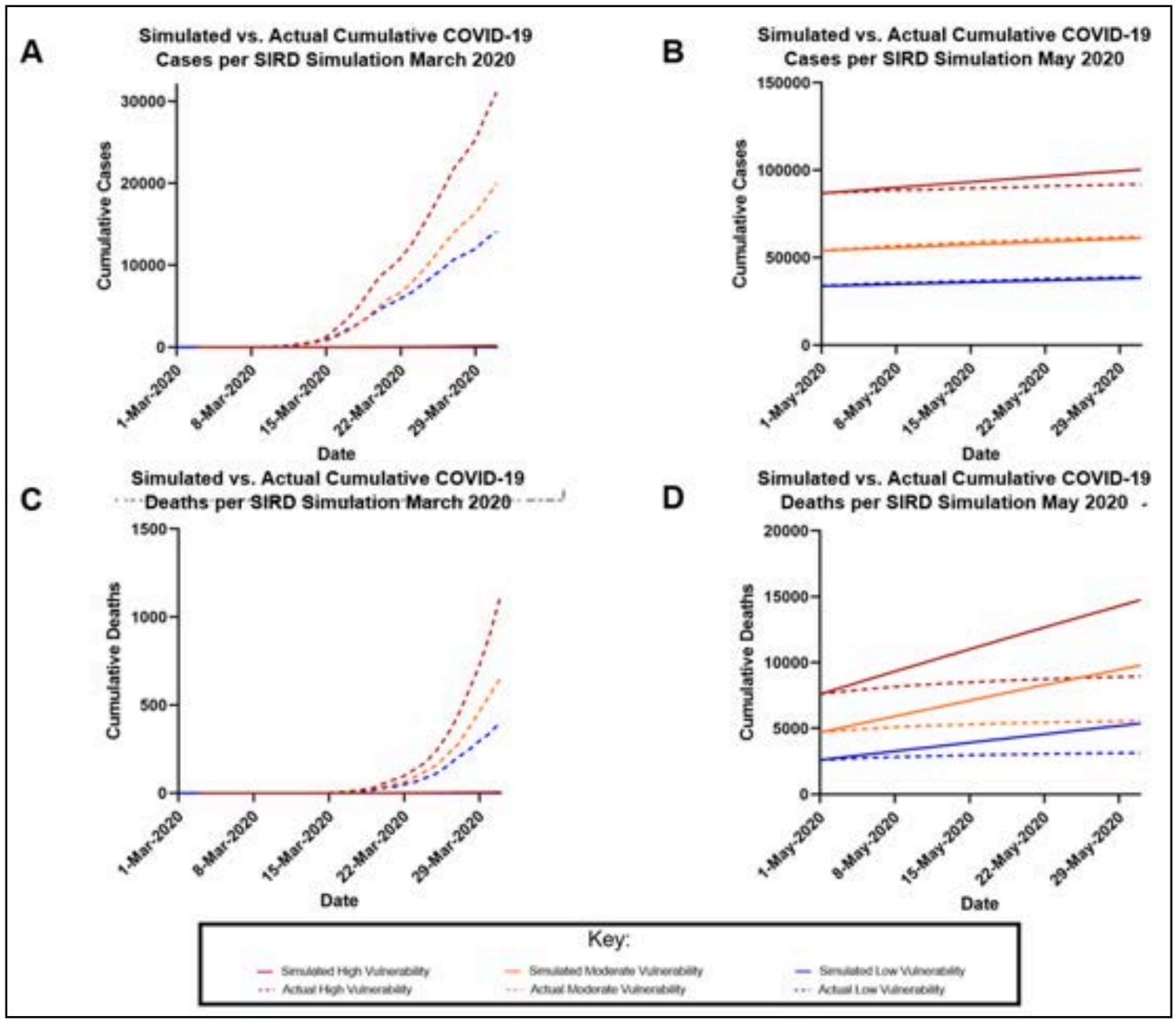

Figure 14. Simulated vs. actual data.

A. Simulated vs. actual cumulative COVID-19 cases per SIRD simulation March 2020
B. Simulated vs. actual cumulative COVID-19 cases per SIRD simulation May 2020
C. Simulated vs. actual cumulative COVID-19 cases per SIRD simulation March 2020
D. Simulated vs. actual cumulative COVID-19 cases per SIRD simulation May 2020

D. Modeling COVID-19

To better understand the spread of COVID-19, epidemiologists have attempted to apply a variety of modelling paradigms to the pandemic. Utilising reported data, researchers have been able to decipher information that may guide the response to COVID-19. Models of the COVID-19 spread in various regions have primarily aimed to better understand the pathology of the disease, forecast short-term effects and advise public health interventions (Arino & Portet, 2020). In doing so, researchers are able to better understand the disease and how specific social practices or factors impact disease spread.

The most common general purpose models that have been applied to COVID-19 are the SIR model and SEIR model (Wangping et al., 2020). Both consider the susceptible (S), infected (I) and removed (R) populations, with the addition of the exposed (E) group in the SEIR model. Due to their straightforward nature and simplicity, they are easily applicable to all illnesses as the states are typically present in all outbreaks.

The θ-SEIHRD is a novel model developed by epidemiologists to take into account COVID-19 specific traits. The model contains the compartments susceptible (S), infected (I), infected undetected (I_u), hospitalised will recover (H_r), hospitalised will die (H_d), dead (D), recovered from detected infection (R_d) and recovered from undetected infection (R_r) (Ivorra et al., 2020). This particular model is specifically tailored to the COVID-19 pandemic as it accounts for the impact of undetected infectious individuals, the effects of hospital sanitary conditions, and the need for hospital beds which are all significant issues for COVID-19.

In response to the COVID-19 pandemic, a group of researchers developed the SIDARTHE model. The SIDARTHE model is a compartmental disease model that is made up of eight states: susceptible (S), infected (I), diagnosed (D), ailing (A), recognised (R), threatened (T), healed (H) and extinct (E) (Giordano et al., 2020). The addition of key stages allows for a more accurate representation of asymptomatic spread which has been a large concern for public health officials. In addition, the new model takes into account the different recovery rates based on the

severity of the illness and the likelihood of an individual to progress onto more severe symptoms.

Mathematical models have been used to study the significance of public health intervention on the pandemic spread. However, there is a lack of understanding in regard to the usage of pandemic modelling to quantify the impact of SDOHs such as household income, race, or environment crime rate on health outcomes during the COVID-19 crisis. Evidence of inherent disparities can help bring attention to the necessity for interventions to bolster public health outreach in at-risk communities.

‘Won’t somebody please think of the gays!’ Investigating the Experiences of LGBTQ+ Students in British Schools

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Abstract – Over the last 50 years there has been significant societal progress on securing rights for LGBTQ+ people. Same sex couples now have full marriage rights, trans people can legally transition gender, and there is greater LGBTQ+ visibility than ever before. However, in spite of these positive developments, homophobia, biphobia, and transphobia still persist in society, especially in schools. A recent Stonewall study found that 45% of LGBTQ+ students have experienced homophobic, biphobic, and transphobic bullying at school; approximately two thirds of LGBTQ+ students have self-harmed; and more than half of those students do not have an adult they can talk to about being LGBTQ+. This article argues that being institutions that exist to help young people transition into adulthood, schools are uniquely placed to support LGBTQ+ young people as they come to terms with who they are; and, as such, schools should do more to support their LGBTQ+ students. First, the author will draw on their experiences working as a trainee teacher in a state secondary school in South East England to examine current educational practices. A review of literature will then consider government and school policies concerning LGBTQ+ issues, painting a national picture of the school experiences of LGBTQ+ young people. Finally, the author will make recommendations for how schools can improve their LGBTQ+ policies and reflect on the implications of these policies for future educational practice.

Keywords: LGBTQ+, sexuality, gender, secondary education, diversity, inclusion, education policy, bullying, teaching

Introduction

Over the last century, lesbian, gay, bisexual, trans, and queer (LGBTQ+)[1] individuals have seen themselves go from being regarded as outcasts in society to securing rights to marry their same sex partner and transition gender (Jones & Clarke, 2007). However, despite significant societal progress, homophobia, biphobia, and transphobia are far from being eradicated in many public institutions today. One such institution is the school, where bullying and heteronormativity can have a major impact on the experiences of LGBTQ+ students (Chesir-Teran & Hughes, 2009).

I wished to explore this issue further during my teacher training. In June 2021 I completed a Postgraduate Certificate in Education (PGCE), one of several formative routes into secondary school teaching in the UK. The course involved a nine-month placement in a state school in South East England – henceforth 'internship school' – and university classes on a wide range of issues affecting students' wellbeing such as social background, special educational needs (SEN), or indeed, being LGBTQ+.

Staff at my internship school claimed the school was very 'open' and 'tolerant'. However, as detailed in the 'school-based exploration' section below, there seemed to be little evidence supporting such claims – for example, no LGBTQ+ inclusive displays in the school. I also heard some staff members 'deadnaming' a trans student, which is calling them by their old 'dead' name that had since been changed to another, and referring to them using the wrong pronouns. The school had one openly LGBTQ+ staff member who tried to support LGBTQ+ students, but their efforts were not recognised by colleagues. Overall, the school was making attempts

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[1] A note on terminology: the terms used in this article have been chosen with a view to be as inclusive as possible of individuals who identify with the queer community. The two acronyms commonly used for referring to the queer community are LGBT (lesbian, gay, bisexual, trans) and LGBTQ (plus queer). A '+' is sometimes added after the Q in recognition of individuals who may not fall under LGBTQ – for example, those who identify as asexual. In the interests of inclusivity, the acronym LGBTQ+ has been adopted for this article.

Where possible, the term 'trans', instead of 'transgender', is used, in order to include individuals who may identify as trans, but not transgender. Generally, trans includes anyone whose gender is different to the sex they were assigned at birth, for instance, a non-binary person assigned female at birth. Transgender, on the other hand, is more often used in reference to individuals whose gender identity is the opposite of their assigned sex: that is, female to male, or male to female.

to be inclusive, but there was scope for it to do much more. Research suggests that this model of dealing with LGBTQ+ issues falls broadly in line with that of other schools in the UK (Bradlow et al., 2017; Guasp, 2014).

School-based exploration[2]

My school-based exploration was twofold. First, I interviewed staff responsible for enacting government and school policy. Second, I spoke to staff who were more aware of pupil experiences outside of curriculum lessons, as research and personal anecdotal evidence suggest that non-curricular experiences are the biggest factors shaping LGBTQ+ young people's perceptions of school life (Jones & Clarke, 2007). These staff members included the School Counsellor, the school's PSHE (Personal, Social and Health Education) Coordinator, who is also the Head of Year 11 (students aged 15-16), and the LGBTQ+ staff member, who is a pastoral assistant. This latter, as a member of the LGBTQ+ community, would be far more aware of issues affecting LGBTQ+ students within the school. Unfortunately, I was unable to talk to any students who identified as LGBTQ+; given the private nature of sexuality and gender, I did not feel it was right to approach students without having first built substantial rapport.

The school's PSHE curriculum specifically covers LGBTQ+ relationships and families in the Relationships and Sex Education (RSE) units. The aim of these units is to normalise LGBTQ+ lives and to raise awareness of the prejudice and discrimination that the LGBTQ+ community has faced in the past and continues to face today. Teaching is also conducted through a series of assemblies, with roughly one assembly on an LGBTQ+-related topic per term. Such assemblies include spotlights on famous LGBTQ+ individuals like Alan Turing, and sessions on why homophobic language like 'That's so gay.' is offensive. These lessons and

[2] This is a case study based on school observations, interviews, and reviews of literature. The research methodology requires a lengthier discussion and will not be covered in this article.

assemblies were designed in collaboration with the LGBTQ+ staff member to ensure accuracy of both content and language.

The school used to have an LGBTQ+ support group. This was an initiative established by sixth form students (ages 16-18) for other students in the school, but discontinued once the founding students left the school. No attempts had been made to restore it until the LGBTQ+ staff member started at the school in September 2020.[3] Meanwhile, the school runs a peer listening scheme, where sixth formers can act as mentors to younger students. Other support is offered to students on a one-to-one basis, often through external agencies such as Topaz, a charity in Oxford offering support for LGBTQ+ young people.

Both the LGBTQ+ staff member and the PSHE Coordinator considered the school to be 'lucky', in the sense that all students are generally very inclusive of LGBTQ+ students, and homophobic, biphobic, and transphobic (HBT) bullying is not prevalent. By way of contrast, the School Counsellor questioned how much impact the school's 'raising awareness' objective has had on LGBTQ+ students themselves. She engages with pupils who are LGBTQ+, or think they might be, and this often becomes an elephant in the room; both she and the pupil in conversation know that being LGBTQ+ is a factor influencing the student's situation. However, despite her belief that it would be beneficial to discuss this in a school-based therapy environment, the matter is rarely touched upon.

Curriculum lessons do not cover much LGBTQ+ content – though this is changing, especially in English and Drama. Displays around the school do not include same-sex couples or trans individuals, and there are no books with explicitly LGBTQ+ themes to be found in the library. LGBTQ+-related policies on the school website are also difficult to locate.

[3] Unfortunately, this staff member was unable to re-establish the group in the 2020-21 academic year due to pandemic restrictions.

Following this school-based exploration, I developed three research questions:

1. To what extent are government and school policies supportive of LGBTQ+ students?

2. Do the experiences of LGBTQ+ students documented in academic literature correlate with these legislation and policies?

3. According to literature, what action can schools take to better support their LGBTQ+ students?

Literature Review

The legacy of section 28

When considering legislation that explicitly addresses the treatment of LGBTQ+ issues in schools, section 28 of the *Local Government Act 1988* is a good place to start, for its 'notori[ety]' (Greenland & Nunney, 2008, p. 243) and lasting impact on schools today (Lee, 2019):

> A local authority shall not—
>
> > (a) intentionally promote homosexuality or publish material with the intention of promoting homosexuality;
> >
> > (b) promote the teaching in any maintained school of the acceptability of homosexuality as a pretended family relationship.

Whilst section 28 technically did not apply to schools, many teachers believed that schools were subject to the statute (Walker & Bates, 2016). Thus, the ramifications of section 28 were significant, as schools actively avoided addressing topics with LGBTQ+ themes in class (Burton, 1995; Ellis & High, 2004; Vincent, 2014). Teachers felt less inclined to challenge homophobic bullying and support LGBTQ+ pupils (Warwick et al., 2001).

Section 28 was repealed in England in 2003, under section 122 of the *Local Government Act 2003*. However, many local authorities chose to retain it in policies, under similar wording, a decision uncontested by the majority

of schools within their jurisdiction (Adams et al., 2004). Indeed, of the schools involved in a 2013 study, more than 40 were found to have RSE policies replicating section 28 (Morris, 2013). Thus, many teachers continued to avoid the discussion of LGBTQ+ topics in school, as they were unsure where the boundaries of policy fell (Greenland & Nunney, 2008).

A wealth of literature has been written on section 28 and its legacy (Nixon & Givens, 2007; Ellis, 2007; Greenland & Nunney, 2008; Edwards et al., 2016; Lee, 2019). This legacy persists even over 15 years after the section's repeal, with many staff who had taught under the legislation remaining less open to discussing LBGTQ+ themes. Stonewall's 2014 Teachers' Report (Guasp, 2014) surveyed 1,832 teachers across the UK and found that a third of them had yet to '[address] issues of sexual orientation in the classroom' (Guasp, 2014, p. 29); and that, should a student 'raise a question on sexual orientation in the classroom' (Chapman & Wright, 2008, p. 21), one in five teachers would not feel confident responding.

Section 28 enforced a culture of 'heterosexism' – 'the assumption that everybody is heterosexual' – by implying that 'homosexuality' can be 'promoted' (Chapman & Wright, 2008, p. 21). This implication is based on the presumption that heterosexuality cannot be promoted, since it is 'natural and organic' (Marston, 2015). Academic literature reveals that schools maintain heterosexist attitudes, with some researchers expressing worry about the detrimental impact this can have on LGBTQ+ students (Epstein, 1994; Forrest, 2000; Mehra & Braquet, 2006; Chapman & Wright, 2008; Bridge, 2010).

Current legislation

A landmark piece of legislation affecting schools is the *Equality Act 2010*, which consolidates several pieces of anti-discrimination legislation.[4] In 218 sections, the Act affords protection from harassment, discrimination, and

[4] Notably: Equal Pay Act 1970; Sex Discrimination Act 1975; Race Relations Act 1976; Disability Discrimination Act 1995; Employment Equality (Religion or Belief) Regulations 2003; Employment Equality (Sexual Orientation) Regulations 2003; and Employment Equality (Age) Regulations 2006 (Equality Act 2010, para. 4).

victimisation based on any of the 'protected characteristics' of 'age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation' (*Equality Act 2010*, § 2.1). Protection extends across various areas of society, such as employment and use of public services. The part that specifically applies to schools is Part 6, Chapter 1, 'Schools', which legislates protection for LGBTQ+ students, and any other student with any of the protected characteristics, from harassment, discrimination and victimisation by 'the responsible body of a school' (§ 6.1). It is worth noting, however, that the Act itself does not protect against harassment, bullying, or victimisation by other students. Nonetheless, under the Act, a school does have a legal requirement to deal with any such incidents in the same manner as any other form of bullying (Stonewall, 2017).

Current legislation is slowly beginning to counteract the legacy of section 28 by explicitly requiring schools to teach LGBTQ+ topics. This is part of the Department of Education's new statutory requirements, which came into force in September 2020. Under these measures, RSE became compulsory in all state-funded secondary schools, and health education was made compulsory in all maintained schools. Schools had until the summer of 2021 to implement this new teaching. The statutory guidance states:

> 37. […] At the point at which schools consider it appropriate to teach their pupils about LGBT, they should ensure that this content is fully integrated into their programmes of study for this area of the curriculum rather than delivered as a standalone unit or lesson. Schools are free to determine how they do this, and we expect all pupils to have been taught LGBT content at a timely point as part of this area of the curriculum (Relationships Education, Relationships and Sex Education (RSE), and Health Education in England: Statutory Guidance for Governing Bodies, Proprietors, Head Teachers, Principals, Senior Leadership Teams, Teachers, 2019).

When this present article was being written, the policy above had not been implemented by every school, so it remained unclear what impact these changes would have had on LGBTQ+ students' experiences of school. Indeed, there was no research yet published on this policy. However, it should be noted that a study carried out by Scott et al. (2020) examined the RSE guidance as a whole shortly after its initial publication.

The authors believed that the guidance is 'deliberately non-prescriptive' and 'implementation is likely to vary considerably' (Scott et al., 2020, p. 676). In other words, there is still the potential for schools to pay only minimal attention to LGBTQ+ topics. The guidance accords with the recommendation made by Stonewall in their Teachers' Report (2014) that the Department for Education should 'issue statutory Personal, Social and Health Education and Sex and Relationships Education guidance which is inclusive of lesbian, gay, and bisexual pupils and those with same-sex parents' (Guasp, 2014, p. 37). Furthermore, Ellis and High (2004) advocate for RSE lessons as best practice; and Ellis (2007) and Tippet (2015) argue that LGBTQ+ content should be fully integrated into these lessons, rather than taught as the 'gay and lesbian issues' lesson (Macintosh, 2007, p. 33).

Whilst it is encouraging to see that research has been taken into consideration when designing this guidance, there is a strong argument that the policy does not go far enough to ensure that schools teach a fully LGBTQ+-inclusive curriculum. For example, Formby (2013, 2015) argues that limiting discussions around gender and sexuality to PSHE lessons only restricts students' chances to explore societal influences and challenge heteronormative attitudes across the wider curriculum. This is a position shared by Jacob (2013) and Marston (2015), the latter calling for 'cross-curricular coverage' of LGBTQ+ content (Marston, 2015, p. 166).

School policy

Where school policy is governed by legislation (S1 School, 2020b), examining school policies may seem redundant. However, as discussed above, each school will interpret government legislation differently (Scott et al., 2020). An examination of policy is a useful way to gain insight into the school's interpretation of legislation, and with that its priorities and beliefs. These foci, in turn, will shape how much attention is paid to preventing HBT bullying or teaching LGBTQ+ history, for example. School policy objectives of this kind will no doubt have an impact on LGBTQ+ students' experiences in school.

It made sense therefore to investigate policies at my internship school that directly addressed LGBTQ+ issues and impacted LGBTQ+ students' experiences. The policies in question are: (1) the anti-bullying policy, (2) the equality information and objectives policy, (3) the RSE policy, and (4) the transgender policy.[5] Each of these is examined below:

1. The **anti-bullying policy** references homophobic remarks as a form of verbal bullying, though makes no mention of biphobic or transphobic bullying (S1 School, 2019).

2. The **equality information and objectives policy** (S1 School, 2020b) references HBT bullying as an example of a disadvantage to students that the school aims to remove or minimise. However, there are no specific equality objectives in this policy to address HBT bullying. If HBT bullying is an issue, as the policy suggests, why are there no objectives to address this? There seems to be a lack of cross-policy cohesion and support for LGBTQ+ students.

3. The **RSE policy** (S1 School, 2020c) asserts that RSE lessons should aim to 'create a positive culture around issues of sexuality and relationships'. It also explicitly states that families can include LGBTQ+ parents. However, given that this policy is based on the government RSE legislation discussed above, it suffers from the same shortcomings as the latter, and for the same reasons. That is, limiting discussions around gender and sexuality to solely RSE lessons denies students both a deeper exploration of societal influences, and the chance to challenge heteronormative attitudes across the wider curriculum.

4. The **transgender policy** (S1 School, 2020a) is dated January 2020. When this policy was being implemented, a student at the school was beginning to transition (female to male), inviting speculation as to whether the policy was created in response to this. The LGBTQ+ staff member informed me that they (the staff member) were consulted in the creation of this policy, and that they worked closely with the

[5] The term 'transgender' is used here, as this is the terminology used by the internship school.

transitioning student as a pastoral assistant assigned to his year group. The policy itself is very comprehensive in covering relevant legislation and government guidance; the steps that the school is taking towards gender neutrality; and procedures for responding to transphobic bullying. It also details arrangements for transitioning students, such as name changes (including when the school can and cannot use a chosen name over a legal name, with advice for changing a legal name), sex-specific vaccinations, and the use of changing and toilet facilities. Additionally, the policy has a glossary of terms at the end. It is encouraging to see such a detailed and thorough policy, although this does draw attention to how vague the other policies are by comparison.

Research in US schools[6] has found that anti-bullying policies that are explicitly supportive of LGBTQ+ students result in a more positive school climate for those students, suggesting that equivalent policies at my internship school may be helping LGBTQ+ students in similar ways (Szalacha, 2003; Goodenow at al., 2006; Chesir-Teran & Hughes, 2009). However, the mere existence of LGBTQ+-supportive policies does not necessarily guarantee concrete positive change. A 2013 study of over 5,000 LGBTQ+ secondary school students in the US found that, whilst a 'comprehensive [anti-bullying] policy' (Kosciw et al., 2013, p. 55) was linked to LGBTQ+ students having a more positive self-esteem, it did not result in less victimisation or improved academic performance for these students (Kosciw et al., 2013). Moreover, the researchers of this study did not examine the anti-bullying policies themselves, but rather asked the students about their perceptions of the policies, which suggests that an effective anti-bullying policy is one that is considered supportive in the eyes of the students. It follows, therefore, that supportive policies are the minimum a school can offer to LGBTQ+ students; that these policies are rendered meaningless where not enacted; and that policies should be designed in collaboration with students (S1 School, 2019).

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[6] Where research on LGBTQ+ issues in UK schools is lacking, US-based research can help to guide analyses of anti-bullying policies in England and Wales. The US operates a different educational system to that of the UK but anti-bullying policies are broadly similar in both nations (cf. the Gay, Lesbian and Straight Education Network (GLSEN) Model School Anti-Bullying and Harassment Policy (GLSEN, 2019)).

Where my internship school's policies did concern LGBTQ+ issues, their focus was largely on HBT bullying – a tendency which has also been criticised. In the UK, researchers have argued that school policies which focus mainly on HBT bullying are deficient, as they can lead to schools perceiving individuals in a limited fashion – as either bullies or victims – with equally limited responses of either punishment or support. This could result in a missed opportunity for schools to conduct a broader examination of how heteronormativity influences their policy-making and conduct; and, in turn, how a school's institutional response impacts students' lives. Instead, schools should work to provide young people with an alternative narrative to that of bullies and victims and to challenge heteronormativity within their curriculum, broader school environment, and society itself (Payne & Smith, 2012, 2013; Pascoe, 2013; Formby, 2015).

Researchers have also emphasised that a heavy focus on HBT bullying means that schools often overlook the impact an unsupportive home environment can have on some LGBTQ+ students, lamenting that this is often missing from schools' policies (Jones & Hillier, 2013; Formby, 2015). Schools should therefore work to integrate LGBTQ+ issues fully into the curriculum by teaching the science of sexual orientation and the legal rights of LGBTQ+ students (Jacob, 2013) and update their policies to reflect this approach, rather than only talking about LGBTQ+ issues in RSE lessons and holding 'tokenistic' (Formby, 2015, p. 634) assemblies about HBT bullying.

It is interesting to note that while my internship school did have a transgender policy, there was no policy equivalent for LGB students. Reasons for this are not specified anywhere in existing documents nor elsewhere on the school's website. It could be that supporting trans students requires the school to do more for them than for LGB students, which makes a transgender policy necessary for certain rules to be clarified – for example, granting trans students time out of school to attend medical appointments (Taylor, 2002).

The experiences of LGBTQ+ students

This exploration of school policy led me to question its effectiveness: that is, how LGBTQ+ students experience school life under these policies. I looked at both national and regional data on HBT bullying:

- A 2017 Stonewall study of 3,713 LGBTQ+ students across the UK found that 45% had experienced HBT bullying at school (Bradlow et al., 2017).

- Within Oxfordshire, the Oxfordshire Secondary Bullying Survey 2019, a survey of 4,786 students across the county, found that 70% of respondents said they heard 'people being called names that insulted [the fact that they are] gay, lesbian, or bisexual' (Oxfordshire County Council, 2019, p. 18). For transphobic insults, this figure stood much lower at 26% (Oxfordshire County Council, 2019); however, it is unlikely that this difference is due to there being a more accepting environment for trans students, as only 14% of respondents believed an openly trans student would be 'safe from bullying' at their school (Oxfordshire County Council, 2019, p. 6). For openly LGB students, the figure is slightly higher: 17% of respondents believed that they would be safe from bullying at their school (Oxfordshire County Council, 2019). This discrepancy could be explained by the lower percentage of trans individuals in the population and at the surveyed students' schools (the Office for National Statistics estimates that 2.2% of the UK population identify as lesbian, gay, or bisexual (Office for National Statistics, 2018), whilst 200,000-500,000 people in the UK (0.3%-0.75% of the population) are trans (Government Equalities Office, 2018)).

The negative school environment that bullying creates has a detrimental impact on young people's attendance and engagement with education (Rivers, 2011; Jones & Hillier, 2013). Stonewall found that 40% of students who have experienced HBT bullying have skipped school because of it, whilst 52% report that it has negatively impacted their plans for future education (Bradlow et al., 2017). A negative school environment and experiences of HBT bullying also lead to lower academic achievement (Kosciw et al., 2013; Formby, 2014). It also has a detrimental impact on mental health: 61% of LGB students have self-harmed, with 22% having

attempted taking their own life. The figures for trans students are even more alarming: 84% have self-harmed, and 45% have tried to take their own life (Bradlow et al., 2017). The effects of negative school environment are widely attested elsewhere in the literature, with studies consistently showing that LGBTQ+ students have an increased risk of substance abuse, self-harm, depression, and suicide (Savin-Williams, 1994; McNamee et al., 2008; Birkett et al., 2009; Robinson & Espelage, 2011).

Russell et al. (2012) propose that prejudice-based bullying – also called identity-based bullying – may have a greater detrimental effect on students than non-prejudicial bullying. Charlesworth (2015) supports this view, adding that HBT bullying can be particularly impactful since it is not always recognised or reported. Indeed, only 29% of LGBTQ+ students have reported that teachers intervened during an HBT bullying incident (Bradlow et al., 2017). This low percentage may result from teachers not recognising the incident for the bullying it is, having not been trained to respond appropriately to such incidents. The majority of teachers will know to challenge offensive language such as 'That's so gay!' where 'gay' means 'rubbish' or 'stupid' (Marston, 2015); and challenging this is the main way in which schools aim to reduce HBT bullying. However, if the incident does not involve language that teachers are trained to identify as homophobic, or if teachers do not know that the student being offended is LGBTQ+, they may mistake the offending treatment for 'banter'.

Nevertheless, there remains a nationwide focus on challenging the use of 'gay' as meaning 'rubbish' or 'stupid', to the extent that Ofsted expects schools to include this as part of their strategies to combat HBT bullying (Ofsted, 2013). The effectiveness of this strategy should, however, be brought into question. Research has found that 86% of LGBTQ+ students nationally and 87% of students in Oxfordshire regularly hear phrases such as 'That's so gay!' at school (Bradlow et al., 2017; Oxfordshire County Council, 2019). It could be counterargued that use of such language is seldom an actual bullying incident; rarely is it used when referring to an individual (Charlesworth, 2015; Marston, 2015). Indeed, it has been found that the majority of students using such language are not themselves homophobic, and that it is also part of LGBTQ+ students' vernacular (Marston, 2015; White et al., 2018). By simply only labelling such language

as 'homophobic' and adopting a zero-tolerance approach, it is likely that schools will fail to change attitudes or understand their students' worldviews (Formby, 2013; Marston, 2015; Monk, 2011; White et al., 2018).

Schools' failure to understand their LGBTQ+ students has been a prevalent issue for some time. Jones and Clarke's study (2007) showed that schools were unsure as to how they should respond to the needs of their LGB students, particularly those who were openly 'out'. Marston (2015) reports that schools often approach external agencies to obtain more information when their LGBTQ+ support systems are seen as too youth-led. This lack of knowledge and understanding among staff is manifested in LGBTQ+ students' use of the internet as an information resource: 53% of LGBTQ+ students are unable to discuss being LGBTQ+ with an adult at school, and 60% do not have an adult they can talk to at home (Bradlow et al., 2017). Therefore, the vast majority of students turn to the internet for answers. In 2010, 80% of LGB young people used the internet as their first source of information about their sexuality (Bridge, 2010). Taylor (2002) reported similar findings for trans young people, when the internet was still in infancy. Today, 96% of LGBTQ+ students have used the internet to further their understanding of their sexuality and/or gender identity (Bradlow et al., 2017). It is worth considering that while the internet is doubtlessly a rich resource for education, teenage students conducting personal research on LGBTQ+ topics can readily stumble upon false information without their knowing. Just as schools work to eliminate misconceptions in academic subjects, so too should they ensure that students are accessing credible and accurate sources for LGBTQ+ issues.

It is important to remember, however, that LGBTQ+ is not a monolith; a negative school experience will not be universally shared. For example, in a study of 15 bisexual male sixth form students (ages 16-18) from across the UK, almost all participants reported positive experiences throughout their years in secondary school and in sixth form; two reported negative experiences in secondary school, but these ceased to be after the students had left for sixth form (Morris et al., 2014). A similar study conducted at a further education college in South East England also presents a positive experience. Interviews were conducted with 15 students (ages 16-22) and

11 staff who identified as lesbian, gay, bisexual, or 'heterosexual ally'; all participants reported positive experiences, including a lack of homophobia and high levels of LGB visibility (White et al., 2018).

The experiences of the participants in these studies could differ from those of the participants in other studies discussed above, principally because of the age difference between the participants.

Recommendations for schools

There is no shortage of suggestions in the literature for how schools can support their LGBTQ+ students and create an environment that is truly inclusive. Broad consensus exists on the following recommendations:

1. First, the most effective action a school can take is to set up an LGBTQ+ support group (Jones & Clarke, 2007). An in-school support group not only has a direct positive impact on students' mental health (Goodenow et al., 2006; Heck et al., 2011; Toomey et al., 2011), it also reduces victimisation of LGBTQ+ students and, by extension, rates of HBT bullying (Kosciw et al., 2010; Toomey et al., 2011). A support group can also lead to increasing LGBTQ+ students' engagement in education, with improved attendance and academic attainment (Goodenow et al., 2006; Jacob, 2013). At the same time, it is recognised that having a support group may require students to be openly out at school, which can be difficult for some (Bradlow et al., 2017). Therefore, school as a whole needs to be a safe space for LGBTQ+ students; simply having a support group is not enough, as argued in further recommendations outlined below.

2. Secondly, it is imperative that schools create a curriculum that is fully inclusive of LGBTQ+ history, rights, and activism (Linville, 2004; O'Leary, 2005) and normalises discussion of LGBTQ+ issues in all subjects (Jones & Clarke, 2007; Jacob, 2013; Kosciw et al., 2013; Formby, 2014; Marston, 2015; Bradlow et al., 2017). The curriculum should also include RSE that encompasses LGBTQ+ relationships and families and provides information on sexual health for same-sex

couples (Jones, 2011; Marston, 2015; Bradlow et al., 2017; Formby & Donovan, 2020; Scott et al., 2020).

3. Furthermore, school libraries should provide information on a range of LGBTQ+ topics (Walker & Bates, 2016; Bradlow et al., 2017). These topics include: coming out (Norman, 1999; Linville, 2004; Mehra & Braquet, 2006; Alexander & Miselis, 2007); self-acceptance (Taylor, 2002; O'Leary, 2005); and both real and fictional stories with LGBTQ+ characters (Clyde & Lobban, 2001; Taylor, 2002; Levithan, 2004; Linville, 2004).

4. Finally, schools should provide staff with comprehensive training in sexuality and gender so that they can offer support to LGBTQ+ students as needed (Adams et al., 2004; Ellis & High, 2004). Research suggests that supportive staff members can go some way to counteracting negative home environments and rates of HBT bullying, which results in improved mental health of LGBTQ+ students (Greenland & Nunney, 2008; Kosciw et al., 2013; Marston, 2015; Bradlow et al., 2017). A supportive staff body should also include a counselling team trained to deal with the struggles that LGBTQ+ students can face, and openly LGBTQ+ members of staff who can act as positive role models for students. The presence of counsellors and positive role models increases students' self-acceptance and improves their mental health (Guasp, 2014; Edwards et al., 2016; Bradlow et al., 2017).

These four recommendations could be readily applied to my internship school. The school would benefit from having an LGBTQ+ support group run by both students and staff; this approach to organising the group would allow it to continue to operate as students and staff leave the school and new members join. Staff would also benefit from comprehensive training on LGBTQ+ issues, including, for example: the science of sexuality and gender; how to support LGBTQ+ students with unstable home lives; a 'dos and don'ts' list of what to say and what not to say when a student comes out, especially in the case of trans students; and how to combat HBT bullying. Subject curricula could be broadened to include more LGBTQ+ topics with teaching on LGBTQ+ figures in history, texts

with LGBTQ+ characters in English literature, and books with explicit LGBTQ+ themes made available in the library. Additionally, given that the school's anti-bullying policy is due for review, it would be wise, if not essential, to invite a diverse group of LGBTQ+ students to take part in school policy discussions and contribute ideas to making policy more inclusive of LGBTQ+ students and other minorities.

Conclusion

LGBTQ+ students need constant support from schools; it is not enough to simply normalise the lives they lead. Society has made noticeable progress in preventing discrimination against LGBTQ+ people and granting them more rights and visibility, but the better treatment these provisions now guarantee is still far from ideal. LGBTQ+ people continue to face homophobia and transphobia from strangers, from their peers, and sometimes even from their own families (Bradlow et al., 2017). These LGBTQ+-phobic voices can cause great psychological damage to the people they target. While LGBTQ+ adults may eventually develop the ability to withstand this discrimination, the harrowing impact of these behaviours on young LGBTQ+ teenagers cannot be ignored. It is therefore crucial for LGBTQ+ students to access adequate support and to feel accepted by the people who surround them. They should be treated with equal dignity beside their non-LGBTQ+ peers. This is where schools have a crucial part to play: as institutions that exist to help young people transition into adulthood, schools are best placed to offer LGBTQ+ students strong support and care, by establishing LGBTQ+ support groups that help students build a sense of community; presenting positive LGBTQ+ role models; and offering counselling for students in need. Schools should also aim to include LGBTQ+-inclusive curricula in every subject; provide LGBTQ+ materials in the library; and offer school staff training in how to deal confidently with HBT bullying and other forms of discrimination.

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Japan's early involvement in the European Bank of Reconstruction and Development: a review from the perspective of neoclassical realism

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Abstract – This paper examines Japan's involvement in the European Bank of Reconstruction and Development from the end of 1980s to the early 1990s. Through the theoretical lens of neoclassical realism, it analyses Japan's attempt during this period to transform its economic power into political and economic influence abroad. The process was led by the politicians, seen as decision-makers in the shaping of foreign policy, who acts on the perceived change of national power in the international arena. Taking the politicians' perspective, this research reveals the problems faced by Japan in the 1990s, which affected the creation and the effectiveness of the country's foreign policy. The international power change perceived by Japanese politicians was the key drive for Japan, a rising nation, to transform its wealth into power. However, the politicians' perception was not necessarily an accurate reflection of the reality. By studying the Japanese precedents, this research may also provide guidance to another nation with an ever-increasing presence in the international arena, namely China.

Keywords: Japan, European Bank of Reconstruction and Development, neoclassical realism, economy, politics

Introduction[1]

When the Soviet Union collapsed on 25 December 1991, Japan, a member of the former Western bloc, was excited to embrace a new era ahead. Despite the burst of the assets bubble which occurred earlier that year, Japan believed that this setback was merely a temporary adjustment for the booming economy to follow (Takahashi & Watanabe, 2006). The vicious consequences of the bubble burst did not reveal itself immediately; meanwhile, Japan was still enjoying prosperity as the world second-largest economy.

There is no better case study than the European Bank of Reconstruction and Development (EBRD) for demonstrating how Japan's status as the world's second largest economy in the 1990s fuelled the country's political ambition and influenced the ways in which Japanese politicians perceived the external political changes. Japan's involvement in the EBRD reveals that even before the final collapse of the Soviet Union, the country had been picturing a new world order, in which it would play a vital role: as the East Asian economic powerhouse. More importantly, the striking contrast between Japan's own expectations to be a strong influence on other countries and the bitter reality of events that actually transpired around the EBRD explains the transition in Japanese foreign policy in the 1990s: politicians placed more emphasis on Asia instead of Eurasia as a whole. Japan's involvement in the EBRD can therefore be interpreted as the turning point of this shift in foreign policy.

One final remark should be made on Hashimoto Ryutaro, Japan's Minister of Finance of the time and a key figure in the country's involvement with the EBRD: his experience of working for the institution contributes to a better understanding of the foreign policy adjustments that he implemented after becoming Prime Minister in 1996.

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[1] Due to the closure of the Bodleian Libraries during the COVID-19 pandemic, some citations in this paper, which are marked N/A at the end, were reliant on research notes that the author compiled in earlier years. The exact page numbers for these citations could not be confirmed and are therefore incomplete.

Great Expectations

In March 1990, Minister of Finance Hashimoto Ryutaro returned from his meeting in Los Angeles with Nicholas F. Brady, the United States Secretary of the Treasury. In his Diet report, Hashimoto emphasised that Japan and the U.S. had agreed to 'fall in step with each other (共同歩調)' in establishing the EBRD (Hashimoto, 26 March 1990).

A month later Toshiki Kaifu, the Prime Minister of Japan, in his Diet speech used the EBRD as an example to present his grand vision for Japan: 'We must strengthen the Three Pole Structure of the US, EC, and Japan, taking responsibility for the world economy and security through the coordination of policies and cooperation of implementation. The recent proposal of EBRD is a good example […] there shall be more cases like this. Japan will have a bigger role to play in the world economy' (Toshiki, 3 April 1990). Japanese ambition was also echoing in the media. The earliest written record about the EBRD in Japan – an *Asahi Shimbun* article released in December 1989 – described the institution as 'an opportunity to appeal Japanese political existence in Europe' (*Seijiteki*, 1989).

Japan's significant foreign exchange reserves not only made it possible for Japan to provide monetary support to the EBRD; they also fuelled a sense of Japanese honour and an accompanying belief that the country ought to take on more international responsibilities. In February 1991, Nakayama Taro, Minister of Foreign Affairs argued that Japan and Germany were the only two among all the advanced industrialised countries that enjoyed a foreign exchange surplus (Nakayama, 18 February 1991). That said, post-reunification, Germany needed to make huge investments in Eastern Germany, leaving Japan, in Nakayama's view, as the only country capable of providing sufficient funds to the EBRD. He questioned his fellow MPs in the Diet on the issue of investment in the ERBD: 'If not Japan, then who?' (Nakayama, 18 February 1991). Since Japan could not make a contribution to international military cooperation as a result of its postwar Peace Constitution, the country compensated for this lack by using its economic power to foster Western values[2] such as

[2] Although it is an Eastern Asian country, Japan has been a part of the Western bloc since the Cold War and still holds a position in the G7 today.

multiparty democracy, pluralism, and market economics (Dadabaev, 2016). Moreover, Japan had valuable experience in providing economic aid through the erstwhile Official Development Assistance programs and the establishing of the Asian Development Bank. Japan was proud of its expertise and was willing to share it with European countries; this was to be 'Japanese funding with wisdom' (Kawazaki, 6 March 1991).

By joining the EBRD, Japan hoped to assume a greater role in international politics and to promote the country's own values. Beyond these general aims, the country also had a specific mission: to reclaim the Northern Territories (South Kuril Islands) from the Soviet Union.[3] Economic aid to the Soviet Union was a major domestic concern for Japan, ever since the idea of the EBRD was first mooted in the latter. Some MPs and bureaucrats suggested in Diet discussions that any economic aid to the Soviet Union should come with certain conditions attached. Yukio Sato, Director of Information Research at the Department in Foreign Ministry, hinted that due to the unsolved Northern Territories issue between Japan and the Soviet Union, Japan ought to treat the Soviet Union differently from other Eastern European countries in dealings with economic aid (Sato, 13 April 1990). Nikkei Shimbun also pointed out that the Japanese government had insisted on the return of the Northern Territories as the necessary precondition to economic aid (Atamagoshi, 1992). The Liberal Democratic Party (LDP) government faced pressure from both within and outwith the party to take a firmer stand in pursuing national interests in exchange for economic contributions – not least the fierce attack from the opposition party (Muto, 14 March 1991). Nakasone Hirofumi, son of former LDP Prime Minister Nakasone Yasuhiro urged that 'as an important founder of the EBRD, Japan should speak out loud its stand', since foreign aid money was coming from the taxpayers (Nakasone, 21 May 1990). Later, the LDP government, through its manifesto, implemented an assertive policy concerning the territorial claim.

[3] The Northern Territories dispute – known in Russia as the dispute of the Kuril Islands – is a long-standing disagreement between Japan and Russia. The Northern Territories comprises four islands that stretch between the Japanese island of Hokkaido at the southern end and the Russian Kamchatka Peninsula at the northern end. The disputed islands were annexed by the Soviet Union at the end of World War II and are currently under Russian administration as the South Kuril District of the Sakhalin Oblast, despite Japan having claimed them.

In his annual Policy Speech to the 120th Session of the Diet, Prime Minister Toshiki Kaifu stated adamantly that: 'The unprincipled separation of politics from economics, only promoting economic relation[s] and leaving the Northern Territories issue unsolved, is not what Japanese people want' (Toshiki, 1 March 1991).

Bitter Reality

Eventually, in 1991, the Japanese government provided 144.8 billion yen[4] to establish the EBRD. Japan's contribution comprised almost 9% of the bank's total funding, following the largest contribution of 10% by the US (Hashimoto, 18 March 1991). Before its collapse at the end of 1991, the Soviet Union was also an original EBRD contributor, but after the collapse it became solely a recipient.[5] Soon thereafter, the Japanese government realised that EC countries and the USA only wanted the benefit of Japanese funding, and that the Western allies had neglected the agreement prerequisite about providing aid to the Soviet Union.

At first, the Western countries promised to support Japan's territorial claim; or so Japan believed. After the 17th G7 Summit held in London in July 1991, Prime Minister Toshiki Kaifu reported to the Diet that the G7 had reached a consensus acknowledging the significance of the Northern Territories issue, not only for the Japan–USSR relations, but also for other G7 members and the peace and stability of the world (Toshiki, 22 August 1991). Furthermore, Foreign Minister Nakayama Taro named US President George H. W. Bush one of the Western leaders who claimed it was vital to solve the Northern Territories issue (Nakayama, 2 August 1991). However, in hindsight, this appeared to be a simple ruse to secure additional Japanese funding. At the time, Japan believed it was impossible to mobilise the

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[4] Unless otherwise stated, all currencies and values of money mentioned in this paper refer to prices that were established at the time of writing taken from the respective year.

[5] Agreement Establishing the European Bank for Reconstruction and Development, EBRD website. https://www.ebrd.com/news/publications/institutional-documents/basic-documents-of-the-ebrd.html (Accessed 5 March 2019). Although the Soviet Union was listed as a recipient country with other Eastern European Communist countries, its total capital contribution of 600 million Euros was the 6th largest following the USA, Japan, France, Federal Republic of Germany, Italy, and the United Kingdom.

international economy without other countries paying attention to Japan itself (Nakayama, 2 August 1991); but in fact, Japan overestimated the degree of leverage over the Northern Territories that this attention gave them, as compared with their Western partners.

To the Japanese government's surprise, Germany and the US later decided to push forward the agenda of financial support to Russia without waiting for the settlement of the territorial dispute. Germany started giving their support in April 1992, which Tokyo found appalling. Nikkei Shimbun described the news as 'a sudden spill of water to someone asleep (寝耳に水)' (*Atamagoshi*, 1992). The Japanese government was disturbed by the sudden nature of the decision, as much as by the US' support for Germany – the Ministry of Finance in fury that 'the U.S. and Germany [were] trying to draw Japanese funding out through multilateral mechanism' (*Atamagoshi*, 1992).

Another source of frustration for Japan was the establishment of the Nuclear Safety Account (NFA). In early 1992, the EBRD was planning to establish a special account to provide safety assistance to countries operating nuclear power plants that had been built during the Soviet era.[6] European countries such as France and Germany suggested providing all the necessary funds through this newly-established account. However, Japan was fully aware that even though the US and European countries, during meetings, had all purportedly agreed to provide funds, it was unlikely that their governments would be able to pass the relevant legislation in their respective national parliaments. This was largely due to the already significant expenditure those governments were making on the EBRD (*Gempatsu*, 1992). Before the NFA disagreement, Japan had already provided additional funds of 1.6 billion yen to another fund within the EBRD framework: the Japan–Europe Cooperation Fund.[7] Japan was therefore unwilling to make additional large international payments without gaining something tangible in return (*Nihon* CIS, 1992). Japan was right to

[6] Nuclear Safety Account, EBRD website. https://www.ebrd.com/what-we-do/sectors/nuclear-safety/chernobyl-nuclear-safety-account.html (Accessed November 2019)

[7] Japan–Europe Cooperation Fund (JECF) supports transition operations from planned economy to market economy in all 27 of the EBRD's countries.

be wary. While the country did indeed plug the funding blackhole eventually, Japanese companies were nonetheless overlooked in favour of European ones when it came to the awarding of commercial contracts to repair those power plants or to provide alternatives to nuclear energy in the name of the EBRD (*Nihon* CIS, 1992).

The start of Japan's involvement in CA was triggered in an unexpected way. In efforts to convey its dissatisfaction, Japan started to challenge the EBRD with its own Asian counterpart over which Japan had a firmer grip: the Asian Development Bank (ADB). The Commonwealth of Independent States (CIS), including five Central Asian countries, joined the EBRD on 27 February 1992 (CIS 11 *Koku*, 1992). After a period of frustration with the EBRD, Japan endeavoured to divert those Central Asian countries away from the EBRD to the ADB. On 1 May 1992, Michio Watanabe, the Deputy Prime Minister and Minister of Foreign Affairs (Nakayama Taro's successor), met with President Akayev in the capital of Kyrgyzstan, Bishkek. During the meeting, Michio Watanabe expressed Japanese support for all five Central Asian countries to join the ADB (*Tyūōazia*, 1992). The initial plan was to secure exclusive access to those Central Asian countries and their economies through the ADB, with those countries also leaving the EBRD. On 7 May 1992, Hata Tsutomu, the Minister of Finance (Hashimoto Ryutaro's successor), clearly stated that any CIS country that wanted to join the ADB must choose between the ADB and the EBRD. He made a further appeal to the prospective countries: 'The demands for funding are increasing, we all agree that it is necessary to increase the capital of the ADB' (CIS *Syokoku*, 1992). However, after several rounds of negotiations, the final agreement at the end of 1992 was for the five Central Asian countries to accede to the ABD whilst remaining members of the EBRD (*Aziakei*, 1992).

Before the ADB officially ratified the membership of those five Central Asian countries in August 1993, the scandal of waste within the EBRD ignited public outcry that would accumulate in Japan. On 14 April 1993, *Asashi Shinbun* reported that since the establishment of the EBRD in April 1991, investments had reached a total of £101,000,000 with outgoings amounting to some £215,000,000. This latter figure included £55,500,000 for the interior and exterior decorations of a new headquarters, £600,000

to cover the costs of chartering jets for the EBRD's president, Jacques Attali, and £52,000 for the bank's Christmas party in 1992 (EBRD *No Huyōhiyō*). All this notwithstanding the fact that the EBRD had already moved into new London headquarters once before in 1991, which cost the British government £18,000,000; yet these buildings would only be used for two years. *Asashi Shinbun* harshly questioned the unspoken rule of the EBRD 'Headquartered in London and presidented from France', arguing that France shamelessly held on to the EBRD presidency even after the scandal of waste that unfolded under the leadership of French president Jacques Attali (*Sōsaierabi*, 1993). Another newspaper, *Mainichi Shimbun* mocked Japan as a 'straight-A student who follows the rules strictly' and suggested that Japan 'find a candidate to run for the election to have a better understanding of the hateful European manipulation within the EBRD' (EBRD *Zikisōsai*, 1993). Japan's weak, frustrated position in the EBRD could perhaps be encapsulated in the following figures: the percentage of Japanese personnel in the EBRD, around 3%, was significantly lower than the proportion of capital it had injected – approximately 9% (*Seigin*, 1994).

Japan's inaccurate perception of the power change

The theoretical framework of neoclassical realism, with its emphasis on the structural level, enables more detailed scrutiny on the division of labour between the politicians and the bureaucrats. Drawing its roots from classical realism, neoclassical realism posits that the ambition of a country's foreign policy is driven first and foremost by its material power, in relation to that of other countries (Rose, 1998, p. 144). Neoclassical realism, applied to the present case, thus reveals that the most critical reason for Japan's governmental input in the EBRD was the collapse of the Soviet Union and Japan's booming domestic economy.

Distinguished from structural realism, which emphasises security concerns as a nation's prior pursuit (Lynn-Jones, 2001), neoclassical realism contests that a nation pursues the 'maximisation of international influence' (Zakaria, 1992, p. 177). Japan envisaged a tripartite structure of the US, the European Community (EC), and Japan to rule the world after

the Cold War (Toshiki, 3 April 1990). It was therefore keen to fill the power vacuum created after the collapse of the Soviet Union and to demonstrate leadership in Asia to the newly independent Central Asian countries. As Fareed Zakaria's famous book title *From Wealth to Power* indicates, the Japanese pursuit for a more significant role in the international area resonates with the country's proactivity in the middle of its asset bubble from the late 1980s to the early 1990s.

Neoclassical realism further contends that the change of relative material power, the so-called 'systemic pressures', cannot directly impact on foreign policy. It is the *translation* of these systemic pressures, through intervening unit-level variables such as decision-makers' perceptions and policy-makers' reactions, which shapes foreign policy. As Fareed Zakaria describes vividly: 'States may be billiard balls, but each is made of a different material, affecting its speed, spin, and bounce on the international plane.' (Zakaria, 1999, p. 9).

The neoclassical framework applied to this research redefines the politicians as decision-makers and the bureaucrats as policy-makers.[8] It clarifies the foreign policy-making process as a vertical sequence, whereby politicians make decisions based on perceived international power changes; bureaucrats then mobilise the policies as tools to achieve the goals set up by the political masters. If the politicians are described as the drivers holding the steering wheel, the bureaucrats comprise the engine of the 'state power'. The bureaucrats are one of the key variables of neoclassical realism, enabling the government to mobilise its economic power in pursuit of foreign policy goals (Zakaria, 1999, p. 9).

Japan's involvement in the EBRD demonstrated the difference between how Japanese politicians perceived the post-Cold War era and the reality that eventually transpired. As neoclassical realism argues, the fundamental variable of foreign policy evolution is the change of relative power among countries. The Japanese politicians sensed that the collapse of the Soviet Union would provide a power vacuum that could be filled by Japan as one

[8] The Japanese political system is characterised by close collaboration between the politicians and the bureaucrats, in which the politicians instruct, and the bureaucrats draft and implement policy according to their instructions. Therefore, the two groups of actors are usually regarded collectively as the policy-makers (Park, 1986, p. 8).

pole of the new triangular world order. Japan's rising economic power gave them solid ground to aim even higher. However, history suggests that the relative rise of Japanese power was not as significant as elites in the country had first believed. The tripartite post-Cold War world order originally envisaged by Tokyo – whereby the USA, the EC, and Japan would all work as equals – ended up as a one-sided channeling of Japanese wealth to Europe with limited political influence rendered to Japan in exchange. The EBRD not only received a huge amount of funding from the Japanese government, but also enjoyed the low cost of fundraising in the Tokyo financial markets throughout. Of all the funds raised by the EBRD on the open market, the percentage raised from Tokyo was 80% in 1995, 65% in 1996, and 70% in 1997 (*En'yasu*, 18 March 1997).

The frustration felt by Japan through its involvement in the EBRD was concrete evidence that Japan's political influence was not enough to reach Europe across the entire Eurasian continent, let alone as a global powerhouse. Back in 1991, Prime Minister Hashimoto admitted during the Diet that Europe is a place beyond Japanese reach due to the geographical distance and the historical lack of political interaction there between (Hashimoto, 18 February 1991). Adjusting its former ambitious expectations, Japan refocused its foreign policy by retreating from Europe and limiting its activities to Asia. This strategic contraction echoed Hashimoto's earlier speech in the Diet that Japan lacked geographical and historical connections to Europe and that it should therefore conceptualise Asia as its region of primary interest (Hashimoto, 15 March 1991).

Conclusion

In his thesis revisiting Japanese foreign policy in post-Soviet Central Asia, Murashkin (2015) argued that the EBRD 'historically developed an informal geographical division of trusteeship labor', whereby Japan was assigned to take care of CA. The formation of this division may not be as harmonious as Murashkin described: Japan's struggle to challenge the EBRD in Central Asia using the ADB is perhaps evidence of a disconnect. Some scholars believe that Japan's engagement in Central Asia began with Hashimoto's 'Eurasian diplomacy' or 'Silk Road diplomacy' in 1997, but it

more likely started earlier as an unexpected result of Japan's experience in the EBRD (Chung, 2011). The beginning of Japan's involvement in CA can be interpreted as a twofold strategy: to retreat from Europe and to enhance Japanese leadership in Asia, simultaneously. In this context, CA countries were not only regarded as newcomers in the community of Asian countries, but also as comprising the western frontier of Asia against Western influence that was expanding from the west side of Eurasia to the east. The strategic importance of CA, as perceived by the politicians, partly explains the high-profile Japanese governmental involvement in the region. The EBRD case provides us with a channel to examine how Japan wanted to present itself to the international community and carry out its foreign policy. Japan's involvement in the EBRD revealed where it envisaged the border of its influence should be and how the country would maintain it.

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New to Virtual Teaching

A travel report from Dr Eleni Philippou, Faculty of English

With COVID-19 throwing the world into disarray, universities and schools across the UK and further abroad suddenly had to move to hybrid or online learning. In a matter of just a few weeks, I found myself in the same position as many of my colleagues, expected to think about how to teach students remotely – some of whom were living many time zones apart.

Thankfully, I was recently able to attend (online, of course!) a *New to Virtual Teaching* course offered by Advance HE – formerly Higher Education Academy (HEA) – a British professional membership scheme that promotes excellence in higher education. Advance HE offers expertise and resources to support the higher education community in order to enhance the quality and impact of learning and teaching. This two-week course explored effective learning plans for study in an online and hybrid environment. We collectively discussed the selection and use of assessment and feedback tools that support online learning. We also talked about the creative use of digital tools and ways to ethically enhance learning opportunities for all students.

The course acknowledged that there is a general negative perception that online teaching is inferior to face-to-face teaching. Certainly, complaints about online teaching range from minor and comic (students getting interrupted by their pets) to more major structural issues (questions of accessibility and digital poverty). The digital divide is a real and pressing problem, not simply as one between the developed and the developing worlds, but one that is prevalent even within the UK. There are students and learners who have problems both accessing a computer and having adequate bandwidth in their homes to join camera-heavy classes. With the digital divide presenting itself in terms of the scarcity of equipment, Wi-Fi, or skills, the course impressed upon the attendees that lecturers have to make a concerted effort to create inclusive learning environments, by thinking of their classes as a mixture of synchronous and asynchronous activities – live-streamed instruction vs work that can be done at any time.

As the *New to Virtual Learning* course progressed, it became apparent that online and hybrid teaching can be very effective in myriad ways. Information can be provided to students in a visual and digestible manner through different digital tools; students who lack confidence feel less shy speaking in the digital realm; and video recordings of lectures are excellent for revision. Moreover, guest lecturers from anywhere in the world can easily be invited to partake in a class – a great luxury!

After attending this course, I understood that online and hybrid teaching was here to stay, in some form or another. Students find aspects of this type of learning beneficial, and in a pre-pandemic world where students felt more in control of their university experience, many actively asked for at least parts of their courses to include an online element. A recent study by WonkHE and Pearson (2019) – 'Students' experiences of study during Covid-19 and hopes for future learning and teaching' – showed that students hoped a number of online learning features would continue in the future: online access to support services such as wellbeing and careers; all core learning materials accessible via the virtual learning environment; and recorded lectures. Certainly, after this rude awakening into the 21st century's world of online teaching, lecturers, and students alike should take advantage of whatever resources and techniques can inform and enhance the learning experience!

Attendance at this course was funded by St Anne's newly-minted Non-Permanent Academics Research and Travel Fund. The fund was instituted in 2019, and aims to support activities that contribute to the teaching and research of St Anne's contingent staff.

Biography

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Spark Reviews

Edited by Brittany Hause

Spark Reviews are short 1,500 to 3,000-word commentaries on science, culture, and the arts, which showcase the author's individual writing style and analytical skills.

Reviews might explore books, poems, plays, films, television series, exhibitions, music, video games, or other forms of creative expression the author finds personally or culturally significant. Authors accepted for publication are automatically entered into the journal's annual Firework Competition for the chance to win a small cash prize. This year, for Volume 11, STAAR has published five Spark Reviews, three of which appear in the following pages.

Two further Spark Reviews, 'The Four Seasons: a review of Oxford's Botanic Gardens' and 'Cosmopolitan Reveries: Elegy, Epicureanism, and Exclusion in Zweig's *The World of Yesterday*', written by Ramani Chandramohan and Julia Merican, respectively, have been published on our website alongside the pieces selected to appear in print.

The Spark Reviews section of the journal was founded in 2018 by Daniel Mercieca during his studies at St Anne's.

www.stannesacademicreview.com/spark-reviews

A Tibetan Sojourn with *The Horse Thief*

Divya Godbole, MPhil candidate in Development Studies

The Horse Thief (1986) still from *The Harvard Crimson*.

In a country still reeling from the fallout of the Cultural Revolution in the '60s and '70s, the Fifth Generation of Chinese filmmakers managed the arduous task of ushering in a new age of cinema. The Fifth Generation followed the footsteps of four preceding periods of Chinese filmmaking, each having their own distinctive flavour. While the so-called First and Second Generations established technological expertise in the nascent art of film production, the Third and Fourth Generations fell under the influence of dominant political ideologies of those times: Socialism and Nationalism.

The Fifth Generation defected from the political appeasement it had inherited from the vestiges of the Cultural Revolution. Propagandist tales of exploited workers confronting the bourgeoisie abound in earlier films, alongside heavy censorship of opulent period dramas like *The Life of Wu Xun* (d. Sun Yun, 1950) and of storylines that were 'insufficiently revolutionary' (Lee, 2014). Contesting this trend, the Fifth Generation stood for a frontal, unapologetic form of visual representation and storytelling. Tian Zhuangzhuang's *The Horse Thief* (1986) is a product of this revitalised landscape of Chinese cinema, a marked example of work that prioritises candid portrayals of life in China.

The film follows the life of Norbu, a Tibetan herder and occasional horse thief. An itinerant pastoralist, Norbu represents a typical man that film audiences might have expected to encounter in this part of the world. Despite being constantly on the move himself, Norbu's family lives a relatively sedentary life steeped in community and religion. Traversing a patchwork of Buddhist rituals, shamanistic rites, and herding routines, *The Horse Thief* is a study in practice, paying special attention to everyday concerns of Tibetan life.

In making the struggles of a marginalised group – one that continues to be persecuted today – its focal plot, *The Horse Thief* went one step further than its contemporaries in demonstrating the power of representation and voice. It weaves together a narrative that questions the Chinese state's hegemonic domination of Tibet, and advances a brand of courage necessary for challenging an unforgiving communist polity.

While nothing in the plot seems incendiary on the surface, the very act of drawing attention to Tibet is radical to say the least. The systematic erasure of Tibetan culture, which continues into the 21st century, makes *The Horse Thief* particularly relevant for audiences today.

The Fifth Generation: Pioneering a New Wave of Cinema

The Cultural Revolution lasted a decade from 1966-76, until the death of its leader Mao Zedong. It was a movement launched to purge the People's Republic of China (PRC) of all ostensible bourgeois excesses. This entailed the muzzling of traditional art forms patronised by the elite, such as the Peking Opera, strict film censorship, and the banning of publications deemed contrary to communist ideology.

Movies on liberation, resistance against Japanese imperialism, and heroic feats in the Chinese Civil War and the Korean War, like *Taking Tiger Mountain By Strategy* (d. Xie Tieli, 1970), marked the early phases of the Revolution (Berry, 2014). Films that exalted the virtues of patriotism, filial piety, and individual sacrifice for the greater good were common fare as well. Unlike the duty-abiding protagonists of the foregoing films who were

willing to go above and beyond for their country, *The Horse Thief* makes a titular figure of a man situated on the fringes of this nation, living a morally grey life that's circumscribed by religion.

Trained at the Beijing Film Academy, the Fifth Generation of Chinese filmmakers belonged to the cohort that graduated in 1982. In the post-Revolution haze that permeated the Chinese art scene of the 80s, the Fifth Generation managed to turn the lofty portrayals of socialist life, where peasants and workers lived in idyllic harmony, on their head. As the British Film Institute's Michael Berry puts it, the Fifth Generation pioneered a new kind of 'cinematic language' (Berry, 2014). Humanism finds expression in the films of this period, and among these *The Horse Thief* focusses on aspects of daily life (Berry, 2014).

The social divisions and inequalities that the Chinese Communist Party (CCP) wanted to paint over began to receive direct reference in films such as *Red Sorghum* (d. Zhang Yimou, 1987) and *Farewell My Concubine* (d. Chen Kaige, 1993). Chen Kaige's *Yellow Earth* (1984) not only had a female protagonist; it was bold enough to show the disillusionment of the average citizen. The constructed image of a homogenous China was similarly unmoored by *The Horse Thief*. A previously unexplored character – the pastoralist – was seen on the silver screen in a country that largely owed its existence to the mobilisation of agriculturalists.

The Horse Thief carries forward Tian's interest in representing ethnolinguistic minority groups in China, an interest he had already established the year before with *On the Hunting Ground* (1985), a cinematic offering focused on the autonomous region of Inner Mongolia. Tian's simple yet poignant presentation that made his 'point of view universal' prompted director Martin Scorsese to herald *The Horse Thief* as one of the best films of the '90s (Ebert, 2007).

Later, in 1993, Tian's penchant for avant-garde, politically-unsafe filmmaking would result in *The Blue Kite*, a film banned from screening in Mainland China despite receiving international acclaim. *The Horse Thief* escaped such censorship, though it was blatantly alternative content. Here, critique of the regime was implied, whereas disavowal was far more brutal in *The Blue Kite*.

A Novel Ethnographic Lens

Both content and form set *The Horse Thief* apart from other Fifth-Generation films. While Tian shares a zeal for unearthing the underbelly of Chinese society exemplified by contemporaries of the same period, he approaches the content in ways that starkly distinguish *The Horse Thief* from other Fifth-Generation productions. In particular, Tian digresses from the polished techniques of filmmakers like Zhang Yimou to produce a peculiarly rough-hewn, yet rich style of storytelling.

A low-key film catered to niche audience tastes, *The Horse Thief* employs an ethnographic lens to depict life's struggles in the harsh environs of the Tibetan plateau. Not only is the film shot in the local Tibetan language, but its actors are also Tibetan. By making these directorial choices, Tian asserts the integrity of his endeavour to represent Tibetan life as truthfully as possible.

Beside the proliferation of cheap photographic and filmmaking technology in the 20th century, ethnographic filmmaking became a popular tool in the arsenal of the colonial administrator-cum-researcher – or the Occidental traveler. As a person from the Mainland, Tian Zhuangzhuang fits the profile of an outsider studying another culture, but he does so with respect for the participants in his project. In *The Horse Thief*, the lack of essentialisms in Norbu's choice of livelihood is an instance of this circumspection. Tian gives audiences a messy bricolage of provocative shots, including ones of cults or indigenous festivals, and short run-times that were characteristic of early ethnographic films of the 1950s. Often lacking in any narration, the visuals of such ethnographic works were left entirely to the audience's interpretation. Minimal editing was akin to the anthropologist's quest to study societies in their unblemished state.

The Horse Thief appears to co-opt the ethnographic method of filmmaking that's associated with Western observations of cultures – cultures deemed exotic – reworking the filmographic style into a means of commenting on Eastern society from within. In his documentarian depiction of Tibetan life under Chinese rule, Tian reclaims an erstwhile instrument of misrepresentation to authentically illuminate the lives of a minority group. While Tian's positionality as a non-Tibetan and the fraught

relationship between the Chinese state and the Autonomous region of Tibet can be used to challenge the truthfulness of his presentation, being one of the first filmmakers to make forays into the Tibetan countryside in order to bring Tibetans into mainstream Chinese depictions affords him some benefit of the doubt.

Placing the camera used for Asian ethnography into Asian hands was revolutionary in itself. Tian puts on his ethnographic hat and eases into the bread-and-butter elements of ethnographic filmmaking. Sparse dialogue, lengthy shots, and a gratuitous display of the landscape gives *The Horse Thief* its rough, unadulterated character. The unkemptness of the protagonist himself adds to the unpolished quality of the film. His house is a dinghy, as his possessions are meagre and well-used. These were intentional choices by the filmmaker, perhaps to create a contrast with the pre-Fifth-Generation propagandist media that set out to show a prosperous China with no dearth of wealth or happiness.

Tian makes hardship the central motif of the film. Spartan scaffolding of cinematic paraphernalia brings the story's essence to the forefront. An absence of soundtrack creates a palpable atmosphere. If the filmmaking techniques Tian employed were less unassuming, the visceral quality of the content would have certainly been lost.

In *The Horse Thief*, life, death, and the struggle for survival are 'protagonists' as much as Norbu is: three primal forces of existence which keep the plot running, without a progressing storyline and its usual ingredients. The arc of character development that ordinarily follows in the wake of ups-and-downs in the protagonist's life does not feature here. Rather, the direction which Norbu's life will take is plain to see and inevitable, within the material conditions of his natural surroundings. While for some viewers this might make for monotonous watching, *The Horse Thief*'s charm lies in its very mundaneness. What particularly struck me was the film's close resemblance to yesteryear Bollywood with its unfinished veneer, which nevertheless held an immense reservoir of meaning underneath.

The seeming monotony of the film is interspersed by bouts of emotionally-charged scenes. Particularly hair-raising is one scene of a 'sky

burial'. Sky burials are a tradition of disposing the dead in Tibet, where the corpse is exposed to the elements and its erosion aided by carrion birds, vultures in particular. A raw soundscape with bird-caws and splintering bones being dropped by the vultures from a height remains completely unedited. The belief underpinning this funereal practice is that the body must be returned to the elements from which it is derived. *The Horse Thief*'s 'sky burial' scene is resplendent with azure skies and Tibetan prayer flags. It might even evoke a sense of exoticism, were it not for the literal way in which Tian presents the scene.

A Response to Sinicisation

One year after the founding of the PRC in 1949, the People's Liberation Army launched an attack against Tibet, forcing it to become part of the nascent country and ending a period of relative freedom. The ethnic, linguistic, and religious differences between Tibet and China were exacerbated by an incisive campaign of homogenisation – now termed 'sinicisation' – waged by the CCP. *The Horse Thief* wades against this imposed political homogenisation to highlight the uniqueness of Tibetan life.

The sinicisation of Tibet was a thinly-veiled attempt to root out political dissidents. As the last monarchy in China's history – the Manchu Qing dynasty – was ousted from power by the Kuomintang, seeds for a new era of ethnic nationalism were planted in the country. The Kuomintang's opposition, the CCP, was able to rally its Han supporters – incidentally the largest ethnic group in China (and in the world). Being Han was equated with being truly Chinese, and the establishment of a socialist CCP government in 1949, with a Han-dominated politburo at the helm, predicated the oppression of other minority groups in China.

Uyghurs, Mongols, and Tibetans came under the ire of this state machinery, which led to the creation of Autonomous Regions for each of these minorities within Chinese territory. The systematic persecution of Tibetan Buddhists which resulted in an exodus of members of the religion's upper echelons, including the Dalai Lama, was manifest in

compulsory Mandarin at school, appointment of religious leaders by the state, and an infestation of tourists from the Mainland – repercussions of which would perdure to this present day. Representation of Tibet as an independent culture was generally discouraged from the first. As a movie filmed in Tibet, and in Tibetan, by a Chinese director, *The Horse Thief* broke a mould that had stayed solid for almost four decades.

Norbu's squalid existence represents everything the PRC wished to distance itself from. *The Horse Thief* does not play up stereotypes of nomadic people, nor does it shy away from depicting the grim realities of their lives. It carves out space for genuine representations of working-class Tibetans in the sanitised world of cinema the CCP wanted to create. Although the film does not venture beyond the confines of Tibetan culture – no comment on the community's relations and interactions with the Mainland, for example – Tian's audacity to depict Tibetan life in the flesh was itself a powerful political act.

The untamed landscape of *The Horse Thief* recalls an era in which nature was not commoditised and controlled by man. In the rugged terrain of the mountains and the rivers flowing from melting glaciers, hands of the CCP or any other modern political group are nowhere to be seen. Norbu is placed distinctively in the wild, and distinctively in Tibet, to pursue his quest for survival. There is no indication that the lands he travels lie under the watchful eye of administration overseeing Shanghai's vast boulevards or Chongqing's industrial fervour. In spite of the CCP's concerted efforts to create an unvariegated China, the Tibet of *The Horse Thief* remains unapologetically and wholly Tibetan.

Conclusions

The Horse Thief is an extraordinary viewing experience, not only in its vibrant visuals, but also in its honest handling of content that holds such cultural and political significance. The ethically-suspect acts of thievery Norbu indulges in, his family's distinctively Tibetan brand of religiosity, and the unblinking depictions of nomadic culture that characterise the film, mark *The Horse Thief*'s divergence from Chinese cinema prior to the '80s.

Tian's piece focalises on the everyday and a common-man protagonist with a very commonplace Tibetan name; yet it is anything but common. The emotional, cultural, and social depth of this film stands miles apart from the stoicism of the filmography that preceded it. *The Horse Thief* is an example of enthralling narrative artistry. Tian's realist and humanist vision resonates with audiences today, and his vision will continue to withstand the test of time.

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Football by the Numbers: How Liverpool's Data-Based Approach Is Changing the Game

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As the 2011 film *Moneyball* draws to a close, Oakland Athletics – a Major League Baseball team – have come up short in the 2002 American League Division Series. The protagonists' defeat at this late stage is bittersweet: they've lost the championship; but as a team on a shoestring budget, making it as far as they have is widely acknowledged to be a remarkable achievement. Professional baseball was, in the early 2000s, a game dominated by spending power, something the Athletics decidedly lacked during the era recounted in *Moneyball*. Even so, thanks to an innovative data-based approach to the selection of players, this underfunded team rose up to challenge competitors at the highest ranks.

Liverpool fans cheering. Source: https://unsplash.com/photos/eADQs40WywY

Moneyball is based on a true story. It's unsurprising that the Oakland Athletics, an underdog team that unexpectedly found a way to compete against the sporting heavyweights, would be chosen as subjects for the silver screen. The Athletics' dramatic triumph against the odds doesn't just make for entertaining cinema, however. Their real-life accomplishments set

the stage for sweeping changes not only to professional baseball in the US, but to sport generally worldwide, and, in particular, to football here in the UK.

In the last few years, the ground-breaking, data-based methods famously exploited by the Oakland Athletics have been adopted by Liverpool Football Club, leading to similarly impressive results for the team. Echoing the Athletics' rise through the ranks of baseball in the US, Liverpool's recent series of successes is a gripping demonstration of how this new way of playing the game has the potential to revolutionise English football, a fact that pundits and reporters throughout the UK are coming to recognise.

The story begins with baseball

To understand how Liverpool came to utilise these methods so effectively, we need to go back two decades and study US baseball at the turn of the century.

In the United States, data on baseball players have always been collected and disseminated in abundance, but decisions regarding which athletes to sign to which teams rested almost entirely on the scouts' impressionistic assessments of candidates, players whom they observed in action. Under Billy Beane's leadership from 1997, however, Oakland Athletics' management broke from this established pattern of recruitment, opting instead to rely primarily on data for deciding whom to hire. Instead of following the scouts' gut instincts, the Athletics fed data into predictive models designed to assess the potential of various players' skillsets when those players were deployed in combination, using the optimum modelled results within their price range to create an effective and affordable line-up. In this way, the team was able to consistently discover undervalued players overlooked by teams with bigger budgets, and use these athletes to build a competitive force in baseball.

As detailed in Michael Lewis' (2003) book *Moneyball: The Art of Winning an Unfair Game*, on which the film is based, one of the first people to

recognise the brilliance of the Athletics' data-based approach was John W. Henry, owner of the Boston Red Sox. He soon adopted the Athletics' methods to source players for his own team. These new tactics coupled with the Red Sox's more ample financial resources saw them go on to win the World Series, baseball's ultimate triumph. In turn, this victory invited greater national scrutiny of the data-based approach to player selection.

Soon, the impact of Beane, Henry, and other baseball managers breaking with tradition would spread to other major sports played in the US and worldwide. Once this new approach to building competitive teams made it across the Pacific, English football, in particular, would never be the same again.

Data comes to English football

In October 2010, Henry's sports firm, Fenway Sports Group (FSG), acquired ownership of Liverpool Football Club. As evident from opinion pieces published at the time (cf. Thompson, 2016; Herbert, 2020), for fans of the club this was a welcome takeover, releasing the players from mismanagement by previous owners. Liverpool, once the most decorated club in England, had descended into mediocracy, long since overshadowed by wealthier teams when FSG arrived on the scene. With the club in ideological and financial disarray, Henry truly had his work cut out for him to repair the team.

Throwing cash at the problem was not going to be enough to restore Liverpool to its former glory, however. While FSG had money to invest, their funds weren't anywhere near the amounts available in clubs owned by oligarchs and sheikhs. Henry and his partners could not outspend their rivals; so their only option was to outsmart them.

By this point, the data-driven approach to team construction had found popularity among professional baseball, basketball, and other major sports teams in the US. 'Sabermetrics,' a term coined by writer Bill James, the original inventor of these methods (Lewis, 2003), had entered common use in baseball commentaries specifically. His work became acknowledged as a

foundational tool for managers running baseball teams across the United States (McGrath, 2003).

Meanwhile, the world of English football had yet to accept that data and statistics could explain the game. Football was considered too complex to be reduced to mere numbers, and the instincts of seasoned professionals held greater value over statistical data, sometimes to the total disregard of the latter. Long-standing club manager Sam Allardyce scoffed at the idea that English football could ever be governed by statistical models, opining that unlike 'baseball or American football', his sport of preference was 'too unpredictable' to allow for 'decisions [based] on stats' (Schoenfeld, 2019). Until very recently, this stance was also illustrated by pundit and former midfielder Craig Burley's dismissive retort. When asked about predictive models, Burley responded with 'expect[s] things at Christmas from Santa Claus, but they don't come', and the very idea of using data to predict football match outcomes is, according to him, 'an absolute load of nonsense' (Schoenfeld, 2019).

In spite of widespread mockery, Henry believed English football in 2010 was at the same stage of development that US baseball had been in 2002, and he saw no reason to assume that the sabermetrical methods would be wielded to null effect in the former. The Red Sox' success story was sufficient evidence for the view that *Moneyball*-type tactics could be applied in Liverpool's favour. Naysayers on all sides and a rocky start to FSG club management notwithstanding, events would eventually conspire to demonstrate that Henry was absolutely right on the money.

John W. Henry.
Source: https://commons.wikimedia.org

It took time to find a manager who agreed with Henry's ideas and was capable of effectively implementing the strategies in Liverpool's favour. The club cycled through various managers unsupportive of the data-driven approach; results on the field did not initially reflect any improvement relative to Liverpool's pre-FSG era. However, in 2015, the right man for the

job, Jürgen Klopp, turned up, and the FSG jumped at the opportunity to bring him on board.

As someone who had always supported the use of technology to explain football (Athletic Interest, 2020), Klopp instantly clicked with Liverpool's owners and their views on data utilisation, and immediately put data-based strategies into play. The difference which resulted, Liverpool's overall performance improved, culminating in the club's victory against Tottenham Hotspur in the 2019 Champions League Final. At last, Henry's long-held convictions and efforts had begun to pay off.

The stats behind the manager

Bruce Schoenfeld's (2019) *New York Times Magazine* article 'How Data (and Some Breathtaking Soccer) Brought Liverpool to the Cusp of Glory', one of the first pieces of sports reporting that acknowledged the successes of data-driven approaches to football, offers important insight into the strategies behind Liverpool's climb to victory in recent years. What's especially illuminating in this article is the detail provided on how decisions essential to the club's success were underpinned by the advice of ostensible sport 'outsiders': data analysts with more expertise in science than in

Jürgen Klopp at the Liverpool vs. Chelsea game, 2019 UEFA Super Cup. Source: Wikimedia Commons.

football. While Schoenfeld acknowledges that other teams like Tottenham Hotspur and Arsenal also hired data analysts to provide consulting advice, he highlights Liverpool's decisions, under Henry's leadership, as particularly noteworthy, not only in bringing a whole panel on board, but also in giving that panel unprecedented influence over the club's dealings.

Many have argued that the managerial appointment of Jurgen Klopp was the key to Liverpool's recent success (cf. BT Sport, 2019; Ripley, 2020; Sky Sports Football, 2020). Yet, it may surprise readers to know that this appointment was not owed to Klopp's reputation, but rested on match statistics modelled by Liverpool's data team.

Klopp did not enjoy a privileged route through the ranks of football management. Having worked his way up from smaller clubs, he was used to competing against richer teams and maximising the use of resources that were available to him. His CV displays many impressive results overall apart from one abysmal entry: his final season at Dortmund, a club which had challenged top competitors in previous years but which, to the shock of many, took last place in the German Bundesliga, halfway through Klopp's last year of managing the team (Clydey2Times, 2019). Even after finishing the season with a partial revival, Klopp's reputation took a big hit, and people began to doubt his ability as a manager (Holden, 2015).

At Liverpool, however, as Schoenfeld (2019) explains, the data team modelled the stats of Klopp's Dortmund run as a whole, revealing his fiasco of a final season to be an anomaly. Where other commentators saw failure on Klopp's part, the data team identified a series of outlier matches doomed by freakishly bad luck. General opinion now saw Klopp as an undesirable hire, but Liverpool was able to see through the unfortunate circumstances that had plagued his final season with Dortmund and correctly assess him as a competent manager with enormous potential. They did not hesitate to bring him on board.

The stats behind the players

Getting the right manager on board was only the beginning. Choosing the correct players for the job was just as essential, and Liverpool successfully applied data analysis to this task as well.

In the summer of 2017, Liverpool made one of their major signings in Mohamed Salah from Roma. It's conventional wisdom in football that a manager should be given free rein to buy the players they personally want (cf. Lusby, 2015; Jackson, 2019; Watson, 2021), but this is not the route that Liverpool took. Salah was not handpicked by Klopp, who had his sights set instead on the up-and-coming German player Julian Brandt – considered to be a superior option by many football observers (cf. Tanner, 2019). In fact, it was the FSG data team who determined that Salah should be brought on board, despite his seemingly lacklustre career prior to 2017.

Klopp decided to trust the Liverpool analysts' assessment and agreed to sign Salah for his potential indicated by the statistical models. Predictably, the media did not understand the move; word on the streets claimed Liverpool had lost the plot (cf. Marland, 2020). However, the doubters were quickly silenced. Salah soon broke the record for the most goals scored in a Premier League season. He's now regarded as one of the best players in the world (Nalton, 2021), while the career of the player Klopp had initially hoped to hire, Julian Brandt, has so far proved underwhelming by comparison.

Schoenfeld's (2019) article suggests that Liverpool's data-based choice of players would be better described as 'buying goals' than 'buying players'. The data team that pushed for Salah's hiring not only looked at player's personal list of notable achievements in recorded games, of goals and assists, but analysed every action – pass, tackle, or shot – that a player had taken which contributed in some way to the scoring of a goal. This approach to the data, applied to all player statistics, allowed Liverpool's analysts to calculate the potential contribution of a new recruit towards the scoring of goals, even in cases where said recruit might not personally kick the ball into the net.

A character in *Moneyball* tells Billy Beane, 'Your goal shouldn't be to buy players. Your goal should be to buy wins, and in order to buy wins, you need to buy runs.' Swapping out 'runs' for 'goals', the success Liverpool has enjoyed under a management willing to listen to data analysts on this point shows that the statement holds as true for football as it does for Major League baseball.

Conclusions

In 2020, Liverpool Football Club were crowned the Premier League champions. This victory did not quite top the club's 2019 Champions League triumph, but was nonetheless hugely meaningful to fans who had been waiting 30 years for Liverpool to retake the Premier League trophy. As was the case when the Red Sox won the World Series in 2004 after 86 years, Liverpool's win seemed to validate John Henry's unconventional approach to data analysis in the face of popular scepticism.

Liverpool's data-paved path to victory has not been without its bumps. Schoenfeld's (2019) article takes care to note that the results of statistical analysis are only as reliable as the data on which they are based, and the algorithms designed and applied by analysts are prone to human fallibility. Until Klopp, managers hostile to the idea of using *Moneyball*-type tactics undermined the benefits that statistical modelling could bring to a club like Liverpool. Admittedly, not all player signings made on the basis of statistical analysis have turned out as well as the case of Salah (Gates, 2021). But on the whole, the use of statistical data modelling to determine the best choice of manager, players, and gameplay tactics has, to all appearances, worked out very well for Liverpool. With other clubs remarking on Liverpool's success, it is doubtful that football will ever return to the game it was before. A new era in football is on the horizon, and this era has begun with Liverpool.

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***Bullshit Jobs*: A Review**

Augusta Nannerini, Alumna (2016)[1]

Together we create the world we inhabit.

— David Graeber (2018, p. 238)

Introduction

The Covid-19 pandemic and economic lockdowns have made us realise that there is such a thing as an 'essential job'. In 2020, the people holding an 'essential job' were those who could not work from home: doctors and nurses on the frontline, as well as bus drivers, cleaners, and supermarket cashiers. Some businesses, such as hairdressers, had a disputed status under this new system of job classification, hovering across the borderline between 'essential' and 'non-essential' according to the popular view. Not deemed sufficiently vital to receive government permission to remain in operation during the first lockdowns, their services were nonetheless sorely missed by many during that time. And yet other professions have, by contrast, come to be recognised as clearly 'non-essential'. The pandemic has changed previously held perceptions of work and the workforce, and its legacy will continue to challenge our understanding of socioeconomic systems going forward.

One important fact revealed during the pandemic is that many essential jobs are among those paid the least. In other words, modern society remunerates and rewards the highest stipends to people whose jobs are not considered essential. David Graeber in *Bullshit Jobs: A Theory* (2018) identifies this phenomenon as one of the biggest problems of our current political and economic system. He claims we should value care labour more than we do and spend less time doing meaningless, albeit higher-paid, tasks.

The definition of 'care labour' is fluid. In disambiguating this form of work from the less meaningful activities he examines in his book, Graeber

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notes the standpoint of feminist scholars that 'virtually, any form of labor can be described as 'caring' in the sense that it results in activities that help meet the needs of others' (Folbre, 1995, p. 74). A large problem in our society, however, is that the caring aspect of what in the Covid-19 pandemic became 'essential jobs' – professions rooted in care, empathy and human relations – goes largely unacknowledged and unrewarded, just as 'women's unpaid caring labor is made to disappear from our accounts of 'the economy"' (p. 236).

The major takeaway here for Graeber is that were we to recognise the value of care work and stop supporting jobs with no function beyond perpetuating the societal system of power relations within which we're embedded, in the long term we could institute a twenty-hour workweek (p. 26).

My concerns are slightly narrower. The main idea I came away with in my reading of *Bullshit Jobs* is that exploring how the present pandemic has altered our views of what work entails could clear the way for us to reconsider our personal work priorities and our relationships with our colleagues. Doing so has the potential to ultimately give our jobs meaning.

Defining 'bullshit jobs'

Graeber applies the label 'bullshit job' to any 'form of paid employment that is so completely pointless, unnecessary, or pernicious that even the employee cannot justify its existence', despite the fact that 'as part of the conditions of employment, the employee feels obliged to pretend that this is not the case' (p. 10). Examples of people mired in bullshit jobs include bureaucrats who can skip work without anybody noticing (p. 3); experts who write reports knowing nobody will read them (p. 50); and receptionists posted at the entryways to elegant buildings whose only responsibility is to open the doors, a task that could easily be mechanised, though it would reduce the building's prestige (p. 52). Such occupations are financially rewarded; but society would not suffer, or perhaps even notice, if those jobs ceased to exist.

Bullshit jobs, according to Graeber, come under five main categories, and these categories correlate with types of workers he terms Flunkies, Goons, Duct Tapers, Box Tickers, and Taskmasters (p. 28):

Jobs held by **Flunkies** are characterised by busywork of the sort that 'exist[s] only or primarily to make someone else look or feel important' (p. 28). The receptionist role mentioned above is an example of this type of occupation.

Next there are the **Goons**. A manipulative, aggressive element is intrinsic to their work. For instance, the PR staff of a makeup firm advertise products by enhancing the appearance of celebrities and actors in commercials to change viewers' perceptions of how men's or women's bodies ought to look. Call centre receptionists and telemarketers, who push people to buy or sign up for services they don't need, also fall under the Goon category (p. 39). These jobs are 'bullshit' because instead of responding to a pre-existing need, the workers that execute them have to create a demand for their products. If those products didn't exist, there would be no need for them.

Duct Tapers fix the problems that other employees make. Usually, the employees who caused those problems cannot be fired, and so Duct Tapers are hired to compensate for their incompetence. Duct Tapers are also responsible for fixing faults within the operational framework of the organisation. An example of a task performed by Duct Tapers is scanning documents that require digitalisation, where an organisation has lacked the capacity or the intuition to do so when those documents were first created.

Box Tickers exist so that an organisation is 'able to claim it is doing something that, in fact, it is not doing' (p. 45). A box-ticking job includes writing a report for a company to demonstrate awareness of the environmental impacts of its work, even though the report's recommendations may never be implemented in real life.

Finally, positions filled by **Taskmasters** come in two distinct shapes. Some Taskmaster jobs consist of doling out assignments to subordinates, while the subordinates are perfectly capable of identifying and performing their duties unsupervised by them. Other Taskmaster-type jobs involve the

wholesale invention of 'bullshit' for other people to do (p. 53). This can occur when a managerial position is created, together with several assistant roles, which exist solely for the purpose of inflating the manager's status and prestige. The assistants in fact do very little in practice, but rather perform the role of the Flunkies. The role of the Taskmaster is to ensure that the Flunkies have something to do with their time under supervision.

The subjectivity of 'bullshit jobs'

There is a high degree of subjectivity within Graeber's definition of a bullshit job. For a job to merit this label, the workers performing the job must themselves believe that their work has no use whatsoever. To fully appreciate the nuanced ramifications of Graeber's stance, it is necessary to consider two distinct angles of his argument. First, the individual subjective element, condensed into the question: 'What do people think/feel about their jobs?' Then, the structural component of his analysis, which inquires: 'What kind of society leads to the establishment of meaningless professional positions?'

Writing about the subjective nature of bullshit jobs is not an easy task, and it required Graeber to put together data on people's feelings towards their work. To get a quantitative measurement of the dimensions of the problem, Graeber relied on a survey carried out by the UK-based polling agency YouGov. YouGov conducted this preliminary study after Graeber put forward his initial arguments in a 2013 essay in *STRIKE! Magazine*. The survey used language taken directly from the article, asking, for example, 'Does your job make a contribution to the world?' (p. xxi). 37% of the respondents considered the purpose of their job to be meaningless, while another 15% said they weren't sure. Other questions returned with similarly mixed results.

In addition to the statistical data obtained via the survey, Graeber relied on data gathered in two other ways. First, his 2013 essay triggered several online discussions on the topic of bullshit jobs. Participants of these discussions applied Graeber's argument to their personal work situations, and 124 of these exchanges were later incorporated into Graeber's analysis

in the book. Second, in 2016, Graeber used his Twitter profile to solicit autobiographical accounts of other users' experiences of pointless employment. He assembled more than 250 testimonies, and asked follow-up questions about the emotional consequences of having a 'bullshit' form of employment. While most testimonies were sourced from English-speaking countries, a bias Graeber acknowledges to be an issue, messages also came from workers in Continental Europe, Mexico, Brazil, Egypt, India, South Africa, and Japan.

Graeber's research was not immune to methodological critique (e.g. Soffia et al., 2021). Writers in *The Economist* (2021) went so far as to say that 'the bullshit-jobs thesis [is], well, bullshit'. Nonetheless, my view is that much of the book's value rests on its radical ideas, a consideration apart from rigorous statistical demonstration of the universal validity of Graeber's arguments. Pedantic scrutiny of the data sources and methods used in his study detach us from an important reflection on what is truly meaningful in work.

Instead, critical attention should be placed on the book's contribution to our understanding of capitalism and patriarchy, and the power these phenomena have over people's professional lives. Feminist scholars have also highlighted this power dynamic in the context of Covid-19, in which the care economy suffered from a lack of financial resources, and incidents of domestic violence sharply increased owing to the patriarchal organisation of households (Prügl, 2020). In my opinion, *Bullshit Jobs* resonates with this kind of work. Graeber helps to explain why it is misplaced to see labour just in terms of production of goods, and why it is important that people care about the purpose of what they do and about the interactions they have with others while doing it.

Despite the questionable aspects of its scientific methodology, *Bullshit Jobs*' focus on the subjective brings Graeber to the interesting conclusion that, contrary to conventional wisdom that might imagine it to be pleasant to spend hours doing nothing, people with bullshit jobs usually feel miserable. In some cases, Graeber even theorises workers in these positions feel resentment and a 'moral envy' (p. 249) towards those with jobs that have a tangible purpose.

For example, Graeber notes that teachers often figure prominently in lists of professionals envied by workers whose jobs are deemed meaningless by contrast. 'No one ever called someone up twenty years later to thank them for being such an aspiring insurance claims adjuster.' (p. 250). This explains why teachers don't have, on a general basis, very high salaries and other forms of employment benefits. Teachers are in the category of 'people who have ostentatiously put themselves forwards as self-sacrificing and public-spirited' (p. 251), and they might even enjoy their job. The latter is an attitude entirely contrary to the philosophy that associates work with self-sacrifice, which also maintains as a corollary that noble or enjoyable work should not be economically compensated.

Consequently, a prevailing view in an economic system where many are unhappy with their bullshit jobs is that a 'noble' category of professionals like teachers cannot demand comfortable levels of pay and financial benefits while also feeling that they are positively contributing to the society. The same goes for social workers and people employed in the third sector. Graeber provocatively claims that thanks to the moral envy suffered by those with (more remunerative) bullshit jobs, improved job conditions for socially valuable workers could lead to people in such occupations being considered 'hypocritical' (p. 251).

I find intriguing Graeber's account of the existence and the impact of moral envy. It's admittedly a difficult concept to quantify or even to identify in real-life situations, as it might exist in people that are not rationally conscious of it. However, his discussion of the topic is valuable, in that it poignantly shows that our economic system is modelled in a way which justifies maintaining an inverse relationship between the social value of work and the amount of money one is likely to be paid for it.

Structural foundations of 'bullshit jobs'

It is puzzling why a financial system is paying low salaries for some essential jobs, but high stipends for meaningless positions. In theory, society's attempts to maximise economic efficiency should erase this sort of underpayment; but Graeber says this situation is neither surprising nor

new. He recalls the socialist regimes of the 20th century which created many 'bogus jobs' (p. 146) and that, in this same period, Western democracies were overstaffing the public sector. For the US, this involved establishing 'self-conscious make-work programs like the Works Progress Administration (WPA)' in the year of the Great Depression (p. 147). The neoliberalism of the 90s should have put an end to this administrative trend; however, the decade continued with jobs declining in the industrial and the agricultural sectors while increasing in the 'service economy' (p. 148). By definition, the so-called FIRE industry (i.e. finance, insurance, and real estate) is included in the service economy, employing professionals such as administrators, consultants, and clerical and accounting staff – the area where, according to Graeber, bullshit jobs mushroom (p. 150).

Graeber argues that this economic structure corresponds to what he terms 'Managerial Feudalism': a redistributive system whereby those in power establish laws to regulate the share they receive from other sectors of the economy. Their loot, which is paid by the powerless, is used to support the Flunkies, the Goons, and all other types of denizen in the feudal structure that don't contribute to the development of society, but merely live off the rent they're allocated automatically by the system. Graeber's model sheds light on the entanglement of economics and politics and explains phenomena such as the advent of 'too-big-to-fail' banks, whose lobbyists, in Graeber's words, 'typically write the very laws by which governments supposedly regulate them' and whose financial profits 'are gathered largely through direct Jura-political means' (p. 177).

The systemic flaws prompt closer scrutiny of what is considered valuable in our society, and who exactly 'produces' it. More specifically, the theory at the heart of *Bullshit Jobs* points to the difference between *value* and *values*.

Value, in economic terms, is what can be quantified and monetised, whereas values are not quantifiable objects; they fall within a category of virtues that are not economically remunerated. People are paid when they 'sell their time' (p. 84), which time becomes a value counted by the number of hours bought by the employer. According to Graeber, this understanding of value is based on a wrong definition of labour, one

which sees economics as the realm of production. A focus on production ignores the importance – and, by extension, the potential value – of care work, paid or unpaid.

Certain kinds of care work have remained invisible historically. Even as the first theories of labour as production were being developed, neighbourhoods designed for the industrial working-class employed in the 'production work' were in fact housing 'far more maids, bootblacks, dustmen, cooks, nurses, cabbies, schoolteachers, prostitutes, caretakers, and costermongers than employees in coal mines, textile mills or iron foundries' (p. 235), even if they were not accounted for in the conceptualisation of those theories. The oversight explains why society only pays well what is numerically countable and tangibly produced, but neglects unquantifiable values such as the empathy of care work (p. 235). This notwithstanding the fact that the jobs on which society depends are not necessarily the valuable jobs based on these standards – a truth which the COVID-19 era has reaffirmed.

Care at work – the way forward?

Graeber demonstrates that the proliferation of bullshit jobs is a problem everybody should acknowledge. Through provocative language, he invites readers to engage with ideas about working which may not have occurred to them before. However, *Bullshit Jobs* does not offer much by way of policy recommendations. Universal Income is presented as an option leading people out of bullshit jobs, but it is not explored in depth. Nor does the book mention how other intellectuals are also hard at work finding solutions to this problem in policy change: Philippe van Parijs (2003) among them, as well as economists who are building on the legacy of Henry George. One economist, Nicolaus Tideman, suggests taxation on land as a potential source for paying a universal income (1977). Graeber, on the other hand, proclaims to be an anarchist who prefers to give people the means to find answers for themselves, over imposing new rules and structures they should follow. He shies away from making clear-cut suggestions; but the lack thereof in *Bullshit Jobs* should not discourage anyone from reading his book.

Some reassurance and encouragement can be gained from reading about people who seem to deal with their bullshit jobs rather happily. A heartening testimony from the tax official in France, who enjoyed getting along with her colleagues and 'cheer[ing] up the troops' (p. 104), shows that, for some people, it's the working relationships with their colleagues which make all the difference, regardless of what's listed in a formal job description. In other words, a bullshit job can become labour of care, in part, where the workers do care for each other. Observations drawn from the 2020 lockdowns support this reading of *Bullshit Jobs*: working from home during the pandemic led to many employees missing the personal interactions they had with their coworkers back in the office (Deloitte, 2021).

Questions of policy aside, reading Graeber's book could help to expand our understanding of the professional space as a place to care about others around us. Taking this approach could add unquantifiable value to our otherwise excruciatingly over-quantified eight-hour workday.

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Creative Writing

Edited by Trisevgeni Bilia and Erin Nickalls

St Anne's Academic Review publishes short stories, creative essays, and poems written by St Anne's students and alumni.

Poems may be short in length, up to 50 lines apiece, or longer for prose poems. Original English translations of poetry or short fiction that are out of copyright, or for which the author has given permission to be published, are also welcome.

All creative writing pieces are published online and a small selection is chosen for print. Further to the works presented here in paper, we're pleased to publish digitally two more Catallus translations by Edward Bell, an alumnus of St Anne's, and two poems "Watch me" and "The Semicolon" by guest contributor Dr Adele Bardazzi from The Queen's College.

www.stannesacademicreview.com

Heat, No Light

I've never rolled a joint before and wished I'd been honest about it. But admitting to Elliot that I usually ask my brother, Mike, to pre-roll them would be embarrassing. We sit on the couch in my dorm room, fumbling with the rolling paper. I've made instant coffee—too much milk—and our mugs sit, lukewarm, alongside cans of Coke and chip packets peppered across the carpet at our feet. The TV glows, muted, in front of us.

My dorm neighbour's music pulses dimly through the wall. Campus lights spill in through the window, glazing Elliot's face. Fuck's sake, the windowpane's dusty, should I have cleaned it before he came over? Why do I care about a dirty win—

'Here,' Elliot says, holding the joint to me. It looks a little sad and loose, a confused worm.

I grin. 'Are you sure you know what you're doing?' I say, more confidently than I feel.

'I'm not the one who didn't even know you needed a filter, Josh,' Elliot jokes. 'You've never smoked before, have you?'

Okay, so maybe I've only *watched* Mike roll before attempting, like, a single inhalation. It was New Year's in New York and spending that time away from Bear, our conservative little hometown—a place that used to feel as snug as a scarf but now feels more like one scratching around your neck in mid-July—was overwhelming enough.

'Not really, but I've watched my brother enough times to know you've done a terrible job,' I say.

Elliot holds up the joint, scrutinising it. It looks like it might split in half. He shrugs.

'You're right.'

We laugh and it's nice. This type of newfound friendship is weird. It feels, I guess, chilled and comfortable, but still like tripping over only the surface layers. It's easy to laugh at things like this. A droopy joint on a winter's evening with the guy you sit next to in Stats. This is what college students do, right? But I wouldn't tell Elliot about the way Bear feels nowadays, or ask him if his hometown feels the same. And it's Friday night—a night that, usually, Ruby and James would be sitting here or I'd be at theirs. Friday nights have been ours for almost eleven years, since the three

of us were kids. They used to be Bible study. Now all three of us have replaced Bear for the same college, we mostly watch movies—sober, but hey. Baby steps. It's probably my first Friday night in months without them.

I reach out, attempting to fix the joint in Elliot's hand. His fingers are cooler than mine.

'I mean, let's be real, neither of us really knows what we're doing,' he says.

We straighten the joint as best we can and then light it. The flame tints Elliot's eyelashes golden for a moment and I wonder if I should notice that. He puts it to his lips, inhales the way Mike does—expertly—and suddenly I'm nervous. He passes it to me, and I think he maybe knows I'm self-conscious so he pretends to take a sip of cold coffee, and I inhale and cough everywhere, like in New York. Elliot purses his lips together, trying not to laugh. He fails and spits out some of his coffee, and then we're both laughing and it's fine.

'Well, this is humiliating,' I say, feeling lighter.

'What you wanna do is—' he says this the way he does when he's describing a stats equation, and then he mimes breathing in deeply, 'as

opposed to, like—' he mimes a shallow, small-mouthed breath. It's funny for some reason and I start laughing again.

'*What?* I'm *helping you!*' He's faux serious.

'I know, I know. Sorry.'

I try inhaling again, and it goes a little better. I imagine the smoke settling in my lungs and sifting into my bloodstream. Elliot has a little more and I wonder if the smoke moves differently through him than through me.

When we start laughing again, it's a different kind—a sleepy laughter bubbling up from my stomach, the type you get in the middle of class, in high school, sharing stupid looks with your friend and trying to stifle the sound. Ruby and I used to do that and Miss Fletcher would lose her mind.

I'm telling Elliot this before I can register the words falling over my tongue. He grins.

'I like her. Ruby. The one from Intro to Psyche, right?'

I nod.

'You guys have known each other that long?'

I nod again. My eyelids feel chalky.

'That's cool. Did you ever—? I mean, are you guys—?'

'No, no. She's—I mean. She's just my friend. Best friend.'

His question makes me feel weird, so I tell him about the way Ruby never turns down a dare—how she'd once snorted wasabi up her nose and didn't even blink, even when she started to cry from the burn.

Elliot cracks up and I know it's mostly because of the weed but it still makes me happy. He passes me what's left of the joint. It's small and hot between our fingers and tastes mostly of smoke.

When I wake up, I'm a little cold and the couch is scratching my cheek. My thoughts are muffled. Elliot is next to me, close, sleeping. The light from the TV flickers across his face. I watch it. I'm probably still high.

I let a thought settle for a moment: I got high, with a new friend. Mike would be proud. Our parents would die.

The room's cooler and darker—less light from the dorm windows opposite. When I get up I step on a chip packet and almost knock the cans and coffee over.

'*Crap.*'

Elliot doesn't stir. I pick my way over to the window and close it; there's frost blooming at the corners of the glass.

'Josh?'

There's something weird about Elliot's sleepy voice, here, in my room, so late. I guess Ruby was right: coming from Bear has made anything slightly new feel strange.

'Hey,' I say, then, uselessly: 'It's cold.'

He nods, rubbing his eyes. 'Need to pee.' He gets up and goes over to the bathroom.

I sit on the couch. Stand up. Sit again. Pull on a hoodie and start clearing the snacks away.

And then Elliot makes a kind of cheerful noise from the bathroom. 'Oh my god, the floor. It's, like, warm?' he yells.

'Oh, oh yeah. It's the uh—I was so confused, but I figured out it comes from the dryers. They're underneath the bathroom.'

'What, the laundry?' I hear the splash of Elliot washing his hands.

'Yeah.'

'And this bathroom's like twice the size of mine, too.'

'I know. Got lucky. But you've got the games room. And heating.'

'True.'

I give up on clearing up the mess. My head still feels funny; I didn't know weed lasted this long. I hear the tap turn off.

'Elliot?'

'Yeah? You've got to try this.'

I frown and walk into the bathroom. Elliot's lying on the floor in the almost-darkness, a strip of light from the little window spilling across his cheek gently. I don't know why, but that makes my heart squirm a bit. I laugh. 'What are you doing?'

'Bro, don't knock it 'til you've tried it.' He spreads his arms wide across the tiles, like he's making a snow angel, then looks up at me. 'What? It's *cold* out there. And this is nice—heat, no light.'

'Are you still high?'

'Probably. Are you?

I lie down next to him. The tiles are warm against my back.

'Probably.'

'Maybe that's why this feels extra nice,' he says.

'Yeah.'

Elliot's right—it's big for a dorm bathroom. Outside, I see tiny flecks of snow beginning to fall against the night sky. I stretch my arms out a bit, my fingers brushing the side of the wall. I shift, and my other hand hits Elliot's.

'Sorry,' I say, jerking it back.

'It's okay.'

I look over at him, at his profile, then quickly turn away. His eyes are closed.

'If you could be anything, what would you be?' he asks.

'Um. I dunno. Maybe a fish—'

'A *fish*?' he cracks up. I love the sound of it.

'Yeah, you know. Those deep-sea ones. They see parts of the ocean we never have before.' I want to tell him I'd like to be something else—that sometimes, I'd take just about *anything* else.

'Fair enough. That'd be cool.'

'Or, I dunno. Just free,' I say, instantly regretting it.

He turns to me, cheek pressed against the floor, brows furrowed.

'Free?'

I shrug. 'Yeah. You?'

'Maybe braver.'

I nod. 'I think you're pretty brave.'

'Really?' he scoffs. 'How?'

I shrug again. 'You argued with Professor Penham that one time, in front of everyone.'

Elliot grins. 'I guess.'

We lie there for a second, looking up at the ceiling, at the snow beginning to gather in the window frame.

'Is it always this warm? The floor?' He stretches his arms out again.

I start to say no, not always, and then his fingers briefly graze mine. My heart does the thing again and I don't like it one bit. I feel him turn to look at me. I look back at him, then look away before he does. My throat feels tight.

'Josh?'

'Yeah.' My voice sounds funny.

I turn to look at him again. His eyes are very green in the dim light, the whites slightly reddened. Making them greener. Should I be noticing this? I don't think I should be noticing this.

'Are you thinking a lot?' he asks.

'What?'

'You look like you're thinking a lot.'

'Sorry.' I say.

He smiles, but it looks different. Nervous. I've never seen him nervous. 'Don't be.'

I feel his fingers scrape against mine again. Lightly, unsure. I swallow, just like in the movies, but it doesn't help; my throat still feels like my heart has settled inside it. And suddenly, I want him to be as brave as he was in Penham's class. Braver, even. So I try not to think and instead let my hand fall against his on the warm tiles.

He looks at me, and I study his face—the curve of his eyebrow, the line of his nose. He has a nice nose. He has a nice everything. Please, God, let me still be very high. Otherwise please, God, let you not be real after all.

I think Elliot sees me thinking a lot again, because he shifts closer, puts his hand on my cheek, and presses his mouth to mine, maybe to help me stop. I freeze, he freezes, I unfreeze, he unfreezes.

His lips are cool and taste of coffee and weed and I don't want to be something else. I want to lie here against the warm floor and be me and have Elliot kiss me and for that to be okay. I want the snow to keep falling until it's so thick it covers the whole windowpane, then the whole campus, and then maybe the whole world, so that we can keep lying here, not knowing what we're doing, together.

——— Georgia Brisco, MSt in Creative Writing

Maybe we can stay friends

I am a guest in the English language.

Like a young lover who meets her partner's family for the first time, I am beyond reproach.

Every night before my introduction, I go over the stories my beloved ever told about his childhood, the family trips abroad. The times he rebelled against them, the times he ran to them for comfort.

I gather every tiny detail and tuck them up my sleeve like the artful magician, master of studied spontaneity; I walk the thin suspended rope between expectation and surprise.

I know a bit about each family member—some whimsy quirk that only intimacy grants—but I am sure never to cross the line. I stick to what I know.

What an outsider is allowed to know.

At dinner.

I listen to their anecdotes and share some of my own, careful not to stray too far from the general discussion.

The conversation calls upon me more and more, I even crack a joke or two, nothing rehearsed; nothing too risky, either. Their laughter fills the air and falls over my shoulders like a blessing upon a faithful subject.

After dessert we're gearing up for games. They've played them all among themselves for centuries, since that one great-great-grandfather whom everyone still remembers as the greatest player yet.

The rules have changed with time, naturally. Everything does. But the aim remains the same.

I'm not the best, but I try hard and—beginner's luck—I score among the highest.

Applause and disbelieving cheers.

I turn around and meet my lover's eyes. He beams with pride.
Don't look at me, it was all her, he seems to say.

A distant cousin who barely spoke to anyone points out how quickly I've picked up the rules, how close I fit right in. I thank him as I would accept a compliment; although I know it's not. He's reminding me of his own birth right to be present, to play at the English family game, while I remain a guest.

The evening ends. I take my leave with an invitation to come back soon—another reminder: I cannot drop by anytime I please. I need permission. The kind you cannot ask for.

Perhaps someday it will be different, if we get married. But I'm not ready yet.

To say yes to the English I love, is also to say no. No, to the Italian I grew up with. To my first love: French. To the Spanish I met that one summer, years ago. To my own Romanian family.

How could I choose?

And so, I wonder: could we remain friends?

Could I forever be a dinner guest to all, faithful only to myself?

——— Alina Martin, MSt in Comparative Literature and Critical Translation

Catullus in Paris

Uncertainty surrounds the life of Catullus. What little we know of him comes from ancient references and his poetry. That he mentions Caesar, Cicero, and other historical figures positions him in the final turbulent years of the Roman Republic. His formal style is Callimachean – well-wrought, erudite, and terse – and he is remembered for his high praise of friends, his salacity, and a readiness to lash out with hendecasyllables.

Below are two literal yet liberal translations of his poems 10 and 11 from my unpublished collection 'Catullus in Paris'. The translation project began and evolved from live recitations performed in Paris in 2015. This ancient poet and I are kindred spirits sharing a metropolitan literary scene; a tempestuous love affair; a handful of enemies; and the untimely death of a brother.

10

Varus me meus ad suos amores
uisum duxerat e foro otiosum —
scortillum (ut mihi tum repente uisum est)
non sane illepidum neque inuenustum;
huc ut uenimus, incidere nobis
sermones uarii, in quibus, quid esset
iam Bithynia, quo modo se haberet,
et quonam mihi profuisset aere.
respondi id quod erat — nihil neque ipsis
nec praetoribus esse nec cohorti,
cur quisquam caput unctius referret —
praesertim quibus esset irrumator
praetor, nec faceret pili cohortem.
'at certe tamen,' inquiunt 'quod illic
natum dicitur esse, comparasti
ad lecticam homines.' ego (ut puellae
unum me facerem beatiorem)
'non' inquam 'mihi tam fuit maligne,

ut, prouincia quod mala incidisset,
non possem octo homines parare rectos.'
(at mi nullus erat nec hic neque illic,
fractum qui veteris pedem grabati
in collo sibi collocare posset.)
hic illa, ut decuit cinaediorem,
'quaeso', inquit 'mihi, mi Catulle, paulum
istos commoda: nam uolo ad Serapim
deferri.' 'mane,' inquii puellae,
'istud quod modo dixeram me habere…
fugit me ratio: meus sodalis —
Cinna est Gaius — is sibi parauit;
uerum, utrum illius an mei, quid ad me?
utor tam bene quam mihi pararim —
sed tu insulsa male et molesta uiuis,
per quam non licet esse neglegentem.'

10. Poet Privilege

A friend caught me at the bar the other night and introduced me to his new woman. She was underdressed but, though a little desperate, had some good conversation. We ordered drinks, sat down and started chatting.

'How's your job going, Ed?' Not bad, I said. 'You made any money yet?' I replied truthfully that the bossman, not the lackeys make the good money; especially if they're so crooked as to sell their own ass sitting down, or at least that of the next intern.

'But you must be making quite a bit now; didn't you say you were going to buy a car?'

Now, to appear bigger than I am in front of this beautiful woman, I said: Fortune hasn't been so unkind to me in the private world that I am not unable to buy a Mercedes.

(Let alone a car, sometimes I can't afford a metro ticket and have to squeeze strangers' asses just to get a ride.)

'Wow, that's fantastic,' this woman said. 'Can you give me and a group of friends a ride to the Rasputin night bar tomorrow evening?'

'Wait a second,' I spat my drink, 'what I said then – I didn't mean to say Porsche or Mercedes or whatever it was – but it's my friend's – Matt's no Geo's, or someone's. Basically, it's like my own, and what do I care, I get around just fine. Anyway, woman, who are you to call out my charm? Do you not see that this is the privilege of being a poet?'

11

Furi et Aureli comites Catulli —
siue in extremos penetrabit Indos,
litus ut longe resonante Eoa
    tunditur unda,
siue in Hyrcanos Arabesue molles,
seu Sagas sagittiferosue Parthos,
siue quae septemgeminus colorat
    aequora Nilus,
siue trans altas gradietur Alpes,
Caesaris uisens monimenta magni,
Gallicum Rhenum horribilesque ulti-
    mosque Britannos —
omnia haec, quaecumque feret uoluntas
caelitum, temptare simul parati,
pauca nuntiate meae puellae
    non bona dicta:
cum suis uiuat ualeatque moechis,
quos simul complexa tenet trecentos,
nullum amans uere, sed identidem omnium
    ilia rumpens;
nec meum respectet, ut ante, amorem,
qui illius culpa cecidit uelut prati
ultimi flos, praetereunte postquam
    tactus aratro est.

11. Shoot the Messengers

Jason and Daniel, comrades of your dear Ed,
Every ready to support me,
Whether I start fights with Indians
Or pick quarrels with polite Iranians,
Or jealous Turks,
Fight the sagacious Pakistanis
Or romantic Syrians,
Whether I refuse to pay the Egyptian for the
Seven-headed hookah pipe,
Or I argue with the Swiss,
Insult the Germans, the Dutch,
Or my threatened fellow Englishmen,
You, ready to support me in all of these confrontations,
Which the machinations of the world throw at me,
Do me this one last favour and tell my ex to fuck off.
Let her have her thousand orgasms
With one thousand different men,
A whole room of soft boys,
Loving none, none loving her,
Constantly, time after time,
Taking them between her legs
In an attempt to scratch that itch.
She will never find my love again.
For it has died, just like a rose you buy from a street seller,
Leave in your bag and find it after wilted, parched, leafless.

——— Edward Bell, Alumnus, BA in French and Latin (2014)

Loneliness makes us human.

It is the abashment of not having
the comfort of others' presence
that glorifies a passive glance,
at times more comforting than
spatial abundance of Nothingness.

Daydreams of a warm laughter,
a soft collision. Bodies
transcending gently, navigating
in a sea of claustrophobic intimacy.

We long for more and more,
greedy, needy, human, real.
A necessity to abandon loneliness,
an obligation to bleed.

It is not tenderness we seek,
it is a fight for survival.
Contingencies –- they determine everything.

Tender, friable, soft, desperate.
Fight for love, except
it is not love; it is desire.
Boredom, lassitude, masochism,
a primitive yearning to feel.

——— Thisuri Perera, BA student in French and German

Father and daughter,
Cafe du Soleil on Broadway

It's graduation week
at Columbia
he searches in the menu
through omelette
ratatouilles
overcooked ravioli
and mixed greens
the words to tell her
I am so proud of you
my dear Anne

Is this your kind of favourite place?
Is it still a stressful time around here?
She answers
He looks now at his cellphone
As he already ordered
his steak sandwich

Anne is moving to London
to work at a law firm
she found a place with Sophie
Anne is going to the restroom
he is not listening anyway

Could I do the burrata salad
she asks to the waitress
who congratulates her on
her graduation day and
Anne wishes a few
kisses from her
as she misses them
from her dad.

——— Dr Adele Bardazzi, The Queen's College

Biographies

Ye-Ye Xu, Editor-in-Chief is a Scottish-Chinese linguist undertaking an MPhil in Linguistics, Philology and Phonetics. She completed a PGCE in European Language with Mandarin at St Anne's and was appointed Junior Dean of Pembroke College in 2021. Ye-Ye previously worked for the Royal Philharmonic Society and established the charities El Sistema France, Alsace, and Nevis Ensemble in Scotland. She holds an LLB with European Legal Studies from King's College London and the University of Strasbourg.

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Naomi Hoodless, Social Science Editor completed her PGCE in French and German at the University of Oxford in 2021. She was the German Editor of a languages magazine during her undergraduate studies at Newcastle University, and was thrilled to have had the opportunity to use her editorial skills for the St Anne's community. Naomi is now a teacher based in the Austrian Alps. When not teaching the St Anne's students of tomorrow, she can be found singing in a choir or exploring the mountains.

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Lise Cazzoli, Production and Science Editor is studying for a DPhil in International Development. Her research focuses on access to healthcare for displaced hurricane survivors, and uses interdisciplinary approaches to cover geography, medicine, ecology, and the social sciences. Lise holds degrees in Social Anthropology, Political Science, and Public and International Affairs. She was trained in mixed methods at the Stockholm Environment Institute, and has worked in policy and the non-profit sector, including the UN.

Evmorfia Dalietou, Science Editor is reading for a DPhil in Interdisciplinary Bioscience. Her interests lie in structural and chemical biology and medicinal chemistry: how molecular structure confers activity and function, and how this relationship is perturbed in health and disease. Eva holds an MPharm from the National and Kapodistrian University of Athens and the University of Vienna. She enjoys playwriting and acting, and her poetry has appeared in independent publications.

Brittany Hause, Spark Reviews Editor is working towards a DPhil with Oxford's Faculty of Linguistics, Philology and Phonetics. Their research centres on the effects of contact between speakers of various languages in an area that's now known as Bolivia. Brittany lived and worked in Bolivia, the US, and South Korea before moving to Oxford in 2015 to undertake an MPhil at St Anne's, also in linguistics. Brittany volunteered first as STAAR Humanities Editor for one year before taking up the Spark Reviews Editor post.

Volume 11 Article Contributors

Ramani Chandramohan is an English Language assistant at the University of Lorraine and SciencesPo, Nancy. She completed an MSt in Modern Languages, a BA in Classics and French, both at St Anne's, and took an Erasmus exchange at the Sorbonne University. Ramani also represented St Anne's on University Challenge and won 'Student of the Term Award' (Stanner) twice. She hopes to make the study of languages and literature as accessible as possible, after having done outreach work while at Oxford.

Charlotte Fraser recently completed her MSc in Environmental Change and Management at Oxford. She holds a BA in English Literature from the University of Cambridge, which has shaped her academic interest in the relationship between the arts and environmental change. Her MSc dissertation focused on community oriented housing in the UK and its contribution to residential sustainability. At St Anne's, she enjoyed promoting sustainability as MCR Environmental Officer.

Theodora Markati is a medical doctor and neuroscientist from Greece who trained in Paediatrics in London and Cambridge. She completed an MPhil at the University of Cambridge where she looked at the molecular mechanisms involved in the development of neural networks. Now at Oxford, Dora is working on clinical studies and trials aiming to treat rare childhood diseases affecting the nervous system. Her hope is to see more efficient treatments for these diseases available for children throughout the world.

Julia Merican is a Malaysian-British writer from Kuala Lumpur who graduated from St Anne's in 2021 with an MSt in post-1900 English literature. She is often moved by very little things, like letters found in secondhand books, or sunlight falling softly onto brick walls. Sometimes, she writes about them. She has also interviewed many interesting people for several publications. Her work has appeared in *Cereal*, *Aesthetica*, and *The Oxford Review of Books*, where she was also an editor.

Asad Moten, a member of Oxford's Medical Sciences Division, is a commissioned officer and academic physician working for the United States Department of Defense. His research interests are in epidemiology, public health and safety, quality and operations improvement, ethics, justice and human rights, and evidence-based practice.

Conrado Eiroa Solans completed his MSc in Psychological Research at St Anne's in 2021, specialising in the nature of human emotions. He holds a BA in Psychology from The College of St Scholastica, Duluth, and he has worked as a Research Assistant at the universities of Yale, Stanford, and Michigan. Outside of academia, Conrado enjoys spending time in the great outdoors, trekking the backcountry and hidden lands.

Zhihang Wang is a DPhil candidate at the Oxford School of Global and Area Studies, conducting a comparative study of Industrial Internet industry policies in Japan and China. His MSc in Japanese Studies, completed at St Anne's, focussed on Japanese involvement in Central Asia as a case study of the interactions between government, semi-government institutions, and private sectors in Japan which shape the governmental and business strategies foreign regions. Zhihang is now affiliated with St Antony's College.

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Below listed are some of the names of participating academics, and we extend our thanks to those individuals who wished to remain anonymous.

Reviews can be read online at www.stannesacademicreview.com.

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