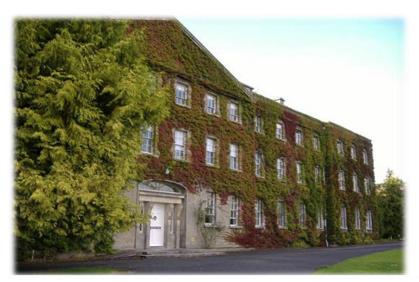


# Milieu 2022





MU Geography Society





44<sup>th</sup> Edition

#### A Note from Dr. Helen Shaw

Head of the Geography Department, Maynooth University

Welcome to Milieu, this edition of the magazine of the staff and students of Maynooth's Geography Department is indeed a special edition. Firstly, the content continues to cover the many varied aspects of Geography in the way we have become accustomed, allowing students and staff to write and read about the myriad of approaches, problems and solutions that encompass Geography over 50 years of the department's history is indeed special. Secondly, we are emerging from a prolonged and unprecedented lockdown. Our worlds have all at once become smaller, as we have studied and worked form home more, but larger, as we go to international conferences from our desks, meet new colleagues and work remotely across geographical barriers. The quality and breadth of Milieu submissions in the face of this strange new world is impressive and is testament to the resilience and adaptability of students and researchers. Our editors are to be congratulated. Dr William Durkan has done an amazing job of keeping this going whilst also finishing a PhD and starting a new teaching role under the challenges of ongoing uncertainties. A very big congratulations for this achievement alongside Dr Adrian Kavanagh whose support for and of the department is remarkable, and more than he ever gets credit for.

Our 50<sup>th</sup> year is marked by celebration and sadness. We remember Martin Charlton and miss him for his contribution, wit, and warmth. We celebrate 50 years and did so with a wonderful event in December where warm memories and future goals were discussed in equal measure by faculty old and new. But, most of all, here at the start of our Milieu edition for 2022, we celebrate the marvellous and outstanding achievements in writing of a number of our students who have not only survived the strange years of their partially online degree with flexibility and determination but have thrived and contributed material which helps us to celebrate being Geographers at Maynooth.

It is wonderful to hear about the influences that encourage study of Geography, and the analysis of the timelines in the various Atlases that inspired James Plunkett shows us that inspiration can come in many forms, we see the outcomes of that inspiration in the Past Graduates and their careers section at the end of this volume. We can read about important people in Geography and challenges to Geography in the first two articles, or the Geographies represented in film in the last three articles, as well as economic, development and feminist geography. Reflecting on the overarching theme of this volume, covered in no less than seven contributions, is the theme of how we impact environment and how we might live more lightly on the planet. As we move to an era of mainstreamed sustainability education it is good to see this focus emerging strongly across geographic disciplines and approaches. These differences in disciplines are illustrated and well observed in conversation in "A Geographers' Tea Party" by Tomas McNamara and a play by Nathan Maguire, differences we should all value and support as we move forward in our new and uncertain world.

I do hope that you enjoy Milieu 2022.

Dr. Helen Shaw

#### Editorial

#### Adrian Kavanagh & William Durkan

Each year when it comes to writing the Editorial for a new edition of Milieu the challenge that faces the editorial team is to try to synthesise the many academic offerings that are packed into that year's issue, while also attempting to situate these within the environmental, social, political, cultural, and economic currents of that time. But a good editorial team will also want to emphasise that their specific issue of Milieu is historical and an especially important addition to the history of Maynooth University Department of Geography. It is an easier job to make these claims this year. We unfortunately live in interesting times. Just as parts of the world start to emerge out of the years long Covid pandemic, conflict in Ukraine has led to death, injury, and mass destruction, as well as mass movements of people across the continent of Europe, reflecting the similar experiences of people in Yemen, Syria, Afghanistan, Tigray, South Sudan and other states in recent years. The political outlook remains bleak for people in these countries and neighbouring countries, such as Moldova. Almost in the background, the rapid escalating global environmental crisis continues afoot, and the world is as far away from an effective response to the threats posed by climate change as it was in the wake of the collapse of the Copenhagen climate conference in 2009.

The one subject that clearly addresses these, and other major, global challenges in a holistic manner is Geography. Over the past half a century, the Maynooth University Department of Geography has provided skills to address local, regional, national, and global socio-environmental challenges to well over ten thousand students, with these ideas and skills then being applied in a variety of workplaces (and not just the university), including schools, planning departments. local and national administration, environmental consultancies, and community organisations. The pioneers of the Geography Department, Paddy Duffy, Proinnsias Breathnach, John Sweeney, Dennis Pringle, Shelagh Waddington, Jim Walsh and the two Willie Smyths (and let's not forget Jim Keenan, Mary Weld and Gay Murphy) made incalculable contributions to the development of geographical teaching and research in the University. It is important that we recall their stories in this year when we celebrate the 50th Anniversary of the Geography Department, while also sadly saying farewell to our dear friend and esteemed colleague Martin Charlton.

Each year brings new stories, new ways of doing and making Geography, and this year's Milieu is testament to that. This year's Milieu is another bumper edition, with a wide range of high-quality articles, covering a range of geographical topic, with most of these contributed from the undergraduate student community. On this basis, the future of Geography lies in good hands. Each Milieu is only as good as the contributions that are received for it and there would be no Milieu this year if a number of people had not taken the time – and also taken courage! – to put their work forward for publication. Ailbhe, Aisling, Aodhán, Caoimhe, Chris, Ciaran, Cody, Daniel, Emma, Eoghan, Ivan, Jake, James, Katie, Leo, Michelle, Naoimh, Natalie, Nathan, Niamh, Orla, Ronan, Shane, Stas, Susan and Tomás,

we thank you. And we also offer especial thanks to all our Past Students - Annemarie, Arlene, Darragh, Eibhlín, Eoin, Ethan, Jennifer, Leila, Orla, Rachel, Rebecca, Sinead, and Tim – who took the time to contribute to our article on past student careers after leaving Maynooth Geography. New Milieu, new stories! For some of our contributors this will be the first time they will have got their work published and hopefully this will encourage some to pursue further studies in Geography after their undergraduate studies and get more work published. If they do, they will be in good company. Milieu '82: A Search for Relevance included an article on "Nationalism and Class" by Gerard Toal; today, one of the leading geographers in the world, but back then a Final Year Geography student in Maynooth, like most of this year's contributors. Could an article in this year's Milieu be a first step in a glittering career in academic Geography for at least one of our student contributors? We'd like to think so.

Finally, a few words on this year's Geography Society. Congratulations to the Committee on a fantastic year. After some very quiet and inactive years, they made the Geography Society relevant, vibrant and – dare we say it – a lot of fun once again. Hopefully, students in Years 1 and 2 this year will come forward next year to play roles in the Society and build on the successes of this year.

William Durkan and Adrian Kavanagh, Milieu 2022 Editorial Team

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#### In Memoriam: Martin Charlton

Author: Chris Brunsdon



Martin Edward Charlton (1957-2021)

It is with great sadness that Maynooth Geography learned of the passing of Martin Charlton last summer. Martin was one of the leading pioneers of quantitative geography and geocomputation whose work helped inspire the recent resurgence of spatial analysis and geographic data science, and much of his contribution can be attributed to his time at Maynooth. After launching his career at Newcastle University he moved to Maynooth in 2004. Here, he co-founded the National Centre for Geocomputation at Maynooth University, Ireland where he remained until his retirement in 2020.

Martin's career spanned the (geo-)computational revolution of the 1980s that resulted in the widespread use of computer programming for spatial analysis in geography leading to a core component of the current GIScience body of knowledge. His research was fundamental to many of the methodological innovations that are now central to the practice of quantitative geography. Central to his contribution was the idea of using innovative computational - and, critically, geo-computational - methods to explore and explain geographical patterns in data, which despite borrowing from ideas in mathematics and computing, were essentially geographical in nature. Martin has left us with a large and impressive body of research which currently stands at over 22,000 citations.

However, beyond all of this we fondly remember his unique approach to academia. A memorable aspect of Martin's talks was that, despite the content often relating to fairly abstract ideas in computing, statistics or geographical information, there were always photographs of people and places, helping to tell the human story behind many of these ideas. Martin showed us that geocomputation and geographical data was not solely about mathematical abstractions, but also concepts grounded in people and places. He was aware of the stories behind the data and made a place for their telling.

Martin was an inspiring teacher. His lectures were entertaining and highly popular with students; he always made the time to help students, especially at dissertation submission times when the corridor outside his office would be lined by students waiting for Martin to willingly and cheerfully assist them. If those that feel compelled to quantify all aspects of academic activity were to count acknowledgements in dissertations, Martin's metric would be extraordinary.

Finally, we would like to remember Martin as our dear friend. We have worked and learned alongside him and discussed ideas over a beer (actually rarely 'a' beer) on many occasions. We are all the sadder that he passed before enjoying a well-earned retirement. Rest in peace, Martin. Discipline in crisis: will human geography's continued fragmentation be the discipline's fatal blow?

#### Author: Ciaran Burns

Indeed, geography is fast approaching cross-roads. Leaving an age of singly definitive answers, we instead enter a time of greater specialisation and diversity. With it, the geographic discipline faces a challenge to ensure its survival. That said, this essay critically evaluates whether or not increasing fragmentation within human geography will cause it to continue losing identity, ultimately ending the geographic discipline. It outlines that while geography's fragmentation can be a fundamentally positive thing, it can bring additional challenges that may make academic cohesion difficult. On the contrary, by restricting the freedom with which academics specialise, their studies may risk being stifled. Thus, a subject which born to draw academic subjects together could lose one of its most cuttingedge attributes. Both have advantages and disadvantages. This essay argues that a balance of both is best for human geography's future, one which sees continued fragmentation, paired with suitable self-awareness, as the key to the discipline's success and affirmation of its identity as an academic lynchpin.

Johnston (2005) believes that geography is approaching a fork in the road, or multiple forks if you will. Integral to this dilemma are two significant directions, restriction, and freedom. Fragmentation, the direction human geography appears to be heading, means an increasing number of subdisciplines and perhaps the danger of losing a common identity. Navak and Jeffrey (2011) argue that geography as a discipline has been rumbled by an explosion of new ideas, all emerging as part of a post-colonial movement. With the discipline heading in so many directions, human geography could reach an identity crisis quite soon. On an optimistic note, Thrift (2002) posits that with current fragmentation, human geography is making exciting progress, which sees the development of myriad new technological and experimental developments such as GIS and online surveys. This would suggest human geography is moving with the times. Following this train of thought, Johnston and Sidaway (2015) hold human geography as simply a reflection of society's transience over time, meaning that its division mirrors societal changes running parallel. On the contrary, Clayton (1985) illuminates that increasingly intricate and specialised subjects require additional staff and resources to keep them going. This practical matter threatens the very survival of geography. Equally, Johnston (2005) underlines a risk of academic immobility that comes with too much fragmentation. Hence, a strongly cohesive direction for human geography is important to its academic presence, and with it the resources it is awarded. Further fragmentation may threaten the stability of our geography departments. Despite this, fragmentation also has the potential to improve the vitality of academic rigour and diversity. It may cause a loss of common identity if not kept in check, but it must be allowed flourish to some extent. How

can we find geography's true place in society and academics if our approach restricts us from finding it? Thus, fragmentation, albeit a risk to common identity and departmental strength, ensures the discipline has creativity and bravery at its core. Maintaining a level of fragmentation is key to geography finding its feet in an ever-changing academic world.

Contrary to fragmentation, human geography could turn in the opposite direction, gathering as a more cohesive unit. Throughout geography's history there have been numerous singly identifiable doctrines that have guided the subject, some of which have posed their own problems. Paradigms such as environmental determinism, regional geography, and spatial science represent a portion of what human geography used to be (Johnston, 2005). The flaws of these approaches highlight the danger of siding with a single world view, even if it maintains stability within the discipline. Colonialism, tied with geography's historical development, is seen in many of today's structures (Nayak & Jeffrey, 2011). In this manner, Johnston and Sidaway (2015) remind us of that human geography's testing history, intertwined with scholars such as Mackinder and Semple, was one blind to minorities' struggle and equally supportive of colonialism. As a result, geography has now become preoccupied with fixing itself, acutely self-aware of its colonial legacy (Thrift & Walling, 2000). Since then, the discipline proceeded to split into various channels, before eventually taking its current shape as a diverse strand of academia. Importantly, other factors determine the health of an

academic discipline. Social context, politics, university funding, and competition all contribute to the discipline's strength, support, and direction (Ibid). These are practical concerns which shed light on a different aspect of the argument. Regardless of what best suits academic rigour and exploration, the reality is that geography departments across the world regularly compete with others to receive funding. The emphasis on allowing further geographic fragmentation shifts as a result. Although a geography following a single approach can be dangerous, the contrary risks a loss of identity and cohesion. If a commonly taken approach holds too many negative connotations, the discipline can be left with an even greater problem. Therefore, fragmentation should not be prevented for it is the lifeblood of a richly diverse, ground-breaking academic discipline.

With a best of both approach, human geography is released from its political bonds, too long a restricting force in the discipline. Acknowledging how it has come to its current juncture, human geography continues on a path of academic experimentation and creativity. Equally, human geography must recognise the realities of funding. Academic freedom and departmental cohesion might appear distinct but marrying both is essential to geography's identity. How do we combine the two? Clayton (1985) advocates an approach which sees geography departments must adapt to ever-changing cultural and political situations. In this way, a balance can be found in being flexible. Using its ability to collaborate with various departments crossing into geography's fringes, geography students and graduates must continue to pursue their academic curiosity. This has to be done whilst maintaining a certain degree of traditional geographical boundaries (Ibid). This challenge manifests itself in current approaches. Thrift and Walling (2000) discuss their opinion on poststructuralism and post-colonial geography, two popular and current geographic approaches. These approaches focus on how we view geography, how it is used to understand the world we live in today. Less about discovering new geographies, more relating to the discipline's place in the world. These approaches represent further fragmentation but also its ability to maintain a common thread of understanding, albeit one that not everyone agrees upon. Human geography does not have to hold a common line of enquiry. The world is too chaotic for there to be one whole truth, but we geographers must recognise that some truths do exist. Again, the need for balance is highlighted. Although Cresswell (2013) views this progression as a challenge to the scientific method, Johnston and Sidaway (2015) contrast this path as an essential part of the human existence. Moving forward with the times, adding a renewed sense of self-awareness, is perhaps the best of both approach that runs between either end of the extremes, the grey area. Thus, to understand that grey area geography must allow continued fragmentation, whilst holding onto its sense of self-awareness to avoid mistakes of the past. Whether fragmentation sounds geography's death knell is uncertain, but this essay argues it

cannot afford to prevent a thousand flowers blooming. The past holds too many unfortunate lessons otherwise.

In conclusion, this essay critically evaluates whether or not human geography's fragmentation is a positive step forward, or if it spells doom via identity loss. Discussed above are some consequences of fragmentation and a singular direction, both positive and negative. The potential and viability of an approach that sees human geography combine the best of both is instead suggested as optimal for its survival. Is it to be an interface between multiple disciplines, or a unique subject with key viewpoints unexamined by other areas? Human geography's value to the world is colossal, so too its potential to provide a well-rounded understanding of the one in which we live. But should it succumb to political and financial pressures because it can neither be restrictive nor boundless? This essay believes human geography covers academia's grey area, hitting the sweet spot in the centre of its endeavours. Thus, a best of both approach is strongly recommended as continued fragmentation does not necessarily doom geography to a loss of identity. By tying division with self-awareness, geography can maintain a common goal whilst remaining appropriately vibrant.

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#### The Contributions of Emyr Estyn Evans

#### Author: Katie O'Brien

Emyr Estyn Evans is a name widely known in the academic Human Geography world. He has had a large impact on the subject of Geography as a whole in Ireland, as he was the country's first professor of Geography (Buchanan, 2009). It is clear that he was, and continues to be, an important figure in the development of Irish Geography, and much of the work and research that has been done in this field may not have been possible without his initial input to the subject. In this piece, there will be a focus on the contributions Evans made to Geography. There will be an analysis done of the dominant trends in global and Irish Geography throughout his career and how this affected his studies, along with his contributions to them. In addition to this, several other topics will be discussed, including Evans' impacts and main topics of study, his works, his work with other geographers, and his achievements.

To begin, there will be a brief background given on Evans' academic career before his professional one, to show how he started out. He began his Geography studies at the University College of Wales, Aberystwyth in 1922 (Graham, 2004). Along with this he also studied anthropology, which could have led to his later interest in regional identity and culture. He graduated with his BA in 1925 but was unable to commence his postgraduate studies in Oxford due to his diagnosis of tuberculosis (Graham, 2004). In 1928, he became the first lecturer of Geography at Queen's University in Belfast, and thus became the first professor of Geography in Ireland (Buchanan, 2009). This was one of the first major steps in the development of Geography on the island of Ireland.

Secondly, there will be a discussion of the dominant trends in geography of the time and the effects they may have had on Evans' research, and how he may have contributed to them. The period of time in which he was actively working in the field of geography was from 1928 until his retirement in 1969, although he did go on to publish further works until 1973 (Buchanan, 2009). His career spanned many decades and therefore, there are many different trends that would have been prominent at various times. Environmental Determinism was the most dominant strain of Geography from 1874 up until the (Kavanagh, 2021b). Evans began his 1920s university studies in Geography in 1922, and it is likely that this type of Geography had already begun to die out to welcome new geographical ideas. Regional Geography came after Environmental Determinism and was dominant up until the 1950s (Kavanagh, 2021b). By definition, it is a subarea of Geography which 'examines the diversity and the organization of nature and human aspects in an integrative regional framework (Paasi, 2020). One of Evans's primary areas of study and research was Regional Geography. Specifically, he focused on Ireland as a region and the way in which its location on the margins of Europe affects it (Graham, 2004). He was interested in the study of borders and frontiers, and the way cultures change and develop because of this. He also had a large part to play in the

image of Ireland by portraying it as an area of regional diversities where differences were as important as similarities (Graham, 2009). Most of his research was more concerned with the rural areas of Ireland, as he often neglected to include information about the cities (Kavanagh, 2021a). This focus on rural areas was likely the result of Ireland following the geography teachings that were popular in France. There are several reasons for this being the case such as Ireland, with its many rural towns, applying quite well to the French romanticisation of rural regions. Another way in which Evans would have been impacted by the French approach was through his studies at the University of Aberystwyth, which was influenced by H.J Fleure (Kavanagh, 2021a). Aside from these reasons, the French approach to Regional Geography dominated for several decades. Although Spatial Science grew to be a dominant area in Geography during the 1960s, there is not much evidence of this in the work of Evans. Humanistic Geography was one of the popular geographies of the 1970s along with behavioural and structural and Marxist Geography. Researching Humanistic Geography involves taking into account the moral, epistemological principles, and prejudices of humanism and humanities (Smith, 2020). This is of particular interest as Evans often took a Humanistic approach in his studies, which can be seen through his Humanistic vision of 'the total inheritance of Irish heritage' (Graham, 2004). The culture and tradition of Ireland was a topic he often focused on in his research and works, looking into inequalities along

with the differences and similarities found among the people of the country.

Thirdly, the main topics of study and research of Evans will be discussed. In his earlier years of research and study, he focused predominantly on Neolithic Geography, mainly looking into this in Ireland and Europe. In his study of this, he examined the evolution of the man-made landscape of Ireland and Western Europe (Buchanan, 2009). His interest in this likely came from his study and interest in other subjects such as Anthropology, which he received first-class honours in when he graduated from University College of Wales at Aberystwyth (Buchanan, 2009). He also did some research on archaeology at Queen's University in Belfast. Apart from Neolithic Geography, he also showed a large amount of interest in Regional Geography. His main areas of study on this topic were regional identity and the sense of place. In his reading of the Regional Geography of France (1937), he found his interest in Regional Geography, but more specifically in regional identity and finding a sense of place (Buchanan, 2009). He developed this interest further as President of the Institute of British Geographers. Although his main focus was on rural areas, he did some work relating to the urban geography of Belfast. As mentioned previously, he often took a Humanistic approach to Regional Geography. This means that although his main research was on the study of regions and their people, he preferred to look into this in a moral way, taking human reason and judgements into account. He did this greatly through his work done on Irish heritage and tradition, while

also acknowledging that identifying as Irish can be quite complex. This would be taking into account Northern Ireland and the Republic of Ireland and also differences in religious views between Catholics, who were considered Irish, and the Protestants, who were considered English. These differences were displayed often through the separation of the region.

In this section, the contributions of Evans through his geographical works will be discussed. The majority of his works were only published in Ireland, and because of that he often didn't receive the full recognition it deserved in Britain (Graham, 2004). Despite this, his work was widely appreciated and recognised in the United States (Graham, 2004). Some of his most famous and influential works include Irish Heritage (1942), Irish Folk Ways (1957) and The Personality of Ireland (1973). The former two were pioneer studies in which he gathered first-hand information and experiences which led to new opportunities in the field of Geography (Buchanan, 2009). Irish Heritage in particular focuses on the relationship between people and their physical environment (Kavanagh, 2021a). The Personality of Ireland was one of his last published books. It is quite complex in explaining the way in which Evans views Ireland, with some focus on the country as a place of diversity and how it holds a legacy through the many generations of its people. The book Mourne Country (1951) is also essential to mention, as it is considered one of his most important works, along with being recognised as a classic study for its focus on the interrelationships present between place and identity (Graham, 2004). This book focuses on the Mourne Mountains of Co. Down. In it, he discusses the formation of the mountain range and the history of the area and the people who inhabited it, along with giving information on the flora and fauna that have grown and adapted to the area (R.M.G., 1952). The text is written in simple terms so that it is accessible to the greater public.

There are also some accounts of different people who have worked with Evans over the years of his career. He, along with his colleague Oliver Davies worked on bringing back the Ulster Journal of Archaeology (Buchanan, 2009). In addition to this, together they put great effort into compiling the first systematic field survey of historic monuments, which was published in 1940 (Buchanan, 2009). They had started this project as Evans found that the Irish Naturalist's Journal had now begun to focus on and have an abundance of excavation reports, which meant there was a need for another outlet (Evans, 1999:139). Davies was in the position of editor for the journal, as he was considered to have a higher profile than Evans. This was because he had a public school and Oxford education, which was considered more prestigious than the lesser-known Welsh College that Evans had attended on a scholarship (Evans, 1999:139). As they had worked together closely for some time, it is clear the two geographers had a lot of respect for one another. This is shown with Evans going on to write an editorial on the achievements and contributions of Davies in 1948 (Evans, 1999:139).

In addition to all of this, he has many achievements and accolades under his belt. Among other achievements, Evans completed several degrees, including an MA in 1931 and DSc in 1939 from Aberystwyth, along with five other honorary degrees (Graham, 2004). The colleges he received honorary doctorates from include 'NUU, TCD, NUI, QUB, Wales and Bowdoin College' (Buchanan, 2009). Due to his research on urban planning in Belfast, he gained honorary membership to the Royal Town Planning Institute in 1950 (Buchanan, 2009). One such achievement includes him becoming the President of the Institute of British Geographers in 1970, after his academic retirement (Buchanan, 2009). He has also received many awards, such as the Victoria medal of the Royal Geographical Society in 1973 and the merit award of the Association of American Geographers in 1979 (Buchanan, 2009). His contributions to geographical research and study are clearly shown through these achievements.

In conclusion, this article has outlined the way in which Emyr Estyn Evans has contributed to the subject of Human Geography throughout his career. There have been notes made on his education, along with his achievements, impacts, theories, and works. As stated, he was the first professor of Geography in Ireland, and because of this, he brought Geography into the Irish education system. Because of his contributions to the subject, he has received much praise over the years, and his work is still studied to this day, showing the true impact he has had on his field.

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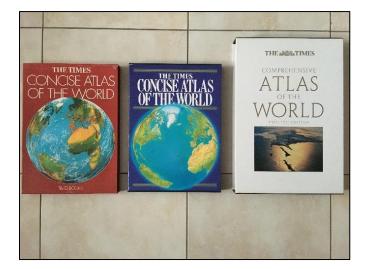
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#### The Times Atlas and the Gift of Geography

#### Author: James Plunkett

When I was younger, I was gifted an atlas from my great uncle. It cost him £150, and he told me to look after it. At the time I had no previous interest in geography but after reading through this magnificent book, my love for geography was discovered. The atlas in question is The Times Comprehensive Atlas of the World Twelfth edition. The atlas was published in 2007 by Times Book Group Ltd. Times Books published atlases stand out from other atlases due to their highly detailed descriptions and illustrations of the subject matter and highly detailed maps. I can honestly say that it is my most prized possession and since receiving this atlas, I have acquired two other Times Books atlases. These atlases are both concise atlases published in 1985 and 1990. I have found it fascinating comparing facts and trends in these atlases. This article aims to illustrate certain trends in the climate change and demographic areas within these classic books.



**Figure One:** From left to right, the 1985 and 1990 concise atlases and the 2007 comprehensive atlas.

#### Topic: Climate Change

Climate change is one of the most challenging obstacles humankind faces in the 21<sup>st</sup> century. Since climate change and the advent of sustainable living has only been a prominent news story in recent years, it is often thought of as a novel issue. However, the correlation between the greenhouse effect and pollution and its impact on the earth's temperature and atmosphere has been known for many years. These illustrations demonstrate the greenhouse effect and how smoke and pollutants can become trapped and cause warming. Pollution can also damage to the ozone layer which exposes the earth to dangerous UV radiation. There is also many areas, particularly coastal areas, and islands, that are at risk of submersion due to rising sea levels.

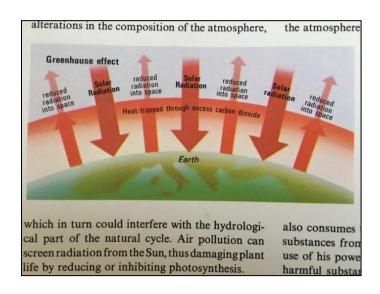
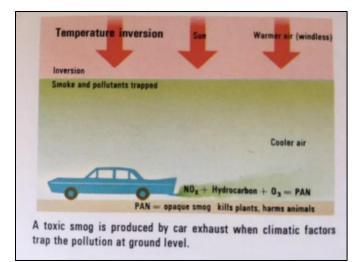
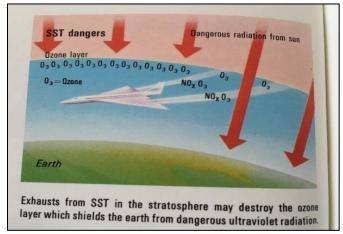


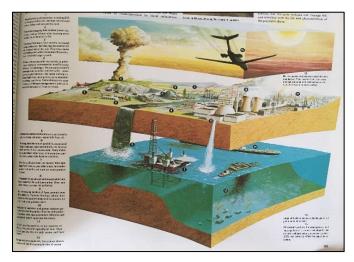
Figure Two: Greenhouse Effect (The Times, 1985)



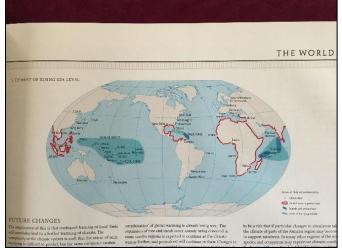
**Figure Three:** Exhaust emissions from cars contributes to warming. (The Times, 1985)



**Figure Four:** Exhausts from SST (supersonic transport, now discontinued commercially) may have damaged the ozone layer letting in dangerous UV radiation. (The Times, 1985)



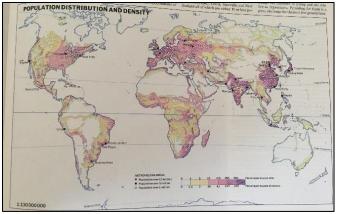
**Figure Five:** The vicious cycle of transportation and industrial pollution. (The Times, 1985)



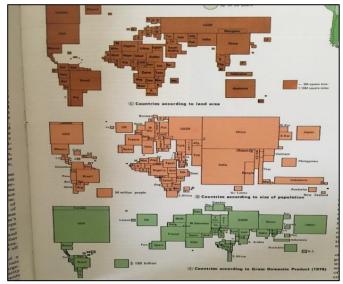
**Figure Six:** Areas at risk of submersion. (The Times, 2007)

#### Topic: Demographics

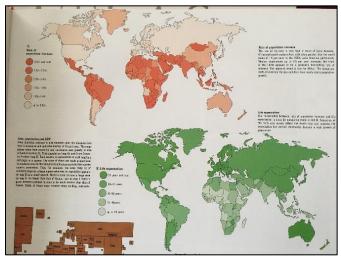
Another issue humankind faces in the 21<sup>st</sup> century is sustainable population growth. The highest population densities have long been established on coasts and rivers due to the convenience of this type of landscape. However, rising sea levels now pose a threat to these settlements. Governments must now incentivise establishments be they business or domestic in rural areas. This will lead to a more even spread of the geographical economy while also reducing the pollution associated with commuting and high levels of pollution in major urban centres. These illustrations demonstrate population change and distribution and the size of different countries with respect to not only area but also population and GDP. There is an obvious correlation between the rate of population growth and life expectancy.



**Figure Seven:** Population distribution and density. (The Times, 1990)



**Figure Eight:** Size in different contexts (brown = area, pink = population, green = GDP), (The Times, 1985)



**Figure Nine:** The darker the red (higher population growth) the brighter the green (lower life expectancy). (The Times, 1985)

#### Conclusion

Although these atlases contain detailed information on many more geographical areas, I chose to examine the climate change and demographic sections as they are the main areas of study that I am currently immersed in. They can also be linked to all the other geographical areas in some way. For example, to understand climate change it is necessary to understand earth science. Demographics is also linked to earth science as the location of the earth's natural resources has an impact on local populations. Going from a child that was wondering what kind of a gift a comprehensive atlas was to now a third-level geography student goes to show how certain life experiences can spark interests that might never have been discovered otherwise and I am excited to see where my study of geography takes me.

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# Human Actions and Severe Droughts in the Sahel Region of Africa During the 20th Century

#### Author: Cody Murtagh

The Sahel is a semi-arid strip of land located in the West of Africa between the Sahara Desert and the Guinea Coast rainforest (Zeng 2003). It covers a vast area of 3,053 x 103 km2 and has a population of around 60 million. The rainfall in the region is highly variable, with the Northern boundary of the Sahel recording less than 200mm of rainfall annually, and the Southern boundary recording more than double that, 400-500mm of rainfall annually (Epule et al., 2013). A monsoon season occurs every year in Western Africa, lasting from 4-5 months near the Guinean Coast, and around 3 months in the Sahel region (July to September) (Rodriguez-Fonseca 2015). Certainly, rainfall is greatly important to the semi-arid region of the Sahel, and so, the infamous Sahel drought during the 1970s and 1980s was catastrophic to the region as well as to its 60 million inhabitants. The latter part of the 20th Century in the Sahel region saw a drastic 40% decline in rainfall over 50 years (Biasutti, 2011), with Nicholsan (2000) explaining the magnitude of the drought – "every year in the 1950s was wet, and nearly every year since 1970 has been anomalously dry". The Sahel drought has become increasingly popular among researchers, as the severity of the drought is of a never-before-seen magnitude. Indeed, at its culmination during the 1970s and 1980s, the scale of the drought was so extraordinary that it was already suggested to be man-made (Biasutti, 2011). Rodriguez-Fonseca (2015) describes the drought as

"the most significant climate event at the continental scale during the during the twentieth century and is arguably among the largest climate changes worldwide". Undoubtedly, this proves the importance of the Sahel drought, and utterly reinforces the increased amount of research on the topic, as scientific papers have increased from around 150 during the 1950s to 5000 in the period from January to May 2013. There have been several in depth studies which have helped gain an insight into the true cause of the drought, such as Palmer 1986, Gianni et al. 2003 and Kim et al. 2010, to name but a few (Rodriguez-Fonseca, 2015).

Such research has uncovered several possible explanations for the Sahel drought, it was initially believed that the drought was likely due to local deforestation as well as overgrazing (Biasutti, 2011). However, the many new research reports and scientific papers have uncovered that the causes for the drought are heavily linked with sea surface temperature change and human induced climate change, as well as the likes of vegetation, land degradation, and dust feedbacks (Epule et al., 2013). Of course, that does not make the earlier assumed reasons of deforestation and overgrazing negligible, with Zeng (2003) explaining that both of these anthropogenic processes tend to increase surface albedo and reduce moisture supply to the atmosphere. The albedo effect is a key process which refers to the proportion of light or radiation that is reflected by a surface, with an increased surface albedo leading to more reflecting and less absorbing of sunlight. Such deforestation and overgrazing, as well as what they lead to, can be put down to human interactions with land, with the likes of expansion of croplands and intensification at the centre of such issues. Biasutti (2011) explains that sulphate aerosols are another major factor to consider when examining the Sahel, as they have a direct effect on the climate. Indeed, not only do such aerosols cool the Earth's surface by scattering sunlight, but they also increase cloud brightness and longevity (such clouds add to the already growing albedo effect) while decreasing and reducing the size of water droplets within the clouds. These sulphate aerosols are produced through the combustion of fossil fuels (Biasutti, 2011), which links back to Epule's point regarding human induced climate change being a key factor in the Sahel drought. Such an examination of fossil fuels can even be linked back to the industrial revolution and the creation of the 'fossil economy', which is described by Malm (2014) as "an economy of self-sustaining growth predicated on the growing consumption of fossil fuels, and therefore generating a sustained growth in emissions of carbon dioxide". Indeed, the heavy use of fossil fuels which began back in the late 1700s can now be linked with the droughts in the Sahel region some 200 years later. Certainly, the linking of different aspects of human induced climate change is a recurring theme when analysing the Sahel drought.

Epule et al. (2013) describes human induced climate change as the major drought-determining factor, explaining how it controls sea surface temperatures, dust feedbacks and vegetation. Of course, its importance is backed up by the fact it also links with

deforestation and expansion of croplands, as well as sulphate aerosols. Most researchers argue that as a single contributary - i.e., not counting all the factors of human induced climate change - sea surface temperatures are the most important factor in the Sahel drought. Epule et al. (2013) explains that an observation of a particular configuration of global sea surface temperatures (warm anomalies in Southern Hemisphere and cool anomalies in Northern Hemisphere) coincided with the onset of the Sahelian drought. A decreased moisture input was observed which led to the creation of drier conditions with less vegetation and higher albedo (Epule et al., 2013). The true effect of sea surface temperatures was only conclusively demonstrated in 2003. through the comprehensive research conducted by Gianni et al. Zeng (2003) as well as Epule et al. (2013) both provide an insight into such research, explaining that the researchers used a NASA atmospheric general circulation model to observe global sea temperatures from 1930 to 2000, with the model reproducing the variability found in the Sahel rainfall. Indeed, while employing a statistical tool called principal components analysis, Gianna et al. showed that "Sahel rainfall is closely related to a largely tropical sea surface temperature anomaly pattern that spans the Pacific, Atlantic, and Indian Ocean". (Zeng, 2003) Biasutti also describes the core factor influencing the Sahelian droughts as being the sea surface temperatures, yet, as Zeng (2003) explains, Gianni et al. were only able to account for 25-35% of the observed rainfall change, and so, Biasutti attempts to uncover the other

underlying causes of the drought. Biasutti (2011) discusses the work of Ackerley and colleagues who assessed underlying factors using numerical climate models and confirmed that man-made factors caused substantial drying in the Sahel. 1500 model runs were forced by historic emissions of greenhouse gases and sulphate aerosols, with an overwhelming majority of simulations producing drought. Indeed, Biasutti sums up their work as "confirming the main cause of the drought was aerosol emissions from industrialised countries", which heavily links back to the aforementioned 'fossil economy' as well as the description of human induced climate change as the major drought-determining factor by Epule et al. (2013). Much of the human induced climate change also stems from the likes of deforestation. overgrazing. expansion of croplands, and intensification. Zeng (2003) attempts to explain the drought by linking together many factors, explaining that "sea surface temperature change, natural vegetation processes, and land use change have acted synergistically to produce the unusual drought in the Sahel."

In essence, it is impossible to blame the Sahelian drought on just one single factor, however, as a whole it could certainly be argued that human induced climate change and the many effects stemming from it have been the ultimate cause of the drought. It is no wonder that the topic is of great concern to researchers, as it seems that the drought is one of the largest and most evident climatic changes worldwide. As Zeng (2003) explains, it is still not entirely known whether humans are solely to blame for the drought, or if natural variability is the main player. However, it seems almost certain that the drought is most prominently man-made, which spells a catastrophic worry for the future and our ecosystem – with human induced climate change being at the heart of such worry.

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#### **Overfishing in the Anthropocene**

#### Author: Daniel Donovan

The biodiversity of our oceans has made them one of the most important resources for sustaining human life (Imtiyaz et al., 2011:22). Oceans cover 70% of the earth's surface and besides being a source of food and commerce, they are vital to maintaining the atmospheric conditions which allow human life to flourish. They absorb carbon dioxide, allowing excess heat from the greenhouse effect to be mitigated in a "carbon sink" and regulate the climate by transferring heat from the equator to the poles (NOAA, 2021).

Thus, anthropogenic interactions with ocean environments have had a huge impact on marine biodiversity. To critically evaluate overfishing as a threat to marine life, it is important to compare it against other anthropogenic factors which threaten marine life and effect its natural ecosystem processes. Sir David Attenborough's "Blue Planet 2" series outlined the principal threats to marine life as pollution, climate change. and overfishing (Carrington, 2017). In this essay, I will embark on an analysis of the main drivers of marine degradation, as outlined by David Attenborough, which will allow me to reach an informed conclusion as to whether overfishing does, in fact, represent the most serious threat to marine life in the Anthropocene.

Climate change has caused the increased heating of the world's oceans via the greenhouse effect from the burning of fossil fuels. According to Gaines et al. (2019:5) our oceans have absorbed over 90% of the increase in atmospheric temperatures by the greenhouse effect. This has caused an increase in mean global sea-surface temperatures (SSTs) by 0.13 °C per decade since 1979 and an increase in interior ocean temperatures by over 0.1 °C since 1961 (IPCC, 2007 in Brierley and Kingsford, 2009:602). A study this published early year also confirmed "significant" ocean warming from 1950 to present anthropogenic effects on atmospheric from composition (Cheng et al., 2022:10).

Increased oceanic heating can alter ocean currents (EPA, 2016), which are based on temperature differentiation between different ocean regions. These currents sustain diverse marine ecosystems and alterations to them could bring damage to marine life. For example, the same report found that along US coasts, "the average centre of biomass for 140 marine fish and invertebrate species shifted northward by about 20 miles between 1982 and 2018. These species moved an average of 21 feet deeper (EPA, 2016)". This demonstrates how marine life is adapting to climate change. This is likely to have a negative effect on species which depend on environmental cues for reproduction (IPCC 2007:36) and metabolic processes (Hoegh-Guldberg and Bruno, 2010:1525). Some marine biologists have even predicted a loss of 17% of marine biomass by 2100 at current warming levels (Associated Press, 2019). Another recent report by Pinsky et al (2019) examining the thermal limits of marine species globally, found that marine species were more vulnerable to climate change than terrestrial species.

The increase in carbon emissions from the burning of fossil fuels is also causing ocean acidification (Dunbar, 2011:9). Carbon dioxide dissolved in our oceans forms a weak acid which causes increased acidity (IPCC, 2007:48). The acidification of oceans will inhibit organisms which grow shells from calcium carbonate, as they now must exert more metabolic energy against this new "chemical gradient" to build their shells (Dunbar, 2011:11). The degradation of shells, having a protective function, will also inevitably lead to the increased exposure of these organism to predators, altering marine food web dynamics. The position of these organisms in the oceanic food chain as primary producers could affect the entire marine trophic structure (2011:11-12).

Acidification is also hampering coral reef calcification (Albright et al., 2016:364), which is an important measure of reef growth. Coral reefs contain extensive marine biodiversity and threats to coral reef habitats by the synergistic processes of coral bleaching, from warmer ocean temperatures, and acidification may affect the over one million marine species which inhabit them as well as coral reef fisheries (EPA, 2021). In 2016, the Great Barrier Reef lost 30% of its coral to bleaching (EJF, 2020:11-12). Predictions show that if atmospheric temperature increases are limited to 1.5°C above preindustrial levels, coral reefs will still decline by 70%-90% by 2050 (Groc et al., 2021:30).

Another aspect of anthropogenic activity which threatens marine life is the pollution of our seas and oceans. Pollutants vary from oil spills and sewage to agricultural pesticides; however, a vast majority of marine litter mass is composed of plastics (Galgani et al., 2015 in Bergmann et al 2015:30). Indeed, plastic is so prevalent in our society and natural environment that Thompson et al. (2009) have termed the contemporary age the "Plastic Age".

This widespread use of plastic began after World War II, with annual plastic production reaching 5million tons during the 1950s (Napper and Thompson, 2020:1). This figure reached an incredible 367million tons by 2021 (Plastics Europe, 2021:12). More than 80% of marine plastic pollution originates from land-based pollution (Almroth and Eggert, 2019:318), which enters our oceans via rivers and runoff streams. It is estimated that at least 14million tons of plastic end up in the ocean each year (IUCN, 2021) and that by 2050 our oceans could contain a greater mass of plastics than marine biomass (Ellen MacArthur Foundation, 2017:16).

Macro-plastics are a well-documented killer of marine life and easier to observe (see Great Pacific Garbage Patch as an example of this). Estimates suggests that plastic pollution overall kills about 100,000 marine animals annually (Krosovsky, 2021). Kuhn et al. (2020:3) found that 914 marine species have been known to have ingested or been entangled in macro-plastics. On the other hand, microplastics are often invisible to the naked eye, which makes quantifying their extent in our oceans difficult. However, microplastics and chemicals which compose plastics, have been discovered in marine ecosystems and have caused issues in reproductive. endocrine. developmental and

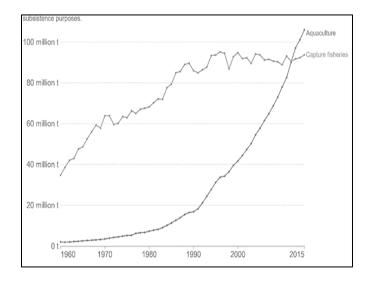
processes in a variety of marine species (Hermabessiere et al., 2017; Frye et al., 2012 in Almroth and Eggert, 2019:319-320).

It must be noted that the long-term impacts of microplastics and nano-plastics on marine life is an area which requires more study (Almroth and Eggert, 2019:319) and research into the wider impact of larger debris on marine species deaths is still ongoing. For now, we depend mostly on estimated figures. Moreover, the volume of plastic entering marine environments is set to quadruple by 2050 (Baulch, 2018).

An ocean consisting of diverse marine life is a vital source of food and employment for millions of people globally (Sumaila and Tai 2019:3). Mood and Brooke (2010:9) estimate that approximately 0.97-2.74 trillion fish are caught annually. The pressures of overfishing include habitat degradation (from destructive apparatus) and pollution (Daskalov et al. 2007; Halpern et al. 2015 in Sumaila and Tai 2019:6). Fishing trawlers release as much carbon dioxide as the entire aviation industry (McVeigh 2021), which means overfishing could exacerbate the effects of climate change on marine life, as previously discussed. As well as the pollutive aspect of overfishing contributing to marine degradation, it also threatens to permanently imbalance marine ecosystems.

In 2016, 171million tons of fish were caught from a combination of commercial capture fishing and aquaculture and that the supply of fish is now increasing past the rate of population growth (Bardey

2019:398). This suggests current levels of marine exploitation are unsustainable. Indeed, the FAO (2016) reported that over 30% of commercial fish stocks are being exploited at unsustainable levels and a further 60% are fully overfished. In other words, overfishing occurs at a rate so high that fish populations are not being given time to replenish. This is due to an increased per-capita demand for fish. Overfishing also threatens coral reefs as fish consume algae which would otherwise smother reefs and inhibit its reproductive capacity (EJF 2020:11), and thus, its ability to support diverse marine ecosystems.



**Figure One:** The increase in global fish production by capture fishing and aquaculture over time

Source: Ritchie and Roser (2021)

Based on my analysis of the existing literature and range of statistical information pertaining to the three principal threats to marine life, it is evident that anthropogenic activity represents the overarching threat to marine life in the Anthropocene. However, when one delves deeper into the issue, we see how the current effects of pollution, in terms of deaths to marine life, are difficult to quantify, when compared to overfishing which has garnered intense study and whose effects are clear.

Thus, overfishing poses the most immediate, contemporary, threat to marine life in terms of its persistent, degrading of marine biomass and exacerbation of pollution, whereas climate change looks set to have more drastic long-term effects as its implications become more pronounced over time. Furthermore, a ground-breaking study has found that moves against overfishing by expanding MPAs (Marine Protected Areas) to just 21% of ocean cover could protect 90% of marine biodiversity in overexploited regions, can increase sustainable food provisioning, and can prevent the remineralization of sediment carbon to CO2 that results from anthropogenic disturbances, vis a vis climate change and pollution (Sala et al 2021:398-99).

This study demonstrated how each aspect of anthropogenic activity we observed are intrinsically linked and act collaboratively. It also demonstrates how solutions focussed on overfishing and maintaining marine ecosystems which have been exploited, can be beneficial in making marine life more resilient to changes in climate and decrease pollution of our oceans and seas. Sumaila and Tai (2020:6) concur with this view, finding that reducing overfishing and maintaining the health of marine life is the best way to mitigate the effects of climate change in the long-term, whilst allowing the regeneration of threatened ecosystems in the short to medium-term.

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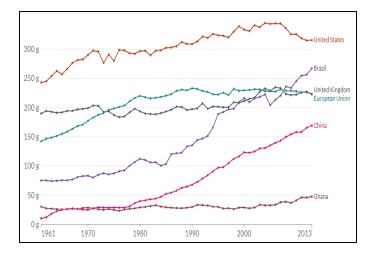
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#### **Moving Beyond Meatification**

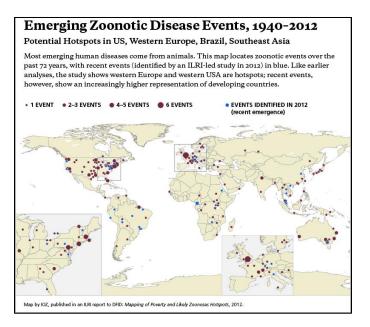
Author: Caoimhe Currie

The food production model now dominant in the Global North has over the last century facilitated rapid growth in the availability of food, such that global rates of nutrient deficiency (Ritchie & Roser, 2017a), malnourishment and food insecurity (Ritchie & Roser, 2019) are seeing notable declines. This trend has included a significant increase in the accessibility of high calorie animal products that previously might have been considered luxuries, largely in the form of protein and fats. Correspondingly, there has also been an increase in their consumption (Ritchie & Roser, 2013). However, while this has been beneficial, it has also introduced new concerns around the effects of increased meat consumption on human health and the effects of its production on animal welfare, disease control, resource availability and the natural environment. These concerns have prompted calls for a fundamental shift in the organisation of global systems of production and consumer consumption, concerns that have become increasingly relevant both as these effects become more apparent and as practise of 'factory' farming becomes the increasingly widespread even in the Global South (Faunalytics, 2017).



**Figure One:** Chart showing increasing trends in total meat consumption in grams over the period 1961-2013 (Our World in Data, 2013).

The global market as it currently exists incentivises the reorganisation of agriculture in order to maximise rapid and efficient production; from this have emerged highly specialised 'concentrated animal feeding operations' (or 'factory-farms') in which animals are raised in large numbers and close quarters; these now account for as much as 99% of all farmed animal populations (Sentient Media, 2020). This system has drawn much criticism, with perhaps the most well-publicised of these addressing concerns surrounding the wellbeing of the animals themselves. Animals in these contexts are removed from their natural environment and are limited by lack of space in their access to stimulation, socialisation and mobility. Their quality of life is then significantly reduced in comparison to what might be expected from 'traditional' pastoral farming practises. This also produces a range of health problems arising from stress, muscle atrophy, violent interactions with other animals and, importantly, the spread of disease (Gentle, 2011).



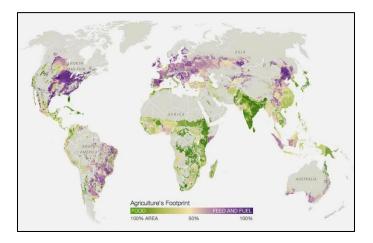
**Figure Two:** Map showing the distribution of known zoonosis 'hotspots' over the period 1940-2012, with greatest concentration in highly meat-producing nations (Richards, 2012).

Additionally, measures taken by factories to mitigate some of these problems have themselves been called inhumane, including the debeaking of chickens (Gentle, 2011) and the 'tail docking' of young pigs (Nannoni et al., 2016). The widespread and heavy use of antibiotics to manage disease outbreaks within factory farms has also been associated with increased microbial resistance (Anomaly, 2015), and by extension increasing health risks to both animals and the humans who manage them (Schwab, N.d.). Environments where animals are highly concentrated have been linked also to an increased risk of zoonotic disease transmission, or the passing of new diseases between species (Sentient Media, 2020; Jadav, 2021) -the recent Covid-19 pandemic is one example of this (Mackenzie & Smith, 2020a; Mackenzie & Smith, 2020b). It could then be argued that these problems might be in large part resolved by a return to smaller-scale, lower-density farming in which animals are permitted to roam; some studies have already associated this with better welfare outcomes for livestock (Mee & Boyle, 2020).

Another major criticism is that the current meat production paradigm is fundamentally unsustainable. While factory farms are cheaper to operate than traditional farms in proportion to their size, they are responsible for intensive resource consumption and waste and have been associated with serious environmental damage. At the macro scale, industrial farming has been linked to the process of global warming, accounting for between 21 and 37% of total global greenhouse gas emissions each year; this includes half of all methane and three quarters of nitrous oxide, produced largely by livestock waste (Lynch et al., 2021). More locally, pollution from managed contaminates improperly waste groundwater supplies with chemicals and pathogens, spreads to private property and residential areas, kills fish and other wildlife and has been associated with negative health effects in exposed humans even miles from the farm itself (CNBC, 2015; PACE University, 2022; Swensen, N.d.).

Also significant is the 'input dependency' of factory farms as a whole; that is, their scale does not allow their needs to be met by locally available resources. Instead, large quantities of animal feed and antibiotics are imported in order to sustain production. The implications of such large-scale use of antibiotics have already been discussed, but other inputs may be equally as problematic. Currently, up to 36% of global cropland is dedicated to growing food for animal consumption, not human. This rate is even higher in countries like Ireland and the U.S, where meat production holds particular economic importance (Plumer, 2014; Department of Agriculture, Food and the Marine, 2021). Given that nearly 9% of the global population —as many as 663 people million remains chronically undernourished (Ritchie & Roser, 2019), it might seem more efficient to use that food for direct consumption, rather than inputting it to a process in which every 100 calories of grain equates ultimately to only 12 calories of chicken or 3 of beef (Plumer, 2014). Further, land clearance facilitating the growth of animal feed is a leading cause of deforestation; particularly in the Amazon, where it accounts for 80% (WWF, 2022). Combine this with the corresponding demand on water resources -4,387 km<sup>3</sup> each year (Heinke et al., 2020)— and the true scope of resource use becomes apparent. In the face of increasing global water scarcity (United Nations, 2022) and escalating biodiversity loss (Briggs, 2021) it is then not a question of whether it would be better to avoid large-scale meat production, but instead one of how long these practises can be sustained before they collapse under the demands of their own consumption.

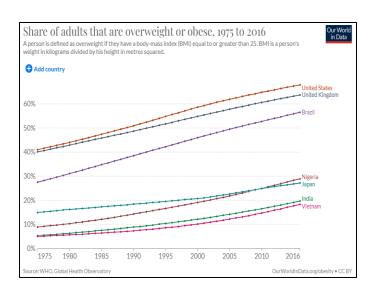
Lastly, while for most of human history meat had been consumed in comparatively small quantities, its availability is now associated with the increasing prevalence of a wide range of health problems. Consumption of red meat (and particularly processed meat) has been linked to the development of type-2 diabetes, stroke, heart disease, a variety of cancers, and mortality more generally (Wolk, 2017); this association exists even where consumption falls within current 'recommended' guidelines (Richi et al., 2015). These are among the most common causes of mortality in the developed world, and increasingly in the developing world as meat products become more available (Schmerling, 2016; Booth, 2018).



**Figure Three:** Map showing proportion of the world's cropland currently growing for human vs animal consumption and biofuels (Plumer, 2014).

Meat consumption is also associated directly with an increased risk of obesity, contributing to a general growth in its prevalence world-wide and exacerbating the effects of many other health conditions (Rouhani et al., 2014). As a result, it could be argued that the benefits of meat —as a calorie dense source of protein, iron, vitamins and other important nutrients (Devje, 2021)— are now outweighed in many ways by its disadvantages. Health guidelines now generally advocate for limiting the proportion of red meat in the diet, substituting it for a plant-based diet (Mayo Clinic,

N.d.). This represents one more reason why the scale of modern meat production now seems not only unsustainable, but unnecessary.



**Figure Four:** Chart showing increasing trends in the percentage of national populations that are overweight or obese, over the period 1975-2016 (Ritchie & Roser, 2017b).

A world without industrial meat farming would be one in which the capacity of human society to manage its greatest challenges is significantly improved. With dramatic reductions in the production of meat would come corresponding reductions in the expansion of human land use and loss of wilderness habitats, in the rate of global warming, in pressure placed on much needed water supplies and in the pollution of those water supplies and of rural communities, who rank among those most vulnerable to exploitation (Miller et al., 2019). At the same time, it would also be a world in which human health risks are mitigated, with reduced meat supply necessarily producing reduced consumption and a reduction in the rates of associated illness. Lesser concentration of animals would likewise reduce the risk of disease spread between species, while the reduced use of antibiotics would safeguard the effectiveness of medicines against existing ones in both human and animal populations. Alongside all of this, the implications of factory farming for animal welfare would no longer be relevant, quelling moral concerns.

What all of this ultimately equates to is a 'freeing up' of global resources, and the capacity for those resources to be used in more beneficial ways. Animal agriculture, as we have already seen, uses vast areas of land; without it, that land could be returned to a carbon-capturing wilderness state, or repurposed towards the production of food for human use. This in particular is significant given that our current farmland, if properly managed, is already enough to feed twice Earth's current population (Majendie, 2020); this would meet the food demands of projected population growth into the next century and, properly managed, potentially eliminate food insecurity worldwide (Roser, 2019). Water resources could be conserved in the face of growing aridity (Neilson et al., 2017), itself driven in part by poor agricultural practises (Rossi, 2020); health services would have more resources to allocate to unrelated health problems (Grogan, 2011), while a reduced supply of cheap meat entering the global market from the developed world might increase the competitiveness of small-scale farmers in the Global South, providing economic opportunities. Ultimately, the advantages are clear.

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#### How Green is "Green" Energy?

Author: Shane Hanly

The global surging shift from non-renewable fossil fuel energy sources to renewable green energy sources in response to climate change and environmental issues is widely considered as a positive step. However, little attention to detail is given to potential issues that arise from green energy. The common media narrative or public conception tends to be that renewable green energy is fully clean with little waste or environmental impacts. By examining some unseen aspects of renewable energy this blog seeks to challenge this mainstream narrative and find out really how green is "green" energy.

# Wind Turbines - Towering waste wreckage machines?

The introduction and utilisation of wind energy has been established for decades now and during operation has proved a clean source of <u>energy</u>. Wind energy in Ireland is currently the largest contributing source of renewable energy. For instance, in 2018 wind energy provided <u>85%</u> of renewable energy sources in Ireland ranking third worldwide. For the regular observer wind energy turbines appear totally harmless- a clean, constant source of energy with none of the harmful emissions that arise from fossil fuels. However, it is during the pre and post operation phases of wind turbines that the main problems arise. The main components of a regular wind turbine include a foundation, a tower, a nacelle and three blades. Every wind turbine that is erected requires raw materials to be constructed. These raw materials include concrete, steel, cooper, and composite materials. This assembly stage and use of these raw materials is energy intensive and related to a scope of chemical usage (Song et al., 2009). Furthermore, disposal at the end of life for wind turbines also poses considerable waste issues. The average lifespan of a wind turbine is roughly 20 years; therefore, these issues are only coming to prominence in more recent years as the first batch of wind turbines erected need replacing (Liu and Barlow, 2017).



Figure One: Wind turbines in operation. Source: Inga Spence/ Alamy Stock Photo

The raw materials that go into wind turbines particularly concrete and composite materials have few to no recycling routes available for them (Job, 2013). This leaves no routes for components of the turbine other than landfills. Take, the turbine blades for instance. Due to their gigantic size (they can be the length of a Boeing 747 jet wing) they are difficult to deal with and are primarily made from composite materials which as mentioned have no recycling routes. Many scholars predict that waste from turbine blades will become a global issue in the coming years. For instance, Anderson et al. (2014) predicts that 400,000 tons of blade waste will be accumulated by 2029-2033, increasing to 800,000 tons by 2050, Albers et al. (2009) forecasts 200,000 tons of blade waste by 2034, while Liu and Barlow (2017) foresee waste from turbines a significant global issue by 2028.



**Figure Two:** Wind turbine blade waste piled up in a landfill

Source: Benjamin Rasmussen

With this in mind it is clear that while wind energy does have its benefits, there are also potential major waste issues that must be managed and controlled, or the vast numbers of wind turbines that are being erected may become towering waste wreckage machines for the future to deal with. One solution that has been offered is the transition to a circular economy approach in order to recover valuable materials from the exhausted turbines, in turn reducing waste (Hao et al., 2020). The circular economy approach can be explained and defined as "an industrial system that is restorative or regenerative by intention and design. It replaces the end-of-life concept with restoration, shifts towards renewable energy, elimination of toxic chemicals which impair reuse and return to the biosphere, and aims for the elimination of waste through the superior design of materials, products, systems, and business models" (MacArthur, 2013; Hao et al., 2020).

#### Are electric vehicles really much greener?

In recent years there has been surging demands for the use of electric vehicles as part of the green energy movement. Exponential growth of electric vehicles is expected with 2 million electric vehicles in 2016, projected to rise to between 40-70 million by 2025 (Agusdinata et al., 2018). There is no doubting the fact that electric vehicles have benefits. For instance, electric vehicles don't emit harmful polluting gases from the exhaust as the conventional petrol or diesel vehicle would. However, on the other hand the source of energy to power an electric vehicle is important and could be contributing to environmental pollution. For instance, the electric vehicle must be charged to run and much of this electricity to charge the vehicles comes from the burning of fossil fuels in distant power plants. Thus, while the electric vehicle may not be polluting emissions while being driven, pollution may have

already been emitted during the charging process in some distant location near the power plant (Holland et al., 2015). A study by Holland et al. (2015) found that in the vast majority of states in the United States of America, when a buyer decides to purchase an electric vehicle rather than a petrol or diesel vehicle they reduced the air pollution in their state. However, in all but 12 states this purchase makes society worse off as a whole in light of the fact that electric vehicles tend to export air pollution to other states more than petrol or diesel vehicles.



Figure 3: Lithium mining consequences. Source: <u>META</u>

The manufacturing stage of an electric vehicle is another important aspect that should be critically examined. Each electric vehicle needs a battery with lithium-ion batteries the go-to-choice. These batteries require minerals such as lithium and cobalt. A rush of extraction for these rare precious minerals has been created as a result with demand for lithium increasing by 790% for instance (Agusdinata et al., 2018). A vast amount of lithium extraction is confined to an area known as the "lithium triangle",

which are the arid regions of Argentina, Bolivia and The excessive mining has presented Chile. sustainability and environmental justice issues. While the mineral rich regions benefit financially, the costs come environmentally. The process of lithium mining from brines in the lithium triangle region is very water intensive. On top of this the lithium triangle region is already one of the driest regions in the world so the environmental impacts are detrimental. The local population are left exposed to health hazardous, forcing migration from the region. Ecosystem degradation is evident due to the mining activities. Research from Flexer et al. (2018) found that the lithium extraction process is chemical extensive, slow and delivers vast quantities of waste.

Cobalt is another key mineral for the production of batteries that enter electric vehicles. Like lithium the mining of cobalt is linked to severe environmental and social issues. The world's supply of cobalt is concentrated largely to the Democratic Republic of Congo (DRC) with over 60% of worldwide production coming from there (Nkulu et al., 2018). The DRC is one of the poorest countries in the world and ranks low on environmental performance indicators which doesn't aid the situation (Wilburn, 2012). The miners are being heavily exploited with young children even working and receiving very little money for their dangerous work. The influx of mining has been created mainly due to the surging demand for electric vehicles. This rush of extraction has led to small scale artisanal mining taking place. This mining takes place in hazardous conditions and is illegal. It is unregulated however due to poor

governance and structures in the DRC. A case study was carried out by Nkulu et al. (2018) because of health concerns raised by local authorities and civilians in the Katanga region of the DRC where small scale artisanal mining was taking place. The findings included that environmental degradation and toxic exposures were evident. Furthermore, there were effects socially with the presence of hundreds of diggers and workers making neighbourhoods unliveable environments. Residents living within close proximity to the mines were found to have high levels of cobalt in urine and blood samples when compared with other communities further from mining activities and in control areas. The current cobalt mining system was found to be unsustainable going forward (Nkulu et al., 2018). The chaotic situation in the DRC is illustrated in the news report video from Al Jazeera below.



**Video One:** This video highlights the desperate situation in DR Congo

To conclude, this blog has critically examined some forms of renewable green energy and questioned their green status. It is clear that while the fundamental idea of green energy cutting down on fossil fuel emissions is good, there are some major underlying issues. For instance, as mentioned the assembling stage of wind turbines are chemical and energy intensive, while major components of exhausted wind turbines such as the blades have no recycling route. This is set to become a pressing issue in the coming years with forecasts of 800,000 tons of blade waste accumulated by 2050 (Anderson et al., 2014). Furthermore, this blog examined electric vehicles and how much greener they actually are. The major issues that exist with electric vehicles are predominately linked to the manufacturing stage but also, the source of power during the vehicles charging process may result in pollution being exported elsewhere. Excessive mining for minerals such as lithium and cobalt are taking place as they are key components to an electric vehicle battery and this mining is creating major environmental, health and social issues. These issues are confined to more regional areas where the mining takes place and are somewhat less dramatic falling "out of sight, out of mind". These areas such as the Democratic Republic of Congo, where the out-of-control cobalt mining is taking place are sacrificed areas. Residents are sacrificing their health; they are sacrificing their geographic environment. And what are they sacrificing all this for? They are sacrificing this in order to benefit others in geographic environments elsewhere, where their privileged lives can afford the luxury of buying brand new electric vehicles, promoting "green" energy.

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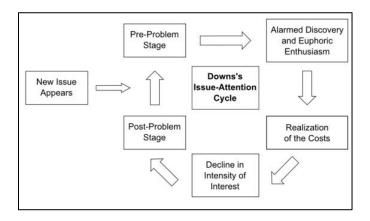
#### **Green Parties and the Issue-Attention Cycle**

Author: Aodhán McGarry

Green parties have become synonymous in their efforts to garner attention, concern and action with regards to environmental issues at a policy level, challenging the pre-existing and long-established political systems in their respective countries. (Richardson & Rootes, 1995; Meguid, 2005; Carter, 2013). With the growing stature of green parties, environmental issues have slowly been introduced into the general public and have changed how these issues are viewed to a certain extent. (Holt & Barkemeyer, 2012). Despite this growth there are many challenges facing Green parties with regards to effective policy implementation. One of the primary challenges is the influence of the 'issue-attention Cycle' on effective Green policy implementation. The issue-attention cycle is a model proposed by Anthony Downs in his seminal work ' Up and Down with Ecology- the issue-attention cycle', published in 1972. This model suggests that public interest in certain topics, especially relating to the environment is finite, and passes through five key stages before dying out. Fox (1994) has noted that Down's framework is an excellent model for highlighting the difficulties faced by green parties in achieving their goals. In this essay I will examine how the issueattention cycle affects Green parties and their goals to implement effective policies. Along with this I will discuss how other political parties can use the issue-attention cycle to the disadvantage of Green parties. Finally I will briefly describe the role of the mainstream in the issue-attention cycle and how it affects Green parties.

The issue-attention cycle describes the lifetime of an issue through the public's eyes as a five step journey. The cycle begins in the pre-problem stage, the problem exists however there is little to no attention drawn to it, especially in the mainstream agenda. The next step is that of discovery, in this phase people are motivated by their newfound interest in a particular issue and are intent on finding a solution. We can imagine this step playing out with regards to environmental issues – a new problem is brought to light and initial reactions are outrage and worry, mobilising people to consider action. It is often the case that there are once-off protests or petitions against a certain issue by the general public. The next stage, is perhaps the most important and relevant in terms of Environmental issues and policy implementation. This stage describes the realisation that any substantial effort to attempt to improve a given problem will be extremely costly, in terms of economic expenditure as well as man hours and sacrifice. (Downs 1972). It is often the case that the majority are unwilling to sacrifice their own traditions to implement change. For example, a wealthy company whose activities produce greenhouse gases will be unwilling to make a change in their approach as they will earn more money as they currently operate compared to an environmentally friendly approach. (Schmidt et al., 2013). With this realisation comes a gradual decline in public interest in the issue at hand as other

problems develop or reveal themselves. What little interest remains resides in those dedicated few, likely those were active in the pre-problem stage. The cycle finishes in the post-problem stage, as the original problem is replaced by a new one. (Downs 1972). Holt and Barkemeyer (2012) point out the cycle is constantly in repetition, particularly with environmental issues. The public tends to lose interest in these issues very quickly as the green ideology hasn't been fully integrated into the mainstream psyche.



**Figure 1:** The issue-attention cycle. (Petersen 2009).

In its' simplest form, the goal of a green party is to influence change at a policy level and reform the ideas and norms currently or traditionally employed in the politics of their state. This ideology is based on the capability to trigger effective change in the status quo. (Downs 1972). Climate change and environmental issues have become a major issue in the last fifty years, and green parties have attempted to politicise these issues and develop a mantra through which they can be discussed. By bringing these newly politicised topics to the general public's attention, green parties have the ability to pressure

established parties to react to the problems risen in a satisfactory manner. (Abou-chadi 2016). In western democracies however, it has proven difficult for Green ideology to penetrate the existing political hegemonies. (Carter 2013). The reasons for this are numerous, however it can certainly be argued that the issue-attention cycle plays a decisive role in the implementation of Green policies. If an issue regarding environmental policies arises, a green party only has a very short period of time to capitalise on the public's emotions and views and transform that into votes of confidence. If a green party can capitalise on the publics' peaked interest levels, it would be very possible that green policies could be supported and implemented. It has proven very difficult for Green parties to able to take an issue that is in phase two of Down's issue-attention cycle, and maintain interest and momentum for a long enough period to be able to make changes at a policy or voting level. (McDonald, 2009; Froio et al., 2016). Another possible complication that faces green parties is that even if significant public awareness is raised, other more traditional issues such as economic recessions or other socio-economic problems such as housing or crime can steal the limelight. The most recent recession in Ireland dominated public discourse on politics for an extended period of time, making it very difficult for any other issues to be raised, and in the Irish case, environmental issues generally sit quite low on the agenda. The question that lingers for Green parties therefore is how prolong stage two of the issueattention cycle and how to ensure they can

successfully use the general public's enthusiasm to cause change before it dies out. Mcdonald (2009) also notes that it proves difficult to communicate these issues to the general public, as opposed to the smaller, less represented groups of people who have a previous interest.

We have established that the issue-attention cycle can be problematic for green parties seeking to implement change, however established parties can use the issue-attention cycle to their own advantage. Abou-chadi (2016) notes that it is unusual for a political party, especially Green parties to change their manifesto based on a shift in public opinion, moreover green parties will attempt to retain their own political identity where possible.(Richardson & Rootes 1995). If an issue regarding environmental policy surfaces, an established party will not necessarily feel obliged to react to it, as the issueattention cycle is likely to work in their favour meaning that they won't have to react to the given pressures because they will inevitably die out. In consequence, green parties are unlikely to gain enough political clout against their competition to incite policy changes. In the event that a newly politicised environmental issue is adopted into mainstream politics, a traditional party will have to consider the electoral threat of a green party. A successful green party would undermine and threaten the position of an established party; however the nature of the issue-attention cycle would make such an occurrence unlikely. (Abou-chadi 2016). The issue-attention cycle works to the detriment of Green parties at two levels. As stage three of the issueattention cycle highlights, economic consequences are often the reason for the downfall of environmentally friendly policy issues. Most Green parties in Western democracies are in direct competition with parties that will use economic growth or competitiveness as a way to avoid committing to Green policies. (Carter 2013).

Media coverage of environmental issues has grown significantly in recent times, with more coverage in mainstream media than ever before being recorded. (Boykoff & Boykoff 2007). However as we have established, mainstream parties have a bigger audience than green parties, meaning that there are less people willing consume media related to environmental issues.(McDonald 2009). Mainstream media and politics go in hand in hand when it comes to agenda setting and discussing certain issues, the media dictates how and what information flows to the general public. As a consequence, in western democracies where environmental issues have yet to be fully realised by the general public, less coverage is given to said issues compared to other topics. This information bias allows for established parties to delay action regarding environmental policy. (Boykoff & Boykoff 2007). The media controls what issues are brought to the public's attention and therefore mediate the issue-attention cycle. The bigger an issue becomes in the public eye; the more likely parties will be pressured into making changes. This influence in agenda setting can have a direct impact on policy making, as dominant parties seek to maintain the status quo. (Downs, 1972; Holt & Barkemeyer 2012). The media therefore can be seen to have a large role in the extent to which an issue grows, and whether it reaches a significant audience as in stage two of the issue-attention cycle.

The issue-attention cycle plays a major role in limiting green parties and any policy they wish to implement. The various stages of the cycle can each hinder the success of green parties. In western democracies, where economic growth and stability are mainstays of the political landscape, green parties struggle to reach positions of power where they can implement effective policies. Whether an issue fades into obscurity due to waning public interest or being manipulated by established political and or media the issue-attention cycle significantly agendas, limits the potential effectiveness of green policy implementation. Unfortunately for green parties, their very ideology is easily hindered by the characteristics of the issue-attention cycle, they smaller audiences are unlikely to be strong enough to incite change at any level, and they themselves are unlikely to be able to gather enough momentum to be in a position to implement effective policy. Despite gaining relevance in recent years, other issues that are more obvious to the general public dominate the political landscape.

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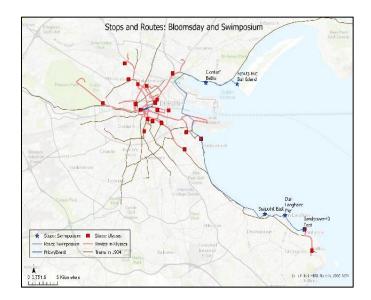
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### Swimstrokes: A new Bluemsday, August 21, 2021

#### The Swimposium as contemporary Bluemsday

Author: Ronan Folev

The Swimposium, the initial piece of swimming artist, Vanessa Daws' (2021) artistic project, Swimming a Long Way Together, took place on Saturday, August 21st, 2021. Starting at 9am in Sandycove/Forty Foot, the event consisted of a series of swims, walks, talks and shared experience at different locations across the bay, ending in the early evening at the southern end of Bull Island. In being an event that traced a route from southern to north across Dublin Bay, it is intriguing to see the Swimposium as a modern-day aqueous retracing of Bloomsday. The start and some of the stopping points were the same, and while the routes differed, they did overlap at key moments. Figure 1 shows the locations visited during the Swimposium alongside the more blurred geography of Bloomsday. That mix of points and lines visualize the geographies of nodes and connectives lines as exemplary representations of relational space and geo-narratives (Travis, 2015). In fact, the Symposium had started the night before, with a swimming performance under lantern-light that travelled up the Liffey from Butt Bridge to just past the Ha'penny Bridge, intersecting the nighttown noise of the revelling city. It is the spirit of the overall event and the links to water and place, that created a resonance, both material and symbolic with Joyce's Ulysses. Like Bloomsday, the Swimposium involved a cast of players drawn to the cities' waters and roads, bringing babbling voices together in a reflective and relational aqueous trace over the course of a single day, though more than a century apart. The cutlass-sharp design of the day, curated by Vanessa and Rosie Hermon, was basically, swimwalk-talk-eat-repeat. Part-sponsored by the MU Geography Department, the strolling cast included a wonderful array of speakers on swimming as well as swimmers of all types.



### Figure One: Routes of Bloomsday and Swimposium

### Joyce, swimming, and relational place

I am thankfully not a Joycean but want in this short paper to look at the two events, Bloomsday and Swimposium, as connective traces across time and space using four broad themes. First, while Ulysses famously starts with a swim at the 40 Foot, Joyce's own writing and engagement with water has always been identified as a central metaphor and theme in his work. This was more than just the initial snotgreen sea-swim but also the specific mention in

Ulysses of the multiple qualities of water: its healing virtues, its metamorphosis into different forms and, reflecting both events 'the restlessness of its waves and surface particles visiting in turn all points of its seaboard' (Joyce, 1922; U 17.185-228). That same motility and productive energy informed the Swimposium as a parallel relational geographical event, built on a shifting time-space assemblage, that equally invoked metaphor and discourse, visceral embodiment and the power of place to create memory, myth and emotion. As a second core theme, the Swimposium and wider artistic project, drew its inspiration from the period shortly after Ulysses was published. Vanessa Daws' inspiration for her art is a tracing of epic Irish swims by female swimmer Mercedes Gleitze between 1927 and 1932 (Figure Two).

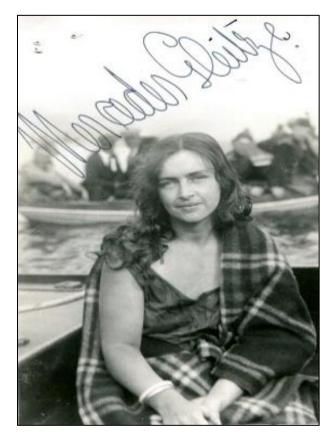


Figure Two: Mercedes Gleitze

Both famous endurance swimmers, Vanessa's work is intended to repeat and replicate some of Gleitze's most famous swims, in a series of public events between 2021 and 2023 that echo contemporary concerns with gender, identity, embodiment and endurance. As a third strand, the geography of Dublin Bay is a central participant as an always unfolding and relational space occupied by a rolling set of immersive participants, both real and imaginative, that in turn holds multiple other stories and narratives that cross those same spaces. Finally, there are echoes of old and new places and practices in the surges of interest in sea-swimming during the COVID19 pandemic. In the last two years, the lockdowns have brought with them new communities of practice; new inhabitations and immersions in the 'nearby blue', even the arrival of new seaside saunas as echoes of the old Turkish Baths referred to in Ulysses (Breathnach, 2004). Ultimately both events speak to palimpsestic qualities of coastal spaces and their liminal but accretive inhabitations and affective qualities that linger across time and space.

### Sandycove Swim

We started at 9am at Sandycove Beach with breakfast (ala Buck Mulligan), then a morning meditation, and first swim (Figure Three). We then swam out to the nearest 'Simpson' (yellow markers in the sea), a literal warmup for long-distance swimmers, but a decent swim for others. Despite the 40 Foot's historic male-only reputation, Video One shows a newsreel clip from just five years after Ulysses' publication demonstrating a considerable 40 female presence at a swimming gala. We then moved via a talking walk along the coast of Scotsman's Bay, a reminder of the first 1954 memorialisation of Bloomsday, a famously alcoholic retracing led by Patrick Kavanagh, Anthony Cronin, Flann O'Brien, and a relation of Joyces. (Open Culture, 2013). The Swimposium walk was less fractious and more collective, and the group reassembled at Dun Laoghaire Harbour.



Figure Three: Swimposium Start



Video One: 1927 40 Foot Swimming Gala

### Harbour Talks

Given the Swimposium happened under ongoing public health restrictions within the COVID19 pandemic, we assembled in a covered space off Dun Laoghaire Harbour for the first set of speakers. These included international writer Philip Hoare who read an exquisite piece on how Irish writers wrote about swimming, something he had finished just two hours before (Figure Four). His words still linger, 'Howth as barometer'; 'the sea as a queer space', Baudelaire's description of swimming as, 'feeling *like being kissed 100 times a minute*'. Other speakers were long-distance swimmers Rosie Foley and Lisa Cummins who talked about swimming the English Channel (and in the case of Rosie, back again just because), while Annemarie Mullally from TUD discussed her research on the gendered history of women's swimming in Ireland, within which Mercedes Gleitze was a key figure.

### East Beach, Seapoint

We then went for a second dip and lunch at the East Beach at Seapoint. The swim was timed for high ride and the swimmers swam more freely here, though occasionally getting snagged on low rocks, while looking across at the COVID crowds at the main Seapoint site. While lunching, we also watched across the bay as dark and brooding clouds gathered across Sandymount, with the Poolbeg Twin Towers barely visible over our next venue, Clontarf Baths (Figure Five). In the near distance could be seem another old 1920s bathing site, the Blackrock Baths (Video Two), now abandoned but still visible and indeed, swimmable at high tide.



Figure Four: Philip Hoare



Figure Five: Lunchtime Swim at Seapoint East



**Video Two:** Swimming Races at Blackrock Baths 1927.

### Crossing the River

While the characters in Ulysses used trams, horses, and cars, we drove across the river and witnessed acts of automotive swimming as cars and bicycles disappeared under flash floods from Booterstown on. In *Ulysses* and in other Joycean texts such as *An Encounter*, (See: Maynooth Geography, 2019) the crossing of the river that feeds Dublin Bay has symbolic overtones of liminality and it felt on the day as if we were crossing on roads converted to streams to be carried aquatically to the next stop and to visit the less celebrated, though no less important, northside swimming world.

### The Furies at The Clontarf Baths

As the intense climate-change-led rain intensified, the lightning arrived just as we got to the Clontarf Baths, where furious health and safety debates erupted. Finally, nerves held, the heavens closed, the skies blued, dinghies were launched and the four speakers, Kari Furre (founder of the UK's Outdoor Swimming Society), Hannah Denton, myself and Easkey Britton talked about different aspects of health and wellbeing associated with swimming. From the water (Figure Six). Easkey also read from her upcoming book, Saltwater in the Blood. While we all agreed one needs a good medical evidencebase, we all agreed it missed something visceral and important about the affective and embodied value of swimming on our own and with others. We then all jumped in and did lengths in the lovely – if still somewhat private space – of the rebuilt baths, fed by the tide and the clouds in all senses. The Clontarf

Baths existed in Joyce's time (Video Three), but while the Poolbeg tower continued to be a pivotal landmark around which the day revolved, these are in fact more recent than people think (only completed in 1971). But again, there is an electric trace through the stormy skies, as the Pigeon House had the world's first three-phase power electricity generator in 1903, the year before Ulysses' setting.



Figure Six: Dinghy-bound Swimposium Speakers



**Video Three:** Swimming races at the Clontarf Baths, 1923

### The North Bull

The Swimposium finished with a delicious evening curry, across the wooden bridge at the Scout Hut on Bull Island on the sunset-lit lime-slimed intertidal strip (Figure Seven) where wonderful singers, Landless, sang a specially commissioned song, while poetry and readings by international swimming writing great, Steve Mentz, played in the background. For the 50 or so attendees and presenters, it was a special day, and we were delighted to play a small role. While some might argue, the world of Joyce's *Ulysses* was a very male one, the very strong female energies of the Swimposium, through its inspiration, curators and participants did shine through as lasting effects.



Figure Seven: Swimposium Last Stop

### Swimming Forwards

The wider project moves on to other swimming spaces, Cork, Galway and Donaghadee, tracing the historic swimstrokes of Mercedes Gleitze. But as a live event and artwork that mirrored the most famous

description of swimming in literature, there is much scope to consider how different tracings, real and imagined, overlay to generate rich affective assemblages of place identity and practice. Water as a reflector and holder of those traces, is invoked in every swim and story. In addition, and echoing some of my own research, swimming can be both fluid yet also more-concrete than expected; swimmer's I have interviewed have described feeling grounded while swimming (Foley, 2015). That solidity through flow, is also glimpsed in Joyce (famously obsessed with fluids), in the character of Bloom, who grounds the Dadaist excesses of the rest of the book, in the material spaces of the city. In ongoing interviews carried out with swimmers across Dublin Bay in the Covid summers of 2020 and 2021, one can still glimpse those traces, along with some new ones, through the power of social and inter-generational worlds and in the rediscovery of the nearby blue that sustains Dublin Bay as a creative space for practice and imagination.

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#### Maynooth GeogSoc 2021/2022

#### Author: Orla Murray

Back in September 2021, Dr. Adrian Kavanagh sent out an email to every geography student requesting interest in the revival of the Maynooth University Geography Society. In replying to that email, we could not have known the heights the Society would reach over the following year and the wonderful experiences that we have had. In the year that has followed the Society has grown from strength to strength and surpassed all of the goals that we had set out to achieve.

Sitting in the Geography Tutorial Room were six students, the majority of whom had never met before. Five Final Year students, who had spent the majority of their Third Level education online, and a Second Year who had spent all of her Third Level education, up to that point, online. Each of us was dedicated to throwing ourselves into student life this year in order to make up for the monumental loss caused by the Covid restrictions. Nine months later this small group has grown to more than 55 members, and 55 friends.

The Society faced many challenges and setbacks throughout the past 9 months but as Miley Cyrus (2009) explained, it's all about the climb. The Society Committee initially comprised of:

- Orla Murray (President)
- Eoghan Brady (Vice-President)
- Ailbhe Sherry (Secretary)
- Caoimhe Currie (Treasurer)
- Leo McConnell (Public Relations Officer)
- Ana Ní Linneáin (Second Year Rep.)

We were later joined by:

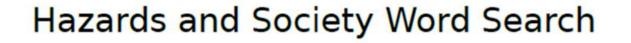
- Isabelle Fitzgerald (Post-Grad. Rep)
- James Plunkett (Welfare and Equality Officer)
- Stas Romanchuk (Commuter Officer)
- Ellen Dunne (Second Year Rep.)

Despite the many setbacks faced by the Society, mainly involving paperwork and navigating the strict rules set out for societies, MUGeogSoc has thrived. Our original goals were to gain 25 members and to revive a conversation about geography among the University student body. We have absolutely surpassed this goal by increasing our membership by 800% from the previous year and hosting numerous successful events and collaborations with other societies. Our events included quizzes, tea mornings, our Eurovision event, and a trip away; my personal favourite of these events being the Trip to Galway.

The Trip to Galway was undoubtedly the highlight of our year as a Society. Fifteen Geography students packed onto a bus at 9am on a bright April morning, set for three days of Geography-filled fun, or at least that is the story we will tell. Our adventures included a tour of Galway City and an examination of the River Corrib, the coastline and the coastal processes at work in the region. We then spent hours in the Atlantaquarium, even getting to touch a starfish. Of course, we had to have a bit of a party in order to immerse ourselves in the culture of the Galway region; we are geographers after all!

Another highlight had to be our Eurovision event. Congratulations to the winners of course, however I believe each member felt like a winner, leaving such a successful event. As Eurovision enthusiasts, a Eurovision event was a non-negotiable when planning our events for the year. We have discovered there is a large community of Eurovision events in Maynooth. We hosted our quiz in early April and had more than ten teams compete in our quiz. We even had a message from famous American Eurovision blogger, Alesia Michelle, to wish us luck both in the quiz and for our upcoming exams, which we were all more than excited about.

The Geography Society has become far more than an excuse to go to Galway for a week or to go out to The Roost. It has become a community within itself. I have no doubt that lifelong friendships have been forged and developed within the Society. Through helping each other with assignments and Masters applications, to lending a floor to sleep on for our GeogSoc nights out. I know I have made friendships that will surpass my limited time here in Maynooth.





vulnerability	earthquake	landslide	hurricane
exposure	heatwave	disaster	wildfire
epidemic	volcano	tsunami	drought
hazard	cyclone	risk	storm
flood			

Contributed By Stas Romanchuk

### GeogSoc Events 2021/2022



## GeogSoc Events 2021/2022



# GeogSoc Events 2021/2022



## **GY347 Elections Campaign 2022**









# GY205 Fieldtrip



# GY205 Fieldtrip



## GY206 Fieldtrip



## GY206 Fieldtrip



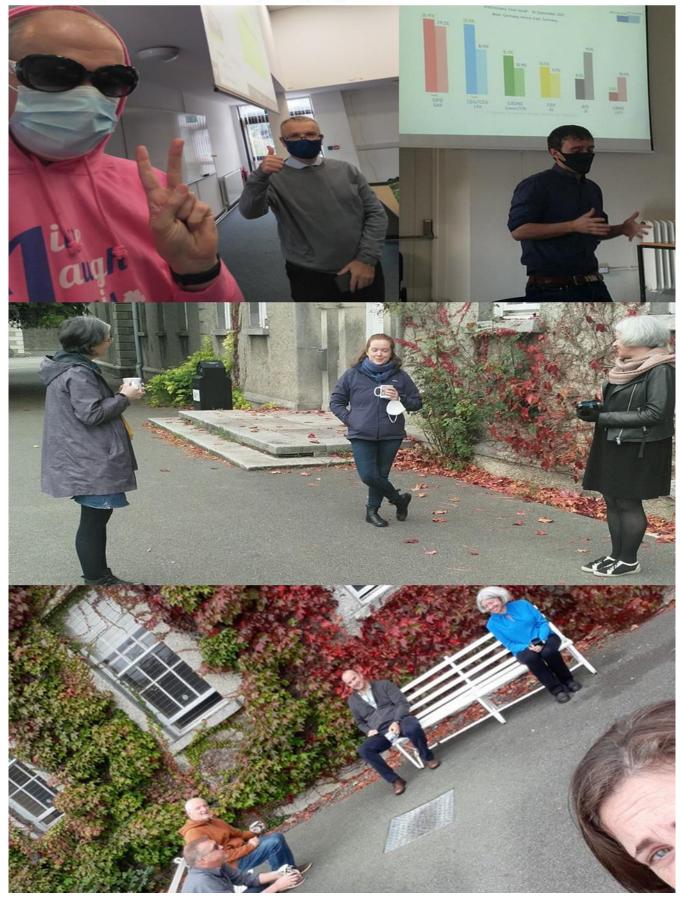
## GY206 Fieldtrip



## Celtic Voyager 2021/22



## Maynooth Geography Staff Hard At Work



### The Heated Dispute: A Spatial Scientist, a Feminist, and a Behavioral Geographer

Author: Nathan Maguire

This one-act play dives into a heated debate between three distinct geographers who hold atypical views on what geographical discipline should lead the subject of geography into a brighter future. Our first character Simon, who is a spatial scientist, can be described as calm and collective but becomes easily irritated when someone challenges his ideas. On the other hand, our second character Mikey, is a behavioral geographer who comes across as aggressive and confident, with a bit of a strange side. Mikey accepts that only his ideas are correct and strongly disapproves the opinions of the other geographers. The final character Kev is a feminist geographer. Although being described as laid back and also easily irritated, he also firmly believes that his discipline should be the direction that the subject of geography should take. While Kev is late to the scene, these three academic geographers agree to meet in their college staffroom. Waiting on Kev, Simon kindly offers Mikey a cup of coffee, who is sitting along a nearby rounded table. While making it, Simon clumsily knocks Mikey's cup onto the staffroom floor and triggers the debate between disciplines to begin.

### The Tense Battle Between the Disciplines of Spatial Science and Behavioral Geography

*Simon [calmly]:* My apologies Mikey, let me please get you another one. [Bending down to pick up the shards of glass scattered along the staffroom floor].

*Mikey [rising fury]:* Enough Simon! My patience is running dry as it is! Where is this Kev fella anyways? [Intensely spinning his head around the room in hopes to find a glance of Kev's presence]. Let's just forget about the coffee for now and discuss the purpose of us being here! [Angrily karate chops the rounded table in half out of frustration, as he is eager to share his ideas].

*Simon [shocked]:* Wha-...how did you? [Looking at the finely chopped table that Mikey crafted in his rage]. Fine have it your way! If you are so eager to begin, tell me why you are so against the idea that spatial science should pilot the direction of geography? [Grabs a seat across from Mikey with the only thing dividing them is a broken table and an intense glare].

*Mikey [confidently]:* My pleasure kiddo! Although spatial science is an important paradigm to the development of geographical methods into a quantitative realm, I believe this science of space and location is just simply too outdated and unsuitable to guide geography into a prosperous future. [Lights up a cigarette that he holds firmly in his mouth while sharing a sinister grin towards an irritated Simon].

*Simon [annoyed]:* How dare you call my discipline outdated and irrelevant to the future of geography! I strongly believe that there is indeed a science in the arrangement of human activity and production of space across this earthly globe. [Putting his hand on his chest feeling his heartbeat slowly increase, as his face becomes boiling red]. Through this quantitative perception in the art of geography, the use of hard

statistics and a focus on movement will produce problem solvers and knowledge that can be applied to real-world problems. [Clenches fists in disapproval of Mikey's statement].

*Mikey [evilly]:* Fuhahah..Yes! I do acknowledge the practical side of such a discipline can contain. Although being scientifically useful in geography as a whole, your ignorance blinds you from such flaws that are imbedded in such a science. [Taking a buff of his blazingly lit cigarette].

*Simon [angrily]:* Wha-..? Such flaws don't exist! Those fumes from that cigarette must be filling that empty head of yours! [Standing up from his chair with the intent of totally losing it and making Mikey pay for insulting his first true love for spatial science].

*Mikey [boastfully]:* Don't look at me with such devilish intent Simon! You need to accept that your discipline simply lacks the inability to deal with the deeper structures and processes within geography due to its bounded conception of space and its naïve assumptions on human behavior that your peopleless spatial science fails to comprehend. [Flicking the remaining ashes from his once so-called cigarette towards Simon].

*Simon [intriguingly]:* Even if this is true, I don't believe that even your discipline of behavioral geography has such a method of dealing with this concept of space and place. [Sitting back down and leaning forward in his chair hoping for an idiotic response from Mikey].

*Mikey [creepily]:* Oh..? Is that what you truly believe Simon? You couldn't be more wrong! [Smiling and tilting his head in a clockwise direction, nearly making a full 360-degree rotation if he continued]. This approach of behavioral geography looks at the concept of space and place at the level of the individual. Unlike your petty spatial science, when behavioral geographers analyze data, we us recognize that individuals vary from each other, which allows us to make more realistic assumptions when interpreting models of human activity and interaction. [Falling into a daze of insanity and continually muttering the word 'behavioral geography' under his breath, while nearly entering the realms of cloud-cuckoo-land].

Simon [pestering]: Mikey... are you ok? You need a timeout? [Gently shaking Mikey's shoulder, which quickly snaps him back to reality]. Even if your discipline may be derived from such humanities as philosophy and literature, how can you hope to achieve collecting this data that harnesses individual motives and patterns that you speak of? Do you not think you are treating humans too individually and overlooking the important aspects of social and cultural contexts? [Walking back to his chair, who nearly tripped over the broken table, nearly embarrassing himself if there was an audience watching].

*Mikey [dazed]:* Ugh...wha-? Oh yes sorry, I kinda just lost the plot a little. [Embarrassingly rubbing the back of his head]. No! I completely disagree that us behavioral geographers overlook such qualities in human activity. Unlike spatial science, I believe that 60

people's behavior is rooted in a behavioral landscape rather than this objective landscape that you are so fond of. [Slowly getting up from his seat and picking up two photographs hung up on the wall, which consists of the busy city center of Dublin and a group photo of the 3 geographers with a famous rising star in the Women's Irish Basketball League]. Human knowledge can be based on images that can depict the impressions of the earthly globe that people create due to their individual experiences, which can act as the baseline for their behavior. We may contain such information using closed questionnaires, which was similar to the questionnaire we took at last year's basketball game on our experience of the atmosphere of the stadium. We can also use metal maps to depict people's impressions of the world, like the fun activity we took part in during our trip to Dublin where we drew important paths, edges, directs, nodes and landmarks to test our understanding of the busy city of Dublin. [Flipping each picture frame towards Simon, in hopes that through unlocking memories of the past can make Simon appreciate and understand the true beautiful nature of behavioral geography].

Simon [aggravated]: What a load of Baloney! Your concept of geography is just too far-fetched for me. Even with your personal anecdotes, you need to wake up to reality..! Your discipline simply confuses cognition with consciousness, that lacks any fine distinction between conceptualizing the relationship between the mind and behavior of these individual lab rats that you collect your data from. So, you can rant about your mindless quantitative discipline all you want. Your ranting won't change the fact that with the developments in artificial intelligence, big data, computerized data analytics and GIS systems will spark a second quantitative paradigm with spatial science being its focal point in the form of spatial data science. [pointing at Mikey as an attempt to provoke him to take a more physical approach to this heated debate].

*Mikey [enraged]:* Enough with your tomfoolery Simon...! Why don't we settle this argument once and for all! [Dropping both picture frames on the ground, smashing them, displaying his wrath by charging toward Simon].

### The Late Arrival of the Feminist Geographer

*Kev [chirpy]:* Hey Guys..! I apologize for my lateness. The line for the takeaway queue for the Byrne's Michelin Star restaurant was huge but I brought muffins! [Harshly knocking the staffroom door before entering, to be greeted by the warzone created by Mikey and Simon]. Whaa-..! What happened here? The place is a mess! Did a bomb go off or something? I was only 10 minutes late. [Stunned by the destruction of a once so-called staffroom].

*Simon [joyously]:* Ah Kev, glad you could make it..! Please take a seat. Me and Mikey already discussed our disciplines, I believe it's your turn to speak about yours. [Chewing on a delicious muffin while passing one to Mikey, who both quickly settled their physical differences].

*Kev [cautiously]:* Ok... if you insist. [Sitting on a wooden plank that was once proclaimed as a chair].

Unlike your two ideologies, my discipline of feminist geography intents to investigate and provoke gender inequalities and divisions within societies, which tends to reveal differences in experience of place as well as exposing dissimilarities in spatial behavioral and activity, which makes it an excellence candidate for what geography should be about. [Shyly looking down at his feet while biting down on the last of the fabulous blueberry muffins he brought with him].

*Mikey [taunting]:* That might sound sweet, but I find your discipline to be unnecessary Kev. Are you not romanticizing this a little too much? While I am not disagreeing that such unequal powers exist between men and women, but I think your discipline clearly glosses over the fact that social organizations are not only highly patriarchal and oppressive against women but for also many others. Your brainless ideology clearly shows that my discipline of behavioral geography is definitely the better of the bunch. [Who is feeling re-energized and pumped up after consuming the muffin received by Simon].

*Kev [antagonized]:* You may have a point Mikey but that doesn't override the importance of the impacts that such a discipline can make. While we can't deny the existence of a gender bias of male supremacy in professional geographic activity, feminist geography can be used as a tool to promote women's liberty and dismantle these gendered divisions within societies that both of your disciplines would never hope to achieve. [Taking his attention away from his feet to look up and see two disapproval faces].

Simon [concerned]: I hate to admit it Kev, but I have to agree with Mikey on this one. I just don't believe that your discipline is the correct direction geography should take. you do represent a solid argument, alternatively I must credit that there may be lack of interest in something just named 'feminist geography' and with an academic neglect of tackling such gendered problems may create problems into transforming this discipline into geography's main lead, making my spatial science the superior overlook on geography. [Confidently smiles towards Kev, which causes Kev to reach his breaking point].

### The Conclusion of the Battle between Disciplines That Finally Reaches its End Point

Kev [infuriated]: Enough..! I'm getting sick of you two ganging up on me. Both of you are just too obsessed with your disciplines that you can't even comprehend the true nature of feminist geography. While there is a notable increase in female geographers, this change is in fact not sufficient as women are still under-represented in academic geography due to the discouragement to seek higher education, highlighting the importance of not neglecting the role that women play in society. [Picking up the smashed picture frame that still contains a picture of the inspiring female athlete]. If you two weren't so stubborn to realize that feminist geography can be used to examine such regimes of power at work and challenge such significance gender differences that shape experiences of space and place, then I am just wasting my time on two imbeciles. [Gets fed up with the two headstrong geographers and leaves the demolition derby of a 62

staffroom to catch other batch of those fabulous muffins].

Simon [relieved]: Maybe it's time to leave his debate for another day. [Receiving a nod of agreement from Mikey, starts to clean up the mess they made to the staffroom, which the shards of glass from Mikey's cup grabs his attention]. Maybe we were too hard on each other. Perhaps, rather finding a discipline that geography should be solely about, we should probably be more aware of the abundance of disciplines that falls under the subject of geography. [Picks up a shard of glass from Mikey's potential cup of coffee]. Let's think of it this way! Although the shards of glass are scattered and pointed in completely different directions, if we collected them and glue them together, the shards of glass would form the shape of the mug, like the disciplines forming the subject of geography. [Looking toward Mikey, who first looks unimpressed but begins to smile].

*Mikey [intrigued]:* I do disagree with your statement as I believe even if you glued each shard of glass together, it would be weak and more brittle as the glass as a whole, which requires a leading discipline to guide geography into the future. [Accepting the fact that the debate went on long enough and leaves the staffroom in the search to where Kev went].

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### A Geographers' Tea Party

Author: Tomás McNamara

Moscow, a city of millions, has just carried out a redesign of its bus routes throughout the city and its hinterland. This redesign was carried out to try and best use the current fleet of buses the city's bus company owns without purchasing new buses. As ever, there are differing opinions about the changes and not all are enamoured by the changes. Included are the local academics Dr. Anton, Dr. Zoryana and Dr. Nikolai.

Dr. Anton, the spatial scientist enjoys the quantitative approach along with logic, reason, and statistical analysis.

Dr. Zoryana, the humanistic geographer prefers to listen to people, believing that the lived experience is a greater guide than mathematical equations.

Drs. Nikolai, the critical realist sees the merit in the use of quantitative and qualitative methods of research and tries to balance these styles to develop well rounded practical solutions to local/global issues.

The location is the weekly tea meeting that takes place in the kitchen of Dr. Nikolai's apartment which is close to the Kremlin building by Red Square. Dr. Nikolai rents a room to the PHD student Mr. Josef, a Marxist geographer who has moved to Moscow to learn more about Lenin and Stalin's developments upon the writings of Karl Marx. Nikolai: What tea do you want this time? Go on, what don't you like about the new bus routes?

### [filling kettle and turning it on]

Zoryana: It's too impersonable, there wasn't much thought given to what people think.

Anton: Wasn't there a public consultation?

Zoryana: Well they never asked me. If I was asked on the board I'd make sure that there was a number of group interviews with people from across Moscow to understand what improvements should have been made for a better user experience.

# [finished sentence while searching in bag for sweetener]

Nikolai: They did send out a tweet and put a section on the website which let you fill out a survey about what you think about the bus routes, also isn't your commute faster now?

[standing beside kettle with pot and tea leaves waiting for the water to fully boil]

Zoryana: That's beside the point. I still need to get onto a tram to watch CSKA play ice hockey.

Anton: Aren't you a season ticket holder?

Zoryana: Best team in the league.

[showing off her CSKA Moscow ice hockey toque]

Anton: I think the introduction of the new bus lanes along the roads that are not served by trams has greatly reduced the time it takes to get from the outer districts to Red Square.

### [in the background Nikolai is pouring the newly brewed tea into 3 cups]

Nikolai: Here's the tea, but not every bus has wi-fi.

### [putting the cups of tea on the table and takes seat]

Anton: No they all do, its just that too many people log onto it when you're heading into the campus. Besides I feel that we now have a much better integrated public transport network that better serves all citizens of Moscow.

### [said in between sniffs of the tea in the cup]

Zoryana: Just because they used your computer model doesn't mean it's amazing.

#### [followed by a loud slurping of the tea]

Nikolai: To be fair it's the best computer model I've seen for a while. Here what questions would you'd have asked people?

# [stirring a lemon in his tea, finishes question with a quiet mouthful of tea]

Zoryana: I would have asked people where in the city they felt there was not enough buses running; do they have to transfer to a tram or the metro; what do they like best and least about the buses and stuff like that.

Nikolai: I'd go for something more like what sections of your district could be better served by the bus and would you prefer the bus, the tram or the metro.

Anton: Ah but not everyone lives near the metro – stick with stats and you won't go wrong.

Nikolai: But you can lie with them.

[knowing Anton can be wound up by such statements]

Anton: No, only if you're careless and want to have a particular result to show up, it's not the stats it's the human behind it.

[trying not to show frustration with Nikolai's statement]

Zoryana: Yes, but if you build a bus stop at the back of a landfill people aren't going to like the bus.

Nikolai: Fair point, there is a value to interviews but surveys are able to reach more people in the same time as a group interview which can give an indication pretty quickly on where the bus stops should be round campus and Savyolovsky District. Biscuit anyone?

[spotting the lack of biscuits on the table, standing up and moving towards one of the cupboards]

Anton: Fig roll please.

Zoryana: Pass us a jammy dogger.

Anton: Just remember the point of the re-routing of the busses was to give better coverage to people living in districts that don't have many or any metro station or tram line in them, and stats and a computer works for that.

Zoryana: But if the buses go where people don't want to go, they're useless.

[takes loud slurp, thinking she's scored a point over Anton] Nikolai: Not useless just inconvenient, besides the re-routing has been helped by the bus lanes his computer model suggested. Here you go.

[sets down the 2 plates of biscuits, then takes a square of 60% dark chocolate for himself]

Zoryana: Well, I still think that they should have replaced the buses with new electric ones cause that's what I heard most from students in the stolovaya (*canteen*) on campus. That would really improve the user experience.

Anton: Moscow Transport said the point was to better use the busses they currently own, besides they have like 40 electric buses.

Zoryana: But with climate change they should be buying new electric buses instead of diesel fumes, killing everyone.

### [said with the look of the voice of reason]

Nikolai: Wait for the hydrogen revolution In the meantime they could retrofit the current buses to be electric, even stick solar panels on the roof.

[knowing he can annoy the pair by mentioning hydrogen]

Anton: This is Russia, even babushkas (grannies) know that won't work half the year.

Zoryana: How's your babushka by the way?

Nikolai: Not bad, she had good things to say about you after that interview you did with her for your podcast. Anton: I didn't know you had a podcast. Zoryana: Oh yeah, it's about the concept of place in Moscow today, it's the best geography podcast in Russia today.

Nikolai: To be fair she does a good job of it.

Anton: You still need a decent map; a decent map goes a long way to showing what's going on.

Zoryana: But a map can't show emotion, like the bus route map.

Nikolai: What about mind maps, didn't you use that in a recent conference paper?

Zoryana: Whist!

Anton: Maps are good after all!

Nikolai: Back to the buses, sure they all have AC now, so they're fine in summer, just sit at the back over the engine in winter, to keep warm. Why don't you have a question as what temperature people would like the AC on the bus?

Anton: Simple answer, keep AC at standard temperature as that's when most humans operate, optimally.

Zoryana: But ideal ambient temperature depends on where you are.

[smiling in the knowledge that she's just scored a point]

Nikolai: She has you there.

[also realising the point scored, looks at Anton] Anton: I'll win next round, any chance of a top up?

# [changing the focus of conversation to distract from the point]

Nikolai: One sec, I'll grab the pot, besides the computer model, what else were you asked to do by Moscow Transport for the new bus routes?

### [leaving the table and putting the pot on the hob to warm up again]

Anton: I also did some consulting for them about which areas are least connected by public transport. And which districts could benefit most from better public transport links to the inner city, like Golyanov District and Izmailovo District.

Nikolai: Was it census data that you used?

Anton: Yes, along with a comparison, distance to workplace and mean commute time for specific districts, like Golyanov and Izmailovo.

Zoryana: But that won't express the lived experience of the people who live there – the census can't tell you the quality of life.

Anton: But the air and water pollution levels can.

Nikolai: Have you been looking at placelessness again?

Zoryana: Maybe, what's the give-away?

Nikolai: You should probably spend more time there, to gain people's trust before starting interviews about place and placelessness. Worked a treat in Vladivostok.

[walking over to the table with the renewed pot of tea and placing it on the table] Zoryana: Thanks for the tea, try telling him the benefit of spending time with people.

### [pointing a finger at Anton]

Anton: I am spending time with people, you count as a human too!

[using his freshly filled cup to point at Zoryana]

Zoryana: I just study the human experience of the places and spaces in which humans exist.

Nikolai: Have you been spending too long in the library again? We should show you how to use something really useful like SPSS or R.

Anton: They've made big changes with ArcPro. It threw me off for day but I figured my way back round the ribbons pretty quickly.

Zoryana: YouTube videos, that's how you did it.

[eyebrows raised at Anton]

Anton: No, not YouTube, all practice!

[confidently drinks his tea to emphasise the point]

Nikolai: Don't underestimate what useful stuff you can find on YouTube for GIS and SPSS, just try and find a video in a language that I can actually understand.

Zoryana: Look at you both, keeping it positivist. You need to appreciate the knowledge of experience, the wisdom of the word and the value of the written word.

[both heads swivel to Zoryana after that comment]

Anton: But there's knowledge in numbers, that's what's stats are for anyway. There's a numerical equation that can explain nearly everything – all we need are bigger computers and better data.

Nikolai: Not gonna lie, I'm a fan of a decent equation. But you can have a great laugh interviewing people about what annoys them on a bus.

Anton: But how does that work in theory?

Zoryana: You love a theory don't you.

[rolls eyes and flops on the chair]

Anton: I'm not the only one that uses theories in their work. Haven't you talked about theories before?

[reaching across to take on of Zoryana's jammy doggers before she notices]

Nikolai: You did, that conference paper, besides you discuss a theory on you podcast.

[grabs one of the fig rolls from Anton's plate]

Zoryana: But it's a good theory!

Nikolai: Ah, we all have our favourite theory. Here, what do you think of the new machines for topping up your troika card (*equivalent of leap card*)?

Anton: Well, the machines are used far more in the city centre than in the outer districts where people go into newsagents. That's what came up in the consulting I was doing. I suggested adding more machines to bring wait times down by 30 seconds.

Zoryana: But that doesn't tell us about how people feel when using the machines. Students in the stolovaya were saying they don't like the layout and it takes too long for the money to transfer to the card, which the wait time can't tell you.

Nikolai: Have you heard of the app?

Zoryana: What app?

Nikolai: The one that lets you top up the card using your phone with your internet banking – he suggested it. Was it Dublin where you saw it first?

Anton: Yes, it seems to save a bit of time at the ticket machines.

Zoryana: I don't trust the internet banking. You're just letting the state track your spending.

Nikolai: That period of time, is officially over.

Zoryana: Do you remember why we first started hanging out in kitchens?

Nikolai: My babushka talks about it. I always liked the books that were brought along.

Anton: I only moved here in 2000, so I missed all the fun.

Zoryana: Don't worry it hasn't missed you!

[lets out a sarcastic laugh]

Nikolai: Fresh tea anyone?

Zoryana: Could you throw in a lemon with it?

Nikolai: Oh by the way, what other software were you using for the consulting? Anton: I used a bit of SPSS and ArcPro for the GIS mainly. But I'm thinking of asking someone in the Computer Science department to give me a hand with developing a programme that can better predict and map changes in public transport that's going to occur with new technologies.

Nikolai: More charging points would be a start!

Zoryana: But we need to ask people if they want more charging points. It's not good enough to presume people will use the new technologies.

Anton: Have you seen the number of e-scooters on campus? I nearly broke my neck last month cause of the pile that was left outside the door of the Art's building.

Nikolai: Asking people where they want them is a better question, especially for everyone who's living in an apartment block.

Anton: Is that a bit of social bias in there?

## [knowing he can annoy Nikolai with the suggestion]

Nikolai: Just because we happen to be in an apartment which I happen to own and live in does not automatically mean that I am bias. Aren't you the one with the summer house?

Anton: The house is great when you want to get away from students, for a while.

Zoryana: I knew you didn't like humans.

Anton: I won the last round; besides I like my wife.

Nikolai: But what is 'real'?

[in full awareness that Anton is going to lose his mind]

Anton: It's a bit early for that, can't you wait until she's mentioned Tolstoy before we start asking questions like 'what is real'?

Nikolai: I win this round, also next time you're bringing one of his books, can you bring that rose and jasmine tea?

Zoryana: Will do, Tolstoy is an excellent writer who deserves for you to attend the new lecture series that the Literature department is putting on.

Anton: You really don't like objective reality, do you?

Nikolai: Be nice, she's paying for us skiing during the reading week!

Zoryana: There is merit to interpretivism, you need to acknowledge it more in your research and teaching.

Anton: I will let the external examiner be the judge about how to improve my teaching, my research doesn't need interpretivism.

[trying to not take the comment personally]

Nikolai: But I'm the one here who has a pedagogical qualification, when are you two going to get started on that?

Anton: I'm already enrolled in a night class once a week.

Zoryana: I'll take it up next term, going to enjoy my free time while I still can

Nikolai: What about your corrections?

Zoryana: Moodle quizzes, you need to get into them more.

[opens door and loudly announces his arrival to the conversation and is met by 3 heads rapidly turning in his direction]

Josef: You need to be more concerned about the damage being done the citizens of Moscow by the capitalist structures that have been imposed on them. There should be no need to charge the proletariat for transport. Your skills would be better used by actively working to dispose of unequal geographies created by this new capitalist wave of oligarchy.

Nikolai: Would like a biscuit with your tea?

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## Cloudy with a chance of... human interference? A Critical Evaluation of Geoengineering

Author: Leo McConnell

With the last seven years (2015-2021) being the hottest years ever recorded (Copernicus Climate Change Service, 2022), drastic measures are needed to combat greenhouse gas emissions (GHGs) and halt global warming. One measure which has gained exponential contestation in recent years is climate engineering, commonly known as geoengineering (Trisos et al., 2018). Geoengineering is the intentional anthropogenic shaping of the Earth's planetary environments on a global scale, in an attempt to reduce anthropogenic global warming (Markusson et al., 2014). The origins of the concept predominantly which focus on weather modification and control - trace back to 1930s USSR, and to the Cold War of the 1960s (Keith, 2000), however, it was not until Crutzen's 2006 paper that geoengineering was catapulted to mass contestation in the climate change community (Trisos et al., 2018).

Due to the widespread contestation faced by geoengineering, this essay aims to critically evaluate geoengineering through the analysis of the two main categories of geoengineering; solar radiation management (SRM) and carbon dioxide removal (CDR), outlining the benefits and consequences which may be faced during the deployment of SRM and CDR technologies. The common moral and ethical issues that prevail within most geoengineering technologies is then explored, followed by a conclusion determining whether geoengineering should be employed now, or (if at all) in the future as a means of halting global warming.

## Solar Radiation Management (SRM):

SRM is a category of geoengineering which aims to reduce the amount of short-wave radiation absorbed by Earth through increasing the reflectivity of both the Earth's atmosphere and surface (Matthews, 2010). SRM encompasses a variety of technologies, from basic albedo enhancements like painting roofs white, to more complex mechanisms such as Stratospheric Aerosol Injections (SAI), and Marine Cloud Brightening (MCB). This section focuses on SAI and MCB.

## Stratospheric Aerosol Injections (SAI):

SAI, one of the most promising geoengineering concepts due to effectiveness (Bellamy et al., 2012), and relatively low costs (Markusson et al., 2014), is (most commonly) the frequent injection of sulphate particles or sulphur dioxide into the stratosphere to create a layer of sulphuric acid droplets that reflect incoming shortwave radiation, mocking the cooling effects of a volcanic eruption (Trisos et al., 2018), and reducing the global warming that triggers climate change.

Although perceived benefits of SAI are particularly high in today's climate emergency environment, the risks of using SAI are also high. The implementation of SAI is predicted to negatively influence crop growth in mid-high latitudes due to cooler temperatures and affect crops in parts of Asia and Africa with decreases in monsoon rainfall, negatively affecting billions of people (Trisos et al., 2018). Ozone layer depletion will also be encouraged through the application of SAI (Trisos et al., 2018). SAI also fails to address the present and rising levels of carbon dioxide (CO<sub>2</sub>), and therefore fails to address ocean acidification (Preston, 2013). Finally, it has been suggested that SAI may change the pH of soils, increasing acidity, potentially negatively affecting water sources and ecosystems (Visioni et al., 2020).

## Marine Cloud Brightening (MCB):

MCB is the anthropogenic strengthening of cloud albedo through the spraying of sea salt water into the atmosphere by vessels below oceanic stratocumulus clouds (Stuart et al., 2013). When the sea salt water is sprayed into the atmosphere and encounters clouds, cloud condensation nuclei are formed, helping water to condense into more droplets and increasing reflectivity (Caldeira et al., 2013). Studies have concluded that an increase of 0.06 in cloud albedo can counteract warming equivalent to double preindustrial levels of CO<sub>2</sub>, suggesting MCB is a good option for halting global warming (Trisos et al., 2018). As a result, less insolation is absorbed by the ocean creating cooler waters. These cooler waters may result in a reduction in the rate of Arctic ice loss and weaker hurricanes (Latham et al., 2014).

However, like SAI, MCB is flawed and the implementation of MCB comes with risks. Some

studies have indicated that introducing MCB will lead to reduced precipitation globally, however an increase in precipitation over land (Stuart et al., 2013). This may have adverse consequences for agricultural industries and could potentially cause flooding in some regions. MCB, like its counterpart SAI, fails to address the root causes of global warming, with CO<sub>2</sub> levels and ocean acidification prevailing with this 'solution' (Bala et al., 2011). Bala et al. (2011) suggests that unforeseen circumstances are likely with the adoption of MCB.

## Carbon Dioxide Removal (CDR):

CDR is a category of geoengineering that aims to halt global warming through the reduction of CO<sub>2</sub> in the atmosphere (Hartmann et al., 2013). CDR techniques range from afforestation and reforestation, to enhanced weathering, ocean fertilization, and CO<sub>2</sub> capture and storage (CCS), amongst others (Preston, 2013). This section focuses on ocean fertilization and CCS.

## **Ocean Fertilization:**

Ocean fertilization is the process of increasing iron content in the ocean to act as a catalyst to enhance the growth of phytoplankton (Boyd and Vivian, 2019). Phytoplankton consume atmospheric CO<sub>2</sub> through photosynthesis and are grazed upon by zooplankton which exhale CO<sub>2</sub> (Steinberg and Landry, 2017). The CO<sub>2</sub> respired by the zooplankton is then stored in the ocean, acting as a biological CO<sub>2</sub> pump (Williamson et al., 2012). Therefore, increasing phytoplankton populations increases the effectiveness of the biological pump, reducing the atmospheric heating capacity with lower levels of CO<sub>2</sub>.

Albeit ocean fertilization comes with severe risks. Storing CO<sub>2</sub> in the ocean is effectively winning the battle but not the war, as oceans are a non-permanent carbon sink and will eventually release CO<sub>2</sub> back to the atmosphere in the future (Hartmann et al., 2013). Another adverse consequence of ocean fertilization is the potential release of methane (a GHG more toxic than CO<sub>2</sub>) from phytoplankton sinking to the bottom of the ocean (Boyd and Vivian, 2019). Thus, ocean fertilization could worsen the effects of global warming.

## CO<sub>2</sub> Capture and Storage (CCS):

CCS is one of the least controversial geoengineering concepts, separating  $CO_2$  from other atmospheric compounds through chemical processes to reduce atmospheric  $CO_2$  levels (Caldeira et al., 2013). The  $CO_2$  captured is then stored in permanent geological reservoirs, or used for commercial purposes (Caldeira et al., 2013). This low-risk technique satisfies the need to reduce  $CO_2$  levels with a permanent sequestration solution.

CCS is not without limitations. The technology is relatively expensive, and the use of the technology would be needed on a massive scale (Matthews, 2010). However, with more research and development, along with mass production of CCS devices, the price may reduce and become economically feasible. However, as CCS removes  $CO_2$  from the atmosphere, the ocean releases more back into the atmosphere to balance the loss (Keller et al., 2018). Therefore, all anthropogenic  $CO_2$  emissions both in the atmosphere and absorbed by the oceans would need to be permanently sequestered for CCS to work (Matthews, 2010).

## Moral and Ethical Issues of Geoengineering

With respective geoengineering technologies having individual benefits and consequences, a common denominator of moral and ethical issues regarding the entirety of the concept emerges due to lack of regulation regarding research, experimentation, deployment, termination, and mitigation.

As it stands, geoengineering technologies currently have not been researched enough to deploy and halt warming (Preston, 2013). There global are significant unknowns involved with these technologies due to experimentation limitations, and it is believed that those who experience the largest threats of global warming (typically low-emitting poorer nations) will experience the largest threats posed by geoengineering if adverse consequences were found during deployment due to the lack of knowledge surrounding potential consequences (Preston, 2013). Thus, it would be highly unethical and morally wrong to subject those who are least responsible for global warming to even-more consequences without a sound understanding of potential adverse reactions.

The application of geoengineering technologies may also see a reduction in mitigation efforts (Preston, 2013). A moral peril may emerge whereby the biggest emitters of GHGs may continue to emit large quantities of GHGs under the illusion that it is acceptable due their employment of to geoengineering technology (Preston, 2013). However, geoengineering technologies are rendered useless without the adoption of substantial mitigation programs and policies (Preston, 2013), thus, it must be ensured that mitigation is the number one strategy for halting global warming, and that geoengineering should complement this.

If geoengineering technologies such as SAI were to be in place, there is a risk of sudden termination, may it be due to scientific incompetence, or war (Preston, 2013). If technology like SAI is terminated suddenly, without the employment of CDR technology and the mitigation of GHGs during the employment period, the Earth's climate will be restored to the state in which it would be in if no SAI was employed within a few years (Preston, 2013). Therefore, thresholds of termination must be established in order to determine when it is time to stop using such technology (Preston, 2013). Without thresholds, sudden termination would majorly affect those who are most vulnerable to global warming extremes, raising moral and ethical issues.

## **Conclusion**

After the critical analysis and evaluation of the pros and cons of geoengineering, this essay concludes that the deployment of geoengineering as a means of halting global warming is not a feasible solution in its current state, as it only addresses the manifestations of global warming and not the causes, whilst imposing moral and ethical challenges. Although this essay is not in favour of the implementation of this technology in its present state, it must acknowledge that there are substantial potential benefits of the technology as a means of halting global warming, that should be reaped only when an international governing committee is formed, and determines it is safe to do so (Preston, 2013). This committee should be made up of welleducated, non-political representatives from every country, which would oversee the research, experimentation, deployment, and termination of geoengineering technology. The committee would be responsible for establishing a global monetary fund in order to advance geoengineering research and experiments, creating new technologies and developing potential solutions for current technologies. This committee would also be accountable for establishing suitable technology termination points, while ensuring termination is not sudden, limiting some moral and ethical issues (Preston, 2013). The committee should also be liable for ensuring mitigation practices are enforced, and if permitting the use of geoengineering technology alongside mitigation practices, encourage the use of both safe SRM and CDR technologies for optimal results, targeting both the root causes and symptoms of global warming. Without satisfying these conditions, this essay believes the adoption of many geoengineering technologies will do more harm than good when attempting to halt global warming and should not be pursued.

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## Shopping centres as a space of consumption

#### Author: Michelle Nolan

This report on Liffey Valley shopping centre in County Dublin will be consider how this space fulfils the functions of both reproductive consumption and recreational consumption. The report will also be examining the shopping centres non – retailing functions and how the shops and non-retail establishments all act in harmony to create an ultimate recreation experience.

Reproductive consumption can also be viewed as the necessities which we need to survive such as water housing clothing and energy in contrast recreational consumption is items which are non-essential, or luxury items consumed for leisure purposes (Mackinnon & Cumbers, 2019). Shopping centres are generally large spaces where the two types of consumption are interwoven to produce a fulfilling leisure experience. Liffey Valley is no exception, and it constantly reproduces itself to conform to the everchanging trends in cultural geography the shopping centres are designed and created in such a way that is tailored to consumer behaviours. During the 20th century mass affluence began to spread throughout many economies this ultimately paved the way to an increased amount of leisure time for the middle class who now obtained a higher level of discretionary income. After the 1950s due to economic and motor advances the levels or car ownership grew as more people lived in suburban areas. The major consequences of this were that now people could travel further to shop and could travel

to and from shops as they wished Liffey Valley responded to this need by creating free on-site parking which can accommodate thousands of cars and it is easily accessible just off the M4 as can be seen in Figure One.



Figure One: Liffey Valley Car Park

Ritzer in (Mansvelt, 2005) suggests that " such 'enchanted spaces'-spaces spaces are where inauthentic alienating experiences are replaced with magical manufactured leisure and consumption experiences in order to make increasingly rationalized spaces ( and the systems through which they operate) seem appealing". Liffey valleys design and construction is true to this for example glass is heavily used in the shopping centre for example Figure Two shows how large panes of glass are erected at the entrance of the centre and create a sense of awe through their sheer size. Glass is also used on the roof throughout the centre which allow light to flood through, as seen in Figure Three, providing a well-lit building the use of glass is just one way in which these spaces are portrayed to us as enchanted spaces.



Figure Two: Liffey Valley Entrance



Figure Three: Liffey Valley Roof Structure

Throughout the past century, designers gradually began to pay more attention to the design of shopping centres. They did this by incorporating glass and taking advantage of the light open spaces created by glass. The colour white is used all over the shopping centre including the floor the colour white is used to add extra light to help maintain the bright space, but it is also used as it's a clean simple colour white, and as often associated with being a clean colour, consumers are more likely going to shop in an establishment which is hygienic and clean. This is also going to help consumers feel at ease which can allow them to enjoy their leisure time at the shopping centres. These actions are all in response to consumer behaviour and desires which help with the production of an enchanted space.

Liffey Valley is a location which has merged spaces of reproductive consumption and leisure consumption into one location which provides an ultimate leisure experience. Liffey Valley contains many outlets which are focused mainly on recreational consumption for example as seen in Figure Four there is a large Cinema with fourteen screens at the entrance to the shopping centre. There is also an indoor trampoline park which can be accessed through the shopping centre side door which would be another example of recreational consumption. Upstairs there is a large food court which contains food outlets such as O'Briens sandwich Bar, Ginzeng, Mc Donald and KFC just to name a few which can be seen in Figure Five.



Figure Four: Vue Cinema Entrance



Figure Five: Liffey Valley Food Court



Figure Six: Liffey Valley Retail Park

Cinemas, trampoline parks, cafes and food outlets are all examples of recreational consumption. Recreational consumption has become increasingly popular as many of our favourite leisure activities can all be easily accessed in the one location: the shopping centre . Liffey Valley can be seen as fulfilling both reproductive consumption and recreational consumption with it array of shops, cafes and other entertainment facilities Another common trend which is becoming increasingly popular is retail parks beside shopping centres Liffey Valley retail park is less than a five-minute walk from the shopping centre and contains popular stores such as Halfords, Harry Corry, the Range and Curry's PC world as seen in Figure Six. Retail Park generally tailor to a certain king of shops are retail parks are normally used by outlets which sell large bulky products such as a refrigerator in Curry's PC World. The presence of retail Parks suggest that Liffey Valley shopping centre is following the trends of shopping and keen to change and expand in response to these trends.

This visit was carried out on the 14th of November and Liffey valley was preparing for its busiest time of year the festive season of Christmas. It was easy to see many examples of festive retailing the shopping centre was being shrouded with Christmas trees Christmas lights, tinsel , wreath and decorations festive retailing helps to create awe among shoppers who then enter the centre and spend money. Many people are busy buying gifts for family members and festive retailing helps promote a further spending on Christmas themed items and decorations. As can be seen in Figure Seven, one shop has created a winter wonderland and has transformed part of the shop to focus on Christmas items. The Christmas music and Christmas fairy lights created an extraordinary, fairytale experience which also encourages excessive, unnecessary spending.

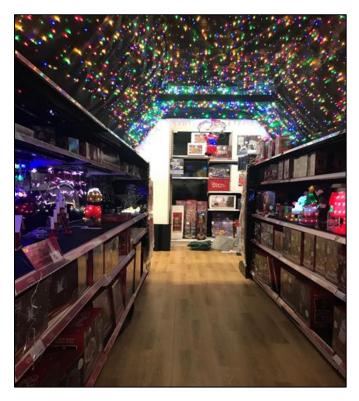


Figure Seven: Winter Wonderland Display

This report has appraised Liffey Valley in terms of its Location , design features , environs, and its ability to fulfil both reproductive consumption needs and recreational consumption. The use of glass and the colour white creates a bright airy space which is an enchanted space. The report has also recognised Liffey Valley's ability to fulfil both the reproductive consumption and leisure consumption. Liffey Valley's broad selection of shops and entertainment outlets has the ability to meet and fulfil the needs of every shopper. The retail park which is in close proximity to the centre and the presence of festive retailing highlights how Liffey Valley Shopping Centre has been following and keeping up with the recent shopping trends. The photos supplied with this report help to solidify the comments suggested in the report, the report also examined how the nonretailing establishment acts in harmony with the retailing establishments to create the ultimate recreational experience.

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## Disposability in Fast Fashion and its Subsequent Impact on the Environment

Author: Emma McGrath

Fast fashion has become ingrained in how our contemporary society consumes clothing. What was in fashion a few months ago may already be going out of style, and this ever-changing demand for new clothing styles leaves major corporations such as Zara and H&M ready to supply clothing and profit from this demand, no matter the environmental cost. Often when major fast fashion corporations are discussed in the media they boast their positive impact on the economy, such as The Irish Times (2022) praising the popular fashion retailer Penneys for creating hundreds of new jobs in their recent expansion. However, the media fails to inform the public about the pollution caused by these garments from their manufacturing to their being discarded. This lack of information available to the consumer as well as a lack of affordable alternatives to purchasing fast fashion are a major reason the fashion industry is a prominent polluter. Questions of who is responsible for this disposability and what impact the fashion industry has on the environment are prevalent and must be discussed in order to dictate a course of action against fast fashion in the hopes of reducing pollution and destruction to our environment. Fast fashion quickly became a major part of how we purchase and discard garments, but it is a relatively recent concept despite its prevalence in our society today and there is hope in reversing fast fashions hold on our society and environment.

Prior to World War II everything from razors to napkins were designed to be reusable. Clothing was handed down and mended and had a significantly longer life span thanks to both the mentality of the consumer and the sturdiness of the natural fibres. However, after WWII disposable goods were expertly marketed as convenient and affordable while consumers had little knowledge of the detrimental effects copious amounts of these products could have on the environment. Materials which are not reasonably biodegradable such as plastic became popularized. Now most items in today's world are designed with disposability in mind, clothing being no exception. The development of new fabric which is synthetic and thus durable and inexpensive to manufacture has been a key factor in making fashion disposable, as fast fashion thrives on low-costs and high quantities of products. The use of these fibres in the fashion industry has been exacerbated to an immoral extent by the mass amounts of fibres required to meet the demand which fast fashion corporations have developed among consumers. The manufacturing of synthetic fabrics such as polyester requires large amounts of crude oil, whose pollution can detrimentally harm the environment by preventing oxygen from getting to animals and plants and has the potential to destroy natural habitats. The manufacturing process also releases hazardous organic compounds and acid gases such as hydrogen chloride into our atmosphere which can cause or exacerbate respiratory diseases. The fashion industry is undoubtably a major contributor to pollution as it is liable for 10% of

global carbon emissions (Claudio, 2007). These fibres are known to be detrimental to both the environment and those exposed to their by-products, yet these effects are viewed as necessary collateral in achieving high profit margins. The fast fashion industry grows despite its negative impact on the environment, potentially due to research and evidence against fast fashion lacking as a discussion in the media. These negative environmental impacts from the manufacturing of clothing are a direct consequence of making clothing a disposable commodity. The manufacturing of these synthetic fibres is just one aspect of how fast fashion is destructive to the environment, as there is an excessive use of man-made fibres in fashion today which achieves in making low-cost and thus deposable clothing.



**Figure One:** Ad from 1960's for disposable plastic cups. Image by: Scott, via Alamy.com

Responsibility for fast fashion's waste and pollution commonly fall on the individual consumers, who are held liable for poor purchasing decisions (nonsustainable) and an irresponsible disposal of garments, as many fast fashion stores claim to do their part for the environment by providing textile recycling for consumers. However, garment recycling programs run by fast fashion corporations are redundant in helping combat fashion waste. These programs take back clothes previously sold to consumers with the promise of recycling the clothing into new garments. Customers who return clothing to a store for recycling often receive a discount on their next purchase of disposable fashion. It would take fourteen years for retailer H&M to recycle the clothing they make in 48 hours into new clothing (Liu, 2017). This depicts how these corporations green wash and mislead consumers into believing they are active in aiding the issue of disposable fast fashion which they are responsible for, while their only intention with such 'initiatives' is to deceive consumers. When disposability of fast fashion is discussed in the media the consumer is convenient to blame, allowing corporations and their reputation to remain relatively unscathed despite the prominent evidence of wrong doings and severe environmental consequences. Corporations intentionally manufacture clothing to be disposable and are wholly responsible for harm caused to the environment though manufacturing clothing as discussed previously as well as responsible for their garments constantly being purchased in mass quantities as they manipulate consumers into repeatedly purchasing garments through strategic marketing, with young women being a particularly targeted demographic. These corporations choose fibres which are not reasonably biodegradable for clothing on account of profit which leaves their garments even more hazardous to the environment once disposed of. Major fast fashion corporations irresponsible and immoral process of fast fashion from beginning to end aimed at profiting in our capitalist society leaves them liable for disposability in fast fashion and its subsequent impact on the environment.



**Figure Two:** Image of Penneys on Mary Street, Dublin. Image by: Dara Mac Donaill, via The Irish Times

While the environmental cost of manufacturing fast fashion in order to make it disposable has been previously addressed, fast fashion is damaging to the environment in a multitude of ways. Clothing must be shipped to stores which requires large quantities of fossil fuels a natural resource which produces carbon dioxide emissions and thus contributes to global warming. The clothing is also often bought online which requires individual packaging per

consumer purchase. Plastic is the most popular choice for this packaging as it is versatile and cheap. Once garments are in possession of the consumer microscopic particles from the synthetic fabric called microfibers are released when washing the clothes which then pollute oceans, wildlife, and humans. These microfibers being released into habitats and the ocean are a direct cost of the use of synthetic fabrics used to make clothing affordable, giving it less value and thus easier to be disposable. Two million tonnes of microfibers end up in the ocean each year (Rath et al., 2019: 188) and these fibres are a main marine pollutant. These microfibers are often ingested by marine life, which is how they become part of the food chain. When marine animals are eaten by humans, these microfibers are then ingested by humans. This depicts how humans are in fact polluting themselves through fast fashion and highlights how extensively fast fashion can pollute. Garments being seen as waste is also a large issue, as in America alone 85% of clothing they consume is sent to landfills as solid waste (Shen, 2014). This textile waste is undoubtedly excessive and unnecessary, and blame can be directed at the business model for fast fashion which encourages the consumer to view fashion as disposable once no longer the desired style of the moment. Clothing which is not taken to a landfill commonly becomes part of the second-hand clothing trade which on the surface appears to provide a circular life span for the garment by the consumer donating or recycling it, but the many garments not sold are exported to be sold in third world countries second-hand markets.

Unfortunately, the garments not successfully sold in these markets become solid waste, clogging rivers and greenways and polluting public spaces. These garments thus pose as potential environmental health hazards by interfering with third world countries waste systems which lack infrastructure needed to handle foreign bodies of textile waste.

Major fast fashion corporations are severely lacking in taking genuine action against pollution as doing so would not only harm the business model of disposable, quickly accessible fashion but lowering or cutting use of toxic chemicals required for manufacturing, as well as using sustainable material would lower profits for the company and will likely only be done on the scale needed for substantial environmental improvement if legislation universally required such action and responsibility to be held by those who benefit most from the disposability of fast fashion (Shen, 2014).



**Figure Three:** Image of a landfill full of clothing. Image by The University of Queensland

Disposability is a characteristic found in many household products in our current society as a result of strategic marketing on behalf of major corporations who seek out large profits from consumers constantly purchasing their products. Disposability's major contributions to waste and pollution are often ignored and overlooked with consumers lacking all the information to make a conscious choice when purchasing and corporations reluctant to make necessary changes to their manufacturing and marketing. Fast fashion is a major cause of an array of environmental issues which stem from the use of synthetic materials to being viewed as disposable and thus often becoming waste. The fashion industry has used marketing to manipulate consumers into constantly purchasing their products while taking little blame for the environmental harm they cause by choosing to make their garments disposable. Our environment needs change in how we consume products, as disposable goods such as fashion come at high environmental cost.

#### **Additional Resources**

Video: The true cost of fast fashion | The Economist



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## The Geography of Internet Infrastructure and its Consequences for Economic and Urban Development

### Author: Ivan Janota

In this essay I will discuss Castells' concepts 'The Space of Flows' and 'The Space of Places.' I will also discuss the geography of the various components of the internet infrastructure. I will look at the reasons why the infrastructure is located where it is and the effects that the spatial distribution of internet infrastructure has on economies and societies.

## Castells' Concepts

Castells' (2010) concept of 'The Space of Flows' refers to the movement or 'flow' of information that has been facilitated by the rise of the internet and information services. These flows, however, are concentrated in key hubs, mainly cities. Castells identifies a contradiction, where information technology should in theory allow for a more dispersed and decentralised economy, with more people working from home and businesses relocating to rural areas. However, this largely hasn't happened and urban areas and their importance in the global economy has only continued to grow in recent years. In particular, Castells notes that while internet access is distributed all across the world, the main centres of economic activity in information technology have

been concentrated in a handful of major metropolitan areas.

Castells (2010) also discusses the importance of 'places', particularly in an urban context. He defines a place as being self-contained and having a meaning and identity of its own. Using several examples, he compares different types of places, contrasting the dense, diverse, mixed-use, and culturally rich places of Belleville in Paris and Barcelona, Spain, with the low-density business complex in suburban Irvine, California. He also uses the example of Tokyo in the 1980s and 90s becoming a more globalised and westernised city with modern business districts being built and the World City Fair planned to be held in the city in 1997. However, the local population was turning increasingly against these changes to their city, in 1995 electing a politician who cancelled the World City Fair. Castells uses this example to show the conflict and disconnect that often emerges between the will of the citizens of a city, and the natural tendency of the 'space of flows' which has little regard for culture, history, or place. Castells notes the growth of 'Edge Cities' in the United States, which are large office districts located in suburban areas of major cities. Consisting of corporate offices and shopping centres, and surrounded by suburban sprawl, these places emerged during a time of Inner-City decay in the United States, where middle class Americans fled the centres of major cities to settle in new suburban developments. This pattern of development has resulted in more polycentric and less dense urban areas. It is in these 'Edge Cities' that many companies involved in information technology have located. In the San Francisco Bay Area for example, the major tech companies of Apple and Google are not located in the downtown but are instead located in major business parks in suburbia.

# The growth of internet infrastructure and impact on development

Malecki (2002) identifies several 'layers' of internet infrastructure: Internet infrastructure - consisting of backbone infrastructure and ISPs. internet applications infrastructure - consisting of the software that allows for data transfer on the internet, internet intermediaries - which are businesses that generate revenue solely through the internet, and internet commerce - which are companies that conduct web-based transactions. These different layers form a gradual scale of importance from the infrastructure that forms the backbone of the internet, to companies that use the internet but don't fully rely on it.

The growth of the internet in recent years has happened as a result of improvements to internet infrastructure and connectivity. The infrastructure of the internet consists of a number of components, including data centres, internet exchange points, and the cables linking them together. Originally, this infrastructure was mainly concentrated in North America, however in recent years, the concentration of internet infrastructure in Europe and Asia has increased and even surpassed North America. Malecki (2014) shows that 15 of the 28 largest IXPs are in Europe, while 11 are in North America. Recent cable links between European countries and between Europe and Asia have enabled these countries to bypass North America where previously internet traffic would be routed through North America. Figure 1 shows a map of subsea internet cable infrastructure. There are cables connecting nearly every country, but the two most distinct cable clusters are between Western Europe and North America, and between East Asia and North America, showing the dominance of these regions in the new Informational Economy. Countries such as the United Kingdom, Japan, China, and the United States in particular have many long-distance cable connections.

Besides the public internet infrastructure, there also exists private networks which, according to Malecki (2002) are used by banks, large companies, and other institutions to transmit information more quickly, more reliably, and more securely than using the public internet.

The distribution of internet infrastructure largely mirrors the previous infrastructure connecting the main metropolitan areas of the world, such as telegraph and phone cables. These big cities are the hubs for internet exchange points and data centres, and often feature connections to multiple 'backbone' internet cables, linking to other major metropolitan areas. Somewhat paradoxically, while the internet allows people to work remotely, and should in theory allow for industries and companies to become more evenly dispersed around the world, the very infrastructure that enables the internet to exist has

entrenched the position of major metropolitan areas as being the centres of commerce and trade. Malecki (2014) notes that 69 of the 122 private peering facilities with more than 10 networks as participants are located in just eight cities, and just five cities have 56 such facilities. Castells (2010) identifies that outside of the United States and Germany, the main centres of high-tech innovation are all located in the largest metropolitan areas, often the capital city. In particular, Castells identifies the rise of 'mega cities' of over 10 million residents in the last two or three decades. In some cases, multiple cities can merge together to form a massive urban agglomeration. Castells gives the example of the Pearl River Delta in China where Hong Kong, Shenzhen, Guangzhou, Zhuhai, Macau, and many more cities have grown into a continuous urban area of over 40 million people. This urban area is a major hub of technology development in Asia, with Hong Kong and Shenzhen having major tech industries. Malecki and Moriset (2008) note that large cities remain important due in part to the greater average internet speeds and greater number of connections enjoyed by cities. However, while the global importance of cities like New York, London, and Tokyo has remained strong, several smaller metropolitan areas have emerged as focus points in the new informational economy, namely the San Francisco Bay Area and Seattle on the west coast of the United States, both of which are home to some of the world's largest tech companies. As mentioned earlier, Shenzhen in southern China has become a major hub for both software and hardware development for China and the rest of the world.

Malecki and Moriset (2008) also note that the distribution of internet infrastructure and new technologies is not evenly spread across the world, with poor regions lagging behind, although many poor regions are said to be 'leapfrogging' wealthy western countries, skipping desktop computers and wired internet and going straight to mobile phones and wireless internet. Ultimately, the centralisation of operations has many advantages for companies, so even with advancements in remote working, cities are continuing to grow both in population and importance. Also, as Castells (2010) mentioned there are many attractions to living in a city for the types of young professionals who work at these tech companies. From access to important services to recreational activities. Therefore. increased urbanisation can be linked to an increase in people working in informational services and other aspects of the new informational economy. Castells (2010) also notes the growth of smaller 'second-tier' cities such as Atlanta, Barcelona, and Stuttgart as new regional centres of service processing activities, as well as the growth of large office developments on the edges of major metropolitan areas. As Malecki and Moriset (2008) note, many key components of internet infrastructure such as data centres are increasingly being located in more rural locations, and in places where the cost of electricity is lower.

Malecki (2002) categorises the internet as an 'enabling technology' that opens up new opportunities and allows other new technologies to develop. Malecki and Moriset (2008) make the case that the distributed nature of internet infrastructure has allowed many activities to be done remotely, but also note that because many of the jobs in the IT sector require a high level of education, much of the growth in the IT sector is still in countries and regions with many highly educated people. Castells (2010) identifies the occupational composition of high-technology manufacturing as having two distinct labour groupings: one that is highly skilled and focused on research and development of new technology, and the other that is largely unskilled and involved in assembly and routine operations. Castells notes that while automation is increasingly reducing the need for these unskilled workers, they remain an integral part of the manufacturing process. There is also a clear geographical divide between the different workers involved in high-tech manufacturing, with research, innovation, and prototyping mostly occurring in core regions of wealthy countries, and manufacturing and testing taking place in poorer countries, particularly in Southeast Asia.

Malecki and Moriset (2008) argue that the growth of information technology has led to increased economic growth, particularly since the 1990s. Although they also note the 'productivity paradox' or 'Solow paradox' named after Solow who identified that productivity per worker had not increased since the adoption of information technology. Malecki and Moriset however, argue that firms can achieve higher levels of productivity with better implementation of new technologies and better management strategies. They identify the difference between the United States and European Union, where US firms were better able to adapt to new information technologies than their EU counterparts, and therefore saw higher levels of productivity. They also point out the 'diminishing returns' of IT adoption, where productivity gains shrink after a new technology becomes standard, so that no firm has an advantage over another. Also, the growth in productivity can allow for products to be sold at lower prices, reducing profit margins. Therefore, most companies need to adopt IT just to remain competitive and survive in the market.

## Conclusion

In conclusion, the growth of the internet in past three decades has had enormous impacts on our economies and lives, and this has been facilitated by a growth in the infrastructure that the internet relies on such as subsea cables and data centres. Castells' concepts of the space of places and the space of flows are useful the understand geography of to internet infrastructure and the economic activities that rely on that infrastructure. Castells notes the uneven distribution of internet infrastructure and the resulting imbalances of economic activity. With key hubs of information technology related economic activity emerging in a handful of cities, rather than the internet facilitating a decentralisation of economic activity, it has instead facilitated the concentration of this activity in a handful of cities. Castells' concept of the space of places is also important to understand the changes to 'places' such as cities that have occurred partially as a result of the growth of information technology. Cities that are key

hubs in this new industry have undergone significant changes, such as Shenzhen which has seen massive population growth, and San Francisco which has one of the world's worst housing crises. Ultimately, it is important to understand the distribution of internet infrastructure as it can be one of the most important economic indicators.

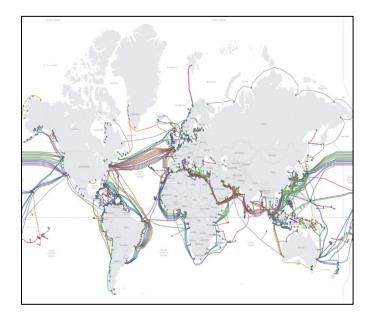


Figure One: Subsea internet cables.

**Source:** submarinecablemap.com (2021)

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## In Film: Woman at War

Author: Niamh Devaney

After watching Woman at War, it is obvious that the film encapsulates the challenging of gender stereotypes by means of resistance to power, whilst simultaneously keeping a constant referral to nature in ways of acting in nature and exploiting nature. Throughout the film, such reoccurring themes constantly remind the viewer of the actual title of the film, "Woman at War", in which the woman, portrayed through "Halla", is consistently at war, whether it be through resistance to power, or with herself in her own personal war when trying to become a mother, leaving her torn in ways of choosing which war to fight. From start to finish there is a strong presence of nature through means of survival and protection, both of which apply, not only in relation to nature itself, but as well as the survival and protection of the human being by concealing oneself through various uses of nature. This constant referral to nature throughout the film further emphasises the war in which Halla is fighting; the protection of our planet from exploitation through which ever means necessary, means Halla uses which can be considered war-like. It is evident that throughout the film that power exists, yet so does resistance, gender stereotyping exists, yet not in the way you would expect, and the beauty of nature exists, yet it is met with ugly extractivism. Combined, a war is created in order to resolve each respecting conflict, each conflict that is experienced by one woman specifically.

therefore instantly informed that the movie involves the theme of gender. According to Anderson (2021), it is assumed gender is natural and uninfluenced, yet this is not the case. Gender is constructed by means of roles in society, in place and considered values within such societies and places (Anderson, 2021). In the beginning of the film, it is almost assumed that typical gender stereotyping will be observed, this is assumed as we are introduced to a dog, a dog that is named "woman", presenting the woman, not in line with the man but within the same level of an animal, a lesser status. Referring to the dog as "woman" highlights the presumed patriarchy of the film, whereby men possess the superiority and authority, like that of a pet, over women (Anderson, 2021). This lingering existence of typical stereotyping also exists with the presumption and satisfaction of the vigilante being a male, as once broadcasted that a "man has been arrested", concerns regarding the almost terrorist behaviour decreases. However, throughout the remainder of the film, it is evident that such stereotyping is not prominent as initially assumed, instead the challenging of existing stereotypes is seen. Gender is ordered in many ways, such ways include the way we dress and accessorise (Anderson, 2021). The use of a purse, or in this case, a stroller, instead challenges such ordering of gender. Halla becomes almost invisible to the male authorities searching for a criminal as she walks the streets whilst pushing a child's stroller, therefore, presumably lacking the capabilities of a criminal.

We are immediately introduced to gender simply by

the title of the film, Woman at War. The audience is

She knows this and so, uses it as a method of concealment to intentionally go unnoticed, evidently challenging ordered genders. Further challenging of gender is seen when it is celebrated that Halla is becoming a mother, however, not through her own conception but through adoption, challenging gender norms by not conforming to the stereotypical way of becoming a mother. The lack of requirement of a male to produce a child greatly challenges the cultural stereotype of gender by which a male is seen as necessary and historically appropriate when wanting to start a family or conceive a child. Halla challenges this cultural stereotype through adoption as a single woman. Similarly, Halla challenges gender norms and stereotypes, and seemingly takes pleasure in wearing a fluffy, floral dress whilst applying lipstick to become a stereotypical, innocent lady in society, and so becomes invisible when police are hunting down an "armed and dangerous" criminal. Furthermore, throughout the duration of the film, constant referral to women in a very positive manner, for example, "moms can do anything", as well as the need for female validation, for instance when needing to make a crucial government decision the men of the group turn to the woman for advice. This evidently makes male presence, although there, become unnoticeable. Such disregard for male presence and their reassurance throughout the film, essentially leaves the man as a spare body that can be used to the woman's advantage when they see fitting. Woman at War therefore challenges the dominant cultural stereotype of gender profoundly.

with both power and resistance to such power. According to Anderson (2021) power exists through places. Throughout the film the presence of power and moreover dominating power exists in various places, from what can be considered the outback or wild Iceland, to the centre of the town and can even exist within the walls of one's home. We are immediately informed that the cutting of power lines has now occurred a fifth time, the cutting of lines which have interrupted industrial development, or as Halla puts it, "organised sabotage". The cutting of the power lines is an obvious resistance to power, both metaphorically and physically. Physically, as literal power across Iceland and its associated developments is lost, disrupting production and progression in development, and metaphorically, as it disrupts the power the government has which continuously promotes the development of such industrial entities. Such power is resisted by Halla as it possesses the qualities of dominating power by which the government show various methods of control in order to ensure society conforms (Anderson, 2021). This control is initially seen with the installation of multiple street cameras in which the government can watch societies movements in order to discover any individual or group that appears as an anomaly. Such control is intensified when the giving of a DNA sample becomes mandatory within airports in order to fully identify individuals. These two examples of control encompass dominating power as they are used to ensure obedience from the public. Evidently, further resistance to power is

Throughout the film there is a constant engagement

expected throughout the film, which it is. One of the most powerful examples of resistance within the film is when Halla discretely, yet obviously, confesses to being the vigilante by writing a confessional letter and essentially leaves said letters on the ground for the public to read. Such an act encompasses resistance, as by definition resistance is the intentional opposing of domination, and so, by confessing as the "Mountain Woman" she is informing those in power of who she is and what she intends to do, by whatever means necessary, until she This blatant admission therefore is caught. encompasses resistance as she is admitting to intentionally challenging and opposing government powers and will continue to do so until she is no longer able or capable, in order to disrupt the development and operation of their planned industrial bodies. Woman at War is, from start to finish, fuelled by the constant to and frow from both dominating powers and those who oppose such powers, therefore, as a film, it is engrossed with themes of power and resistance, both of which are explored almost equally as with each action of power, there is an almost instant reaction through resistance.

There is an obvious reason to why Woman at War entails extreme extents of both power and resistance. Extractivism and the compromission of the planet, as a result, initiates the fight between what is considered good and what is considered bad in ways of monetary gain by doing so and the morally driven beliefs associated with the reciprocal consequences despite the monetary gain. Woman at War portrays extractivism through the lingering referral to oil extraction and the industrial development of an aluminium smelter throughout the film. Such developments relate to extractivism as extractivism is the removal of resources from the earth, and Woman at War shines a light upon the extraction of oil from the earth, as well as the process of extractive metallurgy, a process that occurs when using a smelter to extract metal (Britannica, 2017). Both processes, although providing a monetary gain through their product when considered by the government, are considered a "crime against humanity and all life on earth", not only by Halla, but by multiple Icelandic advocates who see such methods of monetary gain destructive and unnecessary for the earth. This is especially noticeable throughout the film when multiple news channels highlight the "apocalyptic", climate changes that can be predicted should their development continue. Throughout the duration of the film, snippets of effects of climate change are constantly reoccurring, imagery of drought and storms throughout the film are consistent within news broadcasts and radio mentioning's, however, towards the end of the film, a key moment encapsulates how lingering and potentially quick climate change is happening by ending the film within a flood whereby a bus cannot be driven and the passengers, which include both Halla and her daughter, must walk in order to reach their destination. What can be considered a flash flood essentially represents how fast and occurring climate change is, due to processes of extractivism and furthermore, highlights the struggle we will face towards the future, like the struggle the passengers face towards the rest of their journey, should such processes of extractivism and lack of empathy towards the Earth continue.

Despite the negativity associated with extractivism, and its potential damaging effects on the earth and so within nature, there is great positivity and love shown towards nature throughout the film. Furthermore, Woman at War highlights something more than just nature itself, instead it highlights the human-nature connection whereby Halla is seen to constantly use nature to what can be considered both a safety blanket and an escape goat at certain times. The human-nature connection is evident from the get-go where Halla is seen to kiss the ground in an almost loving and meaningful way. Here a relationship is seen where nature is not separate from the human, instead it is seen as a protector and even a teacher (Kimmerer, 2013). The most obvious and consistent human-nature connection is seen through the constant concealment and protection nature offers Halla. At the beginning of the film, she is seen to hide within a concave of the earth, hiding her from search helicopters and it is almost as if nature is waiting to help her as she does not need to look, the protection and concealment is just there when she needs it most. Such concealment is further given towards the end of the film whereby she conceals herself from authorities by hiding within a sheep carcass, evidently becoming invisible to those searching for her. Again, Halla did not have to search for protection from nature, instead it was just there,

allowing the interpretation that nature is always there and willing to protect the human in a time of need almost out of respect for their reciprocal respect by attempting to protect nature itself. Similarly, she takes concealment and protection not only through the wilderness of nature but also through the human attempt of preserving nature within plant pots. By taking advantage of the smell, not only of the flowers, but of the chicken manure, Halla, once again goes undetected as such strong smells defer the sniffer dogs away from the explosives she conceals within her car. Nature, once again aids Halla in avoiding detection. Such protection by nature acts almost as a reward for respecting nature itself, leading to the conclusion that there is a connection between humans and nature and that they are not separate beings, but instead go hand in hand aiding one another (Anderson, 2021).

Overall, Woman at War portrays multiple perspectives and approaches of cultural geography. Through the common theme of protecting nature and the earth, approaches such as power and resistance, nature as a resource and nature as a culture are developed through Halla's determination to oppose the governments allowing of earth destroying developments such as an aluminium smelter, and so, with such rebellion and resistance comes the need for concealment and protection, both of which are achieved through natures unexpected way of concealing Halla, therefore incorporating nature as a being rather than a separate commodity. Also, Woman at War includes the culture of gender stereotypes, yet portrays such stereotypes in a way that almost mocks gender norms by means of using your gender to become invisible, like when Halla becomes invisible pushing a child's stroller and wearing a floral, fluffy dress to not appear as the dangerous criminal that is expected. By using her available means such as nature and even her gender, Halla can achieve the destruction she desires in order to do what is right for the planet and future generations. Altogether, Woman at War highlights actual concerning issues, such as climate change, dominating power and gender stereotyping in a way that can be easily understood and, in some ways, laughed at, yet still makes an impact by constantly referring to such issues throughout the entire film.

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In Film: King Richard or Queen Venus? A Critical Review of Gender Portrayal in Modern Film

#### Author: Ailbhe Sherry

Throughout this essay I will be critically assessing *"King Richard"* (2021), a biographical drama directed by <u>Reinaldo Marcus Green</u> and written by Zach Baylin, from a cultural geography perspective. Throughout the film the theme of gender is consistently prevalent. Within this essay I will be exploring the importance of film in cultural geography, the importance of gender in film, gender and dominating power, as well as looking at the (b)ordering of gender by place.

Just like any art form, film plays a key role in cultural reproduction. Filmmakers can use artistic techniques to represent a cultural space or landscape to a wide audience. Their communicated landscapes can be discovered, created, reproduced, or even invented. Harper & Rayner (2010) compare cinema to landscape in the sense that they exist in time and raise questions that are equally spatial and temporal. Both assume and position audience ideologically and geographically (Harper & Rayner, 2010). In their analysis, film explores landscapes in a similar way to cartography, assisting further human understanding of place and space. Yet these interpretations are unique to the eye of the beholder and vary due to human physiology or due to political or cultural bias (Harper & Rayner, 2010). Depicted landscapes are often symbolic, and frequently contribute to social formation, impacting upon human associations and

societal norms meaning they often initiate similar responses to the discovered or recorded landscapes of the real world (Harper & Rayner, 2010). Throughout the film, the cultural landscape is explored though the themes of gender, race, age, class, and nationality.

The film follows Venus and Serena William's rise to fame as world renowned athletes, yet interestingly the story is told starring "King Richard" played by Will Smith, as the protagonist. It is interesting that the story is told in this manner, yet it is not surprising. According to Perez (2019), sexism in cinema is not a rare occurrence, in film men get twice as much airtime as women and twice as many lines, which rises to three times when a male is the protagonist. This is due to a deeper-rooted gender gap in film where in which women only comprised 8 per cent of directors, 10 per cent of writers and 2 per cent of cinematographers (Hall, 2018). Throughout the film, the story of how Richard "made" the tennis stars is told, with him claiming that he had their career plans drawn up within a 78-page manifesto before they were even born. Smith (2021) wrote that the film "makes the sororal tennis champs seem almost incidental to their own rise to greatness". Although his determination was passed off as inspirational within the film, the character shows many signs of sexist dominating power. In fact, the children were conceived through deceit and coercion for monetary gain after seeing how much professional tennis players could make.

"I went to my wife, and I said, 'We have to make two more kids,' and she didn't want to do it. So I used to take her out on dates, and I'd hide her birth-control pills. That's how Venus came. With Serena, what I'd do with my wife when I'd take her out is make sure that she had her birth-control pills. I'd tell my buddy /take her purse.' And I'd calm her down, and that's how Serena came". – Richard Williams in Rosenblatt, 1999.

Anderson (2015) describes how the gendered body is more than the sexual organs in which we were born with, instead, it involves far more such as the cultural and geographical aspects of meanings, appearances, practices, and places that make up proper ways of being a male or a female body. These tracings of gender (b)order us into norms according to cultural values and preferences (Anderson, 2015). Female bodies are commonly (b)ordered into being in or out of place, a common occurrence in the world of sport. Notions of gender are often emphasized in sport, one way being in that bodies have become naturalised by cultures into accepted shapes and sizes, in which muscular is not appropriate for females (Anderson, 2015). Richard himself was aware of sexism in the professional athlete industry, alluding to the gender pay gap in his memoir "I didn't think it was possible for anyone to make that kind of money in four days, especially a woman" (Williams, R. 2014). Gender pay gap is not the only discrimination, media bias, funding, resources all are problematic. Interestingly, we see Venus William's combat these constraints of gender, which in her case are complicated by age, race, and class, through her talent as an athlete.

The theme of gender within the family setting is explored throughout the film through the obvious of presence dominating power. Richard's problematic power position alludes to the patriarchy which allows him control and coercion of his family. Richard exerts his control over his family in multiple ways throughout the film, one being his lack of communication with his wife, notably about his past, where in which he had other children. Sabrina, his estranged eldest child, called her father a "sperm donor" claiming she had between 15 and 19 half siblings as he (Richard) just uses his kids to get what he needs (Bennett, 2020). This statement seems to hold truth in looking at how Richard used his power position within the family to profiteer off his two youngest children. Throughout the film, Richard's training techniques display overbearing examples of control, training in unfit conditions and in dangerous areas. His male bravado overshines both Venus and Serena, which is clear via the interviews he conducts within the film which are based off real life ones.

Throughout the film the role of Oracene "Brandy" Williams, Venus and Serena's mother is portrayed as a caregiver, the traditional role a woman takes within a family due to the hunter – gatherer ideology. Anderson (2015) talks about the role of gender within the home explaining how it is a heavily gendered place which is considered an "appropriate" place for women. In this dynamic, the unpaid domestic work falls upon the female of the house as she is required to be the backbone of the family. Richard alludes many times throughout the film, to having created the girl's success independently, ignoring the crucial role his wife played. This is reflective of reality though where in which unpaid domestic work is not valued. This is a gender specific issue considering the fact that women do 75% of the worlds unpaid care work (Perez, 2019). Throughout the film, Oracene can be seen caring for the girls by cooking meals, working two jobs and training Serena after Venus and Richard get a professional coach. Her dissatisfaction at his male ego and the unrecognition of her contribution is expressed when she claims she "don't need the world to tell me I'm great". Recognition of this unpaid domestic work is at the core of feminist concerns in the fight to gain gender equality (Yamane, 2021).

In conclusion, film has the ability to reflect the world around us, which allows it to communicate real life themes and social issues. The cultural landscape within the film is complicated yet reflective of society in both the 1980's and today. King Richard forces us to look at the role of gender within society, within the home and within the world of sport.

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## In Film: Technologies and social spaces of the modern industrial city in early film

Author: Naoimh Mallee

This essay will refer to the experimental 1929 silent film *Man with a Movie Camera* by Russian director Dziga Vertov. It will describe in rich detail how Vertov, as an early filmmaker depicted the technologies and social spaces of the modern industrial city using the various film analysis tools. The essay will discuss the use of modern machinery as props in the film and the uncommon filming of the cameraman and how this depicts the social spaces of the modern city. Finally, I will discuss the depiction of social spaces within the modern city, including sporting events, attending the beach, swimming lessons and more.

Modernity can be described as experiencing and living in modern times and what it takes to do so. Evidence of modernity is seen primarily in the last decade of the nineteenth century and the first three decades of the twentieth century (Gold, J.R, 2009). Modern cities were formed due to the increasing amounts of migrants as a result of the social and economic conditions that arose post-war. The cities were not built for such large amounts of people and therefore, had to quickly adapt. Redevelopment of Soviet cities such as Moscow, Kyiv and Odesa called for the formation of modern cities. Tall buildings and architecture were emblematic of these cities and an increase of traffic and transportation called for new traffic arrangements. This included pedestrian crossings and multi-story cark parks. The excitement of the new development of the industrial city is evident in Vertov's Man with a Movie Camera (Gold, J.R, 2009). Man with a Movie Camera is packed full of shots depicting the modern technologies of the industrial city. The very first scene at 00:01:34 shows the modern movie camera that is repeatedly seen throughout the film. The use of footage of the modern movie camera was new in the cinematography of early films as the cameramen are not usually seen in the movies (Gold, J.R, 2009), this allows for the filmmaker to depict the technologies and social spaces of the modern industrial city. Multiple shots in the film include such modern machinery and technologies. Just 7 minutes in at 00:07:16, footage of an elevator is seen transporting passengers and their luggage, followed by shots of a typewriter at 00:07:25, a modern telephone at 00:07:31 and a modern car at 00:07:41. These are just some of the many scenes that are emblematic of a modern city in the film Man with a Movie Camera. From around 00:07:40 to approximately 00:08:15, numerous shots of modern industrial machinery can be seen. Shots of fabric making machines, factories, workers, and various mechanical apparatus are included.

At 00:07:46 shots of electricity wires from below are taken from the point of view of someone looking up, straining their necks to see the tall buildings and architecture, another symbol of the modern city. This compilation of industrial and mechanical-themed shots helps depict the modern technologies of the city. Not many people are seen in these few minutes, but the multiple brief shots including props such as the telephone, the wooden abacus, the walls of buildings and more all show effective use of *mise en scène* which creates a sensory experience of the city. This allows us to experience the technologies and social spaces of the modern city. At 00:55:27 we see a woman using a gun at a carnival. She shoots a wooden soldier down and on the soldier's hat we see a Nazi sign. This scene really depicts the modern times as the Soviet Union had formed just a few years prior to this film being made.

Vertov makes great use of the cameraman as a prop in the film, as well as shots of his wife editing the movie. This is not a common technique in early cinema, but Vertov believed that film should disclose social structures and exhibit the fantasy of the relationship between the spectator and the spectated. (Till, Karen. 2021) One of the first scenes showing the cameraman is at 00:09:38. The shot shows the camera man down on his knees, recording an oncoming train. The shots go from the cameraman on the ground, to a woman having what looks to be a nightmare, to trains passing by at a serious speed. All of these shots put together, paired with the sound of the train in the background increasing in speed and volume creates an intense, exciting montage, which is a collection of fragmented shots of film pieced together to create a scene which depicts the modern industrial city brilliantly in this movie (Mennel, 2008). We see the camera at various angles, such as under the train and looking up at the train passing. At 00:53:43 we see a cleverly edited shot of the cameraman standing over the city, making him look freakishly large. This kind of editing had never been

seen before in early cinema and really depicted the modern technologies of the city, such as transportation, telephone communication and typewriting.

Clever use of montage towards the end of the film shows multiple fast-paced shots of the camera lens and an eyeball. This is a film technique developed by Vertov himself which is known as Kino-Eye. This technique refers to filmmaking and movie cameras being a modern method of surveillance, capturing the social spaces of the modern day. (Musser, Charles. 1996). Vertov makes use of various exposures to merge scenes together, giving us different perspectives on the same shots. This innovative use of cinematography, editing and mise en scène gives us an effective depiction of the technologies of the modern city by using this method of surveillance.

Examples of the depiction of social space in the modern city become apparent around halfway through the film. At 00:32:40 we see women getting beauty treatments done, we see men at the barbers getting their beards trimmed and their hair styled. The shots show every-day middle-class people enjoying leisure activities. Another example of this is at 00:43:10 where we see hundreds of people enjoying a day out at the beach, and at 00:47:08 where we see people attending swimming lessons. The scene is shot looking down into the water where we can see a woman wearing arm bands, learning to swim.

The film seems quite 'documentary' like, but this film actually uses the style of Avant-Garde, which is

a film technique that makes use of certain editing styles, refers to the spectator-screen relationship and includes use of montage in its editing. (Hayward, Susan., 2006). Examples of these can be found throughout Vertov's *Man with a Movie Camera*. A montage of a sporting event begins at 00:44:46 when we see a slow-motion clip of a woman performing a discus throw. The slow-motion edit gives a dramatic effect to the scene. The montage consists of various sports and clips of the crowds gathered to watch. This use of montage is another example of Avant-Garde. (Hayward, Susan., 2006).

Vertov makes use of mise en scène, cinematography, editing, shot and sound in order to effectively depict the technologies and social spaces of the modern industrial city. We see clever editing such as fastpaced, intense montages, a compilation of extremely short clips to form a stop-motion animation such as that at 00:58:16, and multiple various exposures to create tricks like the cameraman in the beer cup at 00:54:04. His use of Avant-Garde is typical of Soviet Cinema.

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## In Film: Capitalism in *Parasite*

Author: Eoghan Brady

This essay will discuss director Bong Joon Ho's academy award-winning film Parasite (2019), which takes place in modern-day South Korea. The film has a lot to say about class struggle, but the aspects that this essay will focus on are the ideas presented in the film of an irrevocable separation between the upper class and the working class in a capitalist society, as well as some depictions of the cultural aspects of international consumerism that are demonstrated by some of the characters' actions. This will be done through the examination of how these themes of separation are presented within the film, particularly the physical geography of the setting of the film and how this effectively symbolises class divide, as well as the set design and dialogue within the movie. This will be carried out in order to critically examine the presentation of capitalism in Parasite and review it from a cultural geography perspective.

Within capitalism, society can be effectively divided into two groups of people, those who own the means of production in order to manufacture and sell products, whom Marx defined as the bourgeoisie, and those who sell their labour in order to ensure that those products are made, also known as the proletariat. The story of Parasite focuses on two families, the Kims and the Parks, each of whom embody the proletariat and bourgeoisie respectively. In the film, the Kims deceive the Parks into hiring every member of their family to work for the Parks in some capacity. This leads to the Kim family escaping poverty somewhat, but one theme within the film is that there is always separation between the bourgeoisie and the proletariat, no matter how much money the proletariat make. This separation is shown in many ways in the film, but one geographical example is the height difference in the places where the two families live. The Kims live in a semibasement apartment at the bottom of a hill, while the Parks live in a large mansion at the top of one. When travelling between the two homes, the characters are often seen travelling up many flights of stairs or steep footpaths and roads. This literally shows the distinction between the upper class and the lower class by having the upper class live in a topographically higher area. Anderson writes, 'the distinction between those who own the means of production and those who only own their labour power is crucial as it secures different opportunities to make currency' (2015). This distinction in opportunity is symbolised in the film by the windows in both family homes. The Parks possess a gigantic window that overlooks their verdant garden and allows rays of sunlight to enter the home, while the Kims have a small window that is at the bottom of the street, due to their semi-basement apartment. This difference in size of window and the height of their homes is emblematic of the amount of opportunity available to the different classes and their standing in society under capitalism.

This difference is further highlighted later in the film when a torrential rain causes a flood to occur in the city. This flood results in the Kims home at the bottom of the street being flooded, with all of their possessions being destroyed. The Parks, however, remain unaffected at the top of the hill. In fact, the voungest son, Da-song, chooses to sleep outside in a tent that his mother bought online, which holds up better against the rain than the home of the Kims. The mother of the family, Yeon-kyo, when asked by her husband, Dong-ik, whether or not the tent might leak due to the heavy rain, replies 'We ordered it from the US, it'll be fine' (Parasite, 2019). This trust in North American manufacturing by Yeon-kyo speaks to the geographical entanglements that many products possess. The concept of geographical entanglements is that ideas surrounding a product often coincide with ideas surrounding the place in which it is made, or as Cook and Crang write, 'the meanings of the brand are bound up with imaginations of its geographical origin' (2016). In many parts of East Asia, things made in America are often considered to be of higher quality than domestic products. This idea is evidenced by the cultural attitude towards the fast-food chain restaurant 'McDonalds' in Beijing, where it has become a 'middle class consumption place,' rather than a simple fast-food restaurant, only because it is American, and 'Americana means something stylish, exotic and foreign' (Crook and Crang 2016). Yeon-kyo's reverence toward American products is a clear example of geographical entanglements in the film, and the fact that the child stays drier in a store-bought tent than the Kim family do in their own home is another way in which Joon Ho demonstrates the divide between the upper and working classes.

In conclusion, Bong Joon Ho creates an image of a cruel and unforgiving society under capitalism. No matter how hard the Kim family works to better their position in a capitalist society, they are unable to overcome the separation between the bourgeoisie and the proletariat. Throughout the film, there is evidence of the Kim family rising through the ranks among working class people, such as when in the beginning of the film they are arguing with a woman who works in a pizza restaurant about how they should be paid for folding the cardboard boxes for them, and then after the family have been employed by the Parks, the Kims are shown eating in that pizza restaurant and being served by the woman with whom they had argued. However, it isn't enough to close the divide between the two classes, which is further exemplified when Da-song comments that the two parents of the Kim family 'smell the same' (Parasite 2019). The presence of this smell is later confirmed when Dong-ik says he sometimes smells it on the subway, and that the smell 'crosses the line' (Parasite 2019). This smell is another symbol of the impassable divide between the classes in the film, that even with newer clothes and more money, the Kim family are still perceived as working class, even though it is by something that isn't visible, such as smell. At the end of the story, the Kims' ruse is discovered, and they conclude the film in a worse position than when they began, which is the final way that Joon Ho portrays capitalism as a harsh system that often punishes those who attempt to rise through its ranks.

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Confessions from the Election Trail: Learning Journals for this year's GY347 Electoral Geography Task

Authors: Aisling Bennett, Natalie Balfe, Jake Land, and Susan Caplis

#### An introduction from Adrian Kavanagh

For the past few years, we have run an election campaign task as part of the GY347 Electoral Geography module based on a belief that students will learn more from "doing an election campaign" than they will from writing yet-another-essay on election campaigning. In previous years, students got to take part in a USA Presidential Election campaign, but – as American politics is getting increasingly stranger than fiction – it got to the point that certain actions, which you really don't want to see in an academic piece of work, could be justified as that was "what politicians were doing in real life". So for this year we moved the campaign back to Ireland, while keeping the electoral rules for a USA Presidential Election process - for all our faults, there are certain things that wouldn't be tolerated in an Irish election (and which the Kavnal.ie factchecker kept a strict eye on), so students were discouraged this year from "lieing their way to victory" (not that stopped *some* students from trying to do so...). The Republicans and Democrats were replaced by the Shamrocks (slightly more left-wing and more Republican) and Harps (slightly more liberal and more centrist). How did the students get on? Very well, I can confirm, especially having read

through almost one thousand student campaign posts over the past few weeks...yikes! After a few weeks of campaigning (on the Moodle forums) and a vicious "Big Debate" (in which one candidate literally lost their wig), a new President was finally deemed elected just before the Easter Break. In these Learning Journal entries, Aisling (who played the ultimate winner, John Jameson, the Harps presidential election candidate), Natalie (who played Tin Tin O'Fuaill, campaign associate of Cabahain MacAoghlais, one of the Harps primary election candidates, and, later, the Harps party leader), Jake (who played Molly Malone, vice-presidential election candidate for the Shamrocks) and Susan (who played Mary Murphy-McElligott, one of the Shamrocks primary election candidates and, later, the Shamrocks party leader) recount their experiences from this year's GY347 Elections Task.



Figure One: President Aisling Bennett

## From Final Year Geography Student to the Next President of Ireland

Author: Aisling Bennett

There are many aspects that I believe led to the successful Presidential campaign for the Harps. I will go through what occurred in the primaries and the election campaign itself. Along with this I will critically assess elements such as what could have been stronger and the overall learning experience.

Pre-Primaries: One of the biggest decisions of the primaries was choosing which candidate to play throughout the campaign. There were several reasons as to why we chose John Jameson and geography was a big one of them. Apart from Cadabhain MacAoghlais (based in Galway), all of the other Harp candidates where from the Greater Dublin Area and this meant that there would be a lot of competition in this area with both home county advantage and the friends and neighbours effect for each of these candidates, thus reducing the effect that both would have. By contrast, Jameson was the only Harps presidential candidate to hail from Munster, so the benefit from the friends and neighbours effect would be particularly significant in his case. Along with this Cork City and County were worth 137 delegates together and Jameson would have a home advantage here. Another advantage to Jameson was that while he may not have been President at the time, he was the incumbent Fianna Fáil Taoiseach (in this electoral universe). Jameson would, thus, be very well known and have a good base level of support that could be drawn upon, with Fianna Fáil having been in power seventy percent of the time since the party was founded (Quinlan & Okolikj, 2017). There is distance decay for friends and neighbours voting; the further from your home base the less votes a candidate can expect (Parker, 1982), but this distance-decay effect would not be as prominent in my case due to Jameson's prominent role within the Government.

Primaries: The early primaries were very important in our strategy as they would create a lot of momentum thus making things easier down the line. However, as a campaign we only got the win in one of the five early counties. Despite this we were still very much in the race as we came no lower than third in each of the other counties. It was the Paddy's Day Palooza when our strategy became a lot more effective. We needed to win Cork City and Cork County and the home advantage was essential here. Along with this we used the friends and neighbours effect to win both Tipperary and Kerry. This was vital in terms of building momentum (Mo-Mo!). Finally, we were keeping track of the other teams' campaign activities and saw that there was a chance of pulling off wins in both Wicklow and Donegal, thus picking up extra delegates from each of these counties. By the end of this period, we were behind in delegates (after Pammy Reinbach), however, we were ahead in terms of the number of counties that we had won. This was a massive boost in our momentum. Decisions were made going forward to be a lot more selective in where we posted. I decided that I would compile posts and just post on the last day so I could see where the other teams were posting and create a false sense of security for them. This proved very effective as Kildare was the sole focus of the next set of (winner takes all) primaries and by preventing Team Reinbach from winning there it meant that the gap between them and us became even closer, even though they won in Meath. The same strategy was applied to the final set of primaries; we left the other candidates to fight out for the victory in Wexford, while I used the friends and neighbours effect to help us win Waterford and posted in counties that had not seen much action from the other candidates, thus picking up wins in these and narrowly edging out Team Reinbach to secure the Harp Party presidential nomination.

General Election: Analysing posting trends was a very important part of the strategy in the presidential election itself. This was particularly important when looking at where the Presidential, Vice Presidential and Party Leaders posted their first three posts (all of which earned "bonus votes" for their parties) as in many cases where they posted was also a heavy focus of the general team. This analysis of post patterns was compiled in a large spreadsheet, along with the way a county was polling. With all this data we were able to see where Harp posts would be the most effective and we had a forecast from their posting patterns and a history from the polls. After each poll I would post in the Teams channel a list of counties where the canvasing should be focused. I feel that this was very important in managing the vote distribution efficiency. While other teams (the Shamrocks and Martina Linden's team) were focussing on areas such as Laois, our idea was to let

the other people post there and, while they were distracted, we could start closing the gaps between us and the Shamrocks in other counties somewhat under the radar. It was at this point when the campaign shifted as counties that the Shamrocks held leads in were able to be taken back. Overall, I feel like we did a very good job at doing this as the number of Harps effective votes was 17.8% higher than that of the Shamrocks; we also wasted less votes where there was a 21.2% difference. One area that I was surprised that the Shamrocks really focused on was Tallaght where they were leading in from the beginning and by the end, they had a surplus of 19,187 votes there. This was a waste of a limited number of posts.



Figure Two: Aisling Bennett & Team

The friends and neighbours effect was also very important but less so than the primaries (as we already had big leads in Cork City and Cork County) and in my case as I only posted in Tipperary and Limerick a couple of times. However, the strategy in the early stages for the entire team, was to post in a county if it was their home county, even if it was a safe Harp County, just to boost the vote there. This was done as when we were on the offensive, we had less to worry about there. Another key strategy was to keep an eye on the other party's posts especially given their history during the primary elections (the Shamrock primaries were slightly "more abrasive" than the Harp primaries). By calling fact checks when necessary, we were able to create a nontrustworthy narrative around the Shamrocks. However, it was very important that we maintained a high standard of ethics ourselves.

In the end the result came down to just a couple of counties. I decided that Dublin City would be the key focus by targeting one area and then taking wins elsewhere if possible. By winning such a big population centre it would greatly boost the popular vote of the party (but also the number of Electoral College votes that we could win).

**Critical Thinking:** After completing this task I definitely have a much better understanding of Irish politics and political parties, and, in particular, their ideologies as sometimes it looks like many of the parties stand for the same things. I did become more like my candidate towards the end and especially during the debate stage. It was hard to listen to the stories being woven about John Jameson by the Shamrocks that were incorrect. Ethics were something that I though was very important as being caught out (on a lie) can really damage voter's perception of the candidate.

I felt as if I learnt the true impact that the friends and neighbours effect can have on how you run your campaign. Each decision that was taken throughout the campaign was rooted in the concepts that were covered in class. One area that I learnt from happened in the first week of the primaries where the first polls had us doing very well in the first counties. This led to some complacency where the decision was made to start campaigning elsewhere. If I were to go back, I would have chosen to stay (and campaign more) in those first counties.

I was very proud that my team was really open to ideas and the analysis from my spreadsheets; this meant that everyone could be on the same page when it came to campaign strategy. I also feel that reducing the number of counties for Harp students to be posting in worked really well as people still had a choice (out of these counties), but it was a lot more focused. My team was not the most active on the Teams page where I was posting information, although this did pick up in the last couple of days. I found myself having to tell people to check the Teams page or informing them after GY347 classes. Most people, from what I am aware of, were not checking the Teams page, which made sharing the strategy all the more difficult. This is something that I would have changed particularly as not many Harps students were in class on any given day. Another thing that I think could have been done better was the distribution of tasks, I found myself wearing many different hats. As a result of this when I was busy there was nobody there to look into things such as planning the debate questions. Looking back, I should have been assigned more people to roles to make sure the workload was spread evenly. Personally, I felt that the St. Patricks Day study week break hindered the task work as it was difficult to get back in the swing of it (after a break of over a week), combined with the increased workload from the middle of the semester onwards. I think running the Elections Task through the study week break and finishing it earlies would be a really good idea going forward.

In conclusion I found completing this task very beneficial for my understanding of the role that geography plays in how successful an election campaign is. Along with this I now have a much more practical understanding of how theories of voting patterns are used and implemented in campaigns.

# Making Political Campaigning "Poetry in Motion"

Author: Natalie Balfe

My favourite part of all my time as an undergraduate student with the Department of Geography in Maynooth University has been the GY347 Electoral Geography module in Third Year. The students were given an opportunity to campaign in a (totally not made up) election. I really enjoyed doing this as it was a break from the assignments and was a much more exciting way of assessment as there was more freedom in the topics students could write about. I really engaged in this election, and I did not realise I would become so passionate and consumed in my role as 'Tin Tin O Fuaill' aka Fintan O'Toole as the Harp Party's campaign leader. Another part of the module I enjoyed was the fact we got to meet Linda Martin aka "Martina Linden" (definitely not Adrian Kavanagh in woman's clothing!) If I had any advice for students going into Third Year geography, they should consider taking this module if they are interested in politics and having a bit of fun!



**Figure Three:** Natalie Balfe Receiving a Campaign Contribution Award

This learning journal shall offer a critical commentary on what my personality (Tin Tin O'Fuaill, supporter of Cadabháin Mac Aoghlais's primary election campaign), mini-team and party did across the recent Primary and General Elections I have taken part in during the GY347 Electoral Geography module. This learning journal shall explore my learning experience throughout the process, why I choose the character I did, what my party members and I did well or could have done better, concepts and literature I used during the campaign, parts of the election I really felt I engaged with and how I began to identity more with my character throughout the campaigning process.

At the beginning of the module when our mini teams were given an opportunity to choose our candidates, we choose Cadabháin Mac Aoghlais. I was interested in choosing Cadabháin as our mini team's candidate because his economic policy focused on subjects I am personally interested in as an Arts student; he focused on the arts, poetry, and music along, with other interesting topics. I choose to be the character Tin Tin O Fuaill, Cadabháin's supporter as the character is based on Fintan O'Toole, who is a journalist for the Irish Times. As an Arts student studying Geography and English, who is interested in writing and journalism, I believe this worked to my advantage for posting in the Primary and General Election forums because I could use my two subjects interchangeably to fit the character of Tin Tin, therefore I already had a good starting ground as creative writing is a strong point of mine.

During the primary elections my mini team members and I did well in creating campaign posts that satisfied all Cadabháin's economic policies; we all were able to find areas in every county that had something to do with the Arts. Prior to this task, I never knew that almost every county had an arts community or arts strategies put in place until my team and I began researching Ireland's counties, which was useful in our course of campaigning for

Cadabháin's economic policies. In the past when I thought of the concept of politics and elections I would never of have associated the arts and politics together and at first thought we would struggle to connect these two concepts together because other mini teams were focusing policies such as health care, which I thought fitted politics better. However, as a team we were able to come up with ideas that made arts and politics work together successfully and it made our campaigning strategies unique in contrast with the other mini teams. During the General Election, when our mini teams all came together as the Harp Party supporting the presidential candidate John Jameson, something we did well was keeping up with opinion polls and communicating. The Harp Party were great at keeping up with opinion polls and figuring out with counties were best suited to campaign in if we had a better chance of gaining votes in them counties or if we were close competition in certain counties with the Shamrock Party we focused on campaigning in those areas. The Party members were Harp also good at communicating with one another through the Teams page and meeting up before the Big Debate to discuss what our team should talk about and creating posters. I learnt that communication is key to any party running in a general election as it helps the team members be more organised and have a better understanding of what needs to be done during the campaign.

An area I personally did well in was during the primary elections, as my character Tin Tin O Fuaill, was where I wrote my own poetry. As Cadabháin's economic policy situated around poetry and since he was a fluent Irish speaker, I used this to our team's advantage and wrote poems in English and Irish directed at certain counties which seemed to have won our team extra votes. I believe this was a smart strategy during my course of campaigning in the Primary election as it was distinctive to our mini team and made us stand out from the other mini teams. I learnt that parties that are campaigning in elections should find something unique to make them stand out from all the other parties which may influence the general public to vote for them because they are unique and different. An area I believe my mini team and I during the Primary election could have done better was maybe considering choosing a female candidate instead of a male candidate. This is because we could have drawn on the Gender Quota concept that we learned about in the module but, it was hard to do this because both candidates and parties I was campaigning for were mostly male dominated. The introduction of the gender quota required political parties to have females and males accounting for at least thirty percent of candidates at general elections from 2016 onwards and stressed how these parties would lose half of their state funding if they did not meet this quota. I believe if we could have incorporated this concept into our campaigning strategy it could have given our mini team more votes because it would have demonstrated our use of this knowledge and gotten more female votes for our mini party, giving us a better chance of winning the primary elections.

A concept I used across my campaigning in the Primary and General election was the friends and neighbours effect. From reading Kavanagh et al (2021, pp.198) I learnt that 'People in a local area will tend to vote for the candidate whom they perceive to be most likely to 'work for' that area and gain political benefits for it, and in most cases, this candidate will be one that hails from this area.' For example, during the general election I focused heavily on Dublin City as my character Tin Tin O Fuaill hailed from Crumlin (in Dublin City). I believed, since he was local to this area, the public would be more likely to vote for the Harp Party as they will be under the impression that more shall be done for their area. I also found it interesting to read literature that included profiles of Irish politicians who explained what they did in their campaign such as Jennifer Carroll MacNeill, a Fine Gael politician, who stressed that "nothing is more important than meeting people and giving them the opportunity to speak to you" (Farrell et al., 2021: 145). I used this advice across my campaigning in the election by setting up scenarios in which Tin Tin O Fuaill was speaking directly to members of the public to gain more votes for going out and identifying people's problems. Through literature and concepts drawn on from GY347 classes, it helped me understand how your party's campaign strategy is so important and how it can make or break your campaigning process. Finally, I want to note the parts of the election I really felt I engaged with and how I began to identity more with my character throughout the campaigning process. I engaged a lot with the area I live in

(Robertstown County Kildare). Since I live in a rural area, I understand myself that we have a lot of problems, such as road infrastructure which is not in as good of shape as it is in urban areas. I used this knowledge in my campaign posts, which gave me an advantage over those students who were living in urban areas who do not understand rural problems like I personally do. I also conducted an interview with my father over an issue he encountered by filling potholes up himself because the Kildare County Council were not listening to his requests, and I thought it made my campaign post more personal because I had first-hand information of rural struggles from my own family members and myself. From the very beginning I believed I identified with my character Tin Tin O Fuaill, since he is a journalist and writer; something I am very interested in. After putting myself in his shoes I felt like I became him during the campaign. Tin Tin was subject to a lot of backlash from the Shamrock party because he was very passionate about issues and correcting false information; since he is a journalist, the character must have the ability to present facts and remain respectful. Therefore, in my rights of replies I acted just as a journalist would; remaining calm, respectful, and always presenting facts, which I think gave me an advantage over certain Shamrock campaigners who had presented false information about the Harp Party. Overall, it was a great learning experience, which has influenced me to pay more attention to politics, because I now know how much hard work and effort goes into campaigning at elections as I've experienced this during the election process for this class!

# Alive-Alive-Oh! The Campaign Escapades of Molly Malone

Author: Jake Land

The task started in our mini teams in February, and I had no clue what I was in for as I picked the GY347 module (based on the time it was on) at the very last minute. Our mini team included Alannah (Lynch), Ciaran (Daly) and me, and the first thing we did was to establish the roles we would play. I usually tend to take a leadership role in most assignments as I'm confident in my communication skills so it was clear that I would play the candidate as in the event we had to debate the rest of my team weren't comfortable in doing that.

One of the benefits of selecting Molly (Malone) was that she was a woman. This meant our posts could explore motherhood and sexism with a more unique and complex approach that playing a man would not allow for. Most of the information I had about gender issues was used from my experience with a Gender and Sexuality module in Second Year. This knowledge allowed me to become Molly Malone. However, one thing that my team did not consider was the importance of this character's beliefs in the campaign on issues such as taxation and the Border. Given the opportunity to do this again I would pick one of the candidates whose character description was more focussed around their personality, Glenn Cantwell for example. We also came up with our slogan #alive-alive-oh, which upon further reflection does not really have a clear message in an election campaign. If doing this again we would have changed this to make a more obvious statement as we were more focussed on having a slogan rather than the quality of it.



**Figure Four:** Jake Land Receiving a Campaign Contribution Award

During the primaries our team was experimental in figuring out what could win votes/delegates and how we could have fun with the assignment at the same time. To do this we created some posts that addressed other candidates directly and hoped someone would play along. Jessie Jane Campbell and her team took the bait, which started a political feud between our teams. This helped with motivation for reading everyone else's posts as other characters took sides and eventually my mini team planned out a set of three posts where Molly Malone was (apparently!) attacked by a Jessie Jane supporter. I felt that I had started to channel Molly Malone very quickly as I felt myself being offended for this fake character whenever she was mentioned in an "adverse manner". It made me want to try and find a better answer to the topics that their posts addressed.

Another strategy we carried out was going to bigger counties that were further away and getting a start on posting there. We knew we had a lot of energy to post at the beginning with few ongoing assignments at the time in the semester (Weeks 3 and 4), so this would give us a boost further down the road. The first few counties also weren't worth as much as what the later ones would be in terms of delegate numbers. We definitely saw it take effect too as, by the time the others reached those counties, we were ahead in posts and the vote tally, and it would take a lot more effort on their parts to beat us in these counties. I believe this is what kept us in second place for so long despite everyone's initial confusion surrounding our strategy.

Towards the end of the primaries however the mini team began to feel a bit defeated as we struggled to keep up with reading the other posts, creating our own posts and focussing on where to post. There was also the issue of trying to get a team in the bottom to drop out that we couldn't crack as everyone felt they were in with a chance of winning. So, as we had kept up second place for so long, we felt comfortable we would land within the top three and just focussed on posting wherever we could to keep up with the demands of the assignment. It seemed everyone else (out of the main contenders) had been more focussed in the winner takes all portion and we had slipped into third place at the end of the primary elections. If I were to do this again, I'd take the time to look back on the notes from class about winner takes all as my team were confused by this sudden change which went against what we had been doing.

One thing I liked about Barty Mohan's (winner of the Shamrocks primary) campaign was the attention to detail, the creation of a logo with infographics about the campaign and a picture of their character doing an activity that matched the post. This was really clever and would have definitely benefitted the aesthetic of our posts during the primaries.

**General Election:** Coming back after the break for the General Election I was definitely dreading going back to posting, despite having enjoyed doing it. I felt there was nothing else, I could possibly talk about as well as being slightly bitter that Team Molly Malone hadn't won the primary elections. Luckily when it came to the general election the Shamrock Party had witnessed my passion for the assignment and were happy to give me the vice-presidential candidate role, as the others (in the Jessie Jane Campbell team) had passed on it. Gaining this role made filled me with an invigorating passion to get stuck into the project again and learn from my mistakes during the primaries.

Our strategy became to cover the whole county and then we would focus on specific regions when the first opinion polls were released. It was important to me to consider everyone's opinions now that we were in a bigger group as everyone seemed a lot more involved in the Party in comparison the Mini Team. To ensure I did this I paid attention to people's skills and helped with appointing roles for them and counties for them to post in, as well as asking the group for their thoughts on certain larger decisions. From this kind of commitment, it became clear that I was taking a stronger leadership role in this group, despite being the vice-presidential candidate.

However, I handed over the data analysis role to other members of the team and I wish I had taken this position. I was the one people approached to ask where they should post next, I was relying on the details provided by the others which were not always as up to date as they needed to be. The political landscape of the election was changing every minute of the day and our team were creating these polls every few days, so by the time they were done the Harps had targeted somewhere different. This was clear with Tallaght where people were still posting despite our very clear lead in that area, as they had been told to post there. We ended up winning by a landslide of around 25,000 in a region that did not contribute largely to our Electoral College vote tally; in the end, we needed more of a focus on Dublin City.

Learning experience: Generally, I learned from this experience that I leaned heavily left politically as any statements made by other campaigners that didn't align this way were the posts that I had the most fun responding to. I also realised that in terms of the Border question I have absolutely no clue where I stand as every time it was brought up there were new things to consider that I hadn't thought of. It's such a complex issue that I definitely want to keep considering after the assignment. One piece of the assignment that was really beneficial to me was the Debate as I got to practice public speaking in an entirely new format. As someone with experience in debating, it was interested to have to improvise as a character and really immerse myself into this world of the election. At times it was hard to remember the names of the participants on the opposition and within my own team, because I had only seen their characters on the forums, and it was hard to recognise some of them "in real life".

**GY347 Material:** One piece of the module material that really struck me was how unfair American politics can be. My mini team were most heavily impacted by this at the end of the primaries; it was shocking to see how quickly Barty rose to the top after getting one of the largest counties in the winner takes all portion of the contest. It became clear very quickly that once he had won that county it was more or less a race for second place. While in the end he would have won the popular vote, it showed that there is a flaw in the electoral college system because so many votes for me and Jessie Jane were discarded once he had won.

As Jessie and I were disagreeing over minute differences it shows how a political party can doom itself by being overly critical. Had real voters been torn between a decision between us our votes would have split down the middle, whereas unity in support for Barty would have placed him above us. In conclusion, this assignment gave me clarity on several aspects of electoral ideology as well as my own political beliefs. It was definitely very helpful to also enhance my debate skills, confidence, and ability to work in a team. I feel I've improved drastically in my critical thinking and will be able to apply the skills learned in so many areas.



Figure Five: Jake and Team

#### **Representing the Rural Voice**

#### Author: Susan Caplis

My character was Mary Murphy-McElligott, she hailed from Killarney, Co Kerry and was a member of the Shamrock party. As the campaign went on, I identified with her more as I was canvassing in rural Ireland mostly. Taking on a rural character allowed me to view this process through a different lens and identity. I felt very strongly about Mary winning her home county in the election process which she did, I was delighted for her! I would have felt embarrassed if I did not get a win there. The US political system of 'first past the post' 'winner takes all' approach along with the Electoral College system was used in our mock election (Kavanagh, 2016). So, I felt that checking each county to see how many delegates or Electoral College votes they had was a good campaign strategy to use throughout the whole process. However, party support was an important factor too, as I did not want to waste votes in counties that demonstrated high levels of support for the Harp party. Also, I did not want to over-canvass in a county either as surplus votes would not be useful for my candidate. My strategy was to gain as many effective votes as possible as these are the only votes that can bring victory (Johnston et al., 2005).



**Figure Six:** Susan Caplis (a.k.a Mary Murphy-McElligott)

Kavanagh et al., (2021) state the importance of geography in determining the electoral boundaries for political parties and when canvassing in the different counties this was taken into consideration as I wanted my candidate to win as many votes as possible, I looked at maps of counties when choosing where to canvass to get a good spatial turnout for my candidate. 'Localism' plays a huge factor in Irish electoral geography also (Kavanagh et al. 2021; Gallagher, 2009). So, I used social media to tell the local people that I was in their area and to thank them for their support and I alerted and sometimes invited journalists from local newspapers to join me on the campaign trail. As my candidate was rural, I mainly kept to rural areas to canvass in. The end to civil war politics in Ireland has made way for a more European 'class cleavage model' and the leftist parties and candidates are benefiting from this model (Kavanagh, 2015). The Shamrock party were mainly a leftist party, so I factored this class cleavage into my campaign strategy. These factors influenced where and how I canvassed throughout the process. Friends and acquaintances including people one interacts with in political conversation, have been demonstrated to influence how one votes (Pattie and Johnston, 2009). Based on this I felt it was important for Mary to do walkabouts, positive interactions with the electorate would be spread in this informal manner.

For the primary elections, our team strategy was to focus on winning one county and we chose to campaign heavily in Leitrim to get the win as Mary is a rural candidate. We used the opinion poll also to

gauge support for Mary; it looked positive and so we continued to post heavily here. It was important to use this data to see where her support was increasing or decreasing (Kavanagh, 2017). According to Kavanagh et al., (2002) Leitrim is one of the counties with a spatial distribution of high voter turnout levels, while people in rural areas also tend to be older and various studies show they vote more. Mary got the win in Leitrim. As the Shamrock Party had close to 60 percent of the vote in Leitrim (prior to the general election), it seemed like a good place to start building momentum for Mary's campaign and ease her into the election process. while picking up 6 electoral college votes. As funding is not limited in the US election like it is in Ireland, Mary and her campaign associate, Ryan Angry (Katie O'Hara), could visit as many locations as possible. As the Shamrock Party was mainly left-wing in its political orientation, Mary campaigned for the hard-working people of Ireland with a focus on farming and rural communities.

The next county I chose for Mary was Limerick as it had 21 electoral college votes and the Shamrock party had 44.6 percent support there while the Harp had 55.4 percent. We campaigned strongly here to increase our potential effective votes. It is largely rural, and Mary would resonate with the locals as she had a farming background, however, I felt she had a good business acumen and so she could appeal to the business community in the city also. A criticism of my campaign here was that I could have spread out more to different geographical locations around the county to win more votes; this is where teamwork comes into play. As Mary was a rural candidate maybe I should have solely focused on the county and not canvassed in Limerick City at all.

For the Paddy's Day Palooza I focused on Kerry as it was Mary's home county, I used the 'friends and neighbour's effect' to win votes here (Kavanagh et al., 2021; Johnson, 1989). This states that a candidate enjoys their highest level of support in the part of their constituency that they are from and their level of support decreases the further out one goes from here. Kavanagh (2014) states that boundary changes that result in the loss of territory in a constituency will reduce votes for a local candidate if part of their bailiwick is moved into another constituency. Thankfully this did not happen in the mock election through gerrymandering or otherwise. While the Shamrock party had a 19.6 percent lead on support here it was important for Mary to win her home county and hold onto the 16 electoral college votes. I regret not posting in County Cork as there were 43 electoral college votes and Mary could have done well there as it is mostly rural (and next door to Kerry); I feel I should have placed a few posts there as it could have swung Mary's way. Her farming background would have resonated with many of the voters in this county.

The results of the Paddy's Day Palooza left Mary placed in second last position in the Shamrock primary election campaign with 78 delegates, I discussed suspending our campaign with Katie and she said she was happy either way. I messaged the other rural Shamrocks candidates to see if we could join them. With no response from them, and with the

next campaign deadline approaching, I made the decision to join up with the Jessie Jane Campbell team. I would have preferred to join other rural candidates but by the time they responded the deadline for posting was upon us and I had already agreed to join Team Campbell and had posts wrote up. As Mary was from rural Ireland, I felt they would have been a better fit, however, Team Campbell was in third place, and I felt together we stood a good chance of winning in the next phase of the election process as we had more team members to divide up the counties to post in and win more delegates. In this team we used the friends and neighbours' effect also depending on where our characters were from and team members themselves as they had more localised knowledge of their county (Kavanagh et al., 2021). We chose the counties to post in also by the level of support for the Shamrock party and also the number of delegates we could claim; we wanted to gain as many effective votes as possible. We spread out around the chosen counties to try and avoid wasting our campaign efforts by winning big numbers of surplus votes in a small number of counties also. Communication was good in this group, and we used a group WhatsApp effectively.

After the Paddy's Day Palooza, the Shamrock Party had a clear winner, Barty Mohan. I was assigned the role of Party Leader of the Shamrocks. This part of the campaign became tricky as I had to go over their posts and get a sense of who Barty Mohan was so I could start canvassing effectively for him in the general election. Lara (Morlang) posted really helpful material on our team's page from their campaign so far. I used this to construct new posts. As party leader I could claim bonus votes for our team in my first three posts each week, as could Nathan (as Barty, the presidential election candidate) and Jake, so communication was key in terms of where to post so we could maximise our effective votes. Communication in the Shamrock Party was difficult as it was a larger team. We used opinion polls to gauge where best to post and chose mainly swing counties to campaign in, plus we posted in counties where there were a high number of electoral college votes where the percentage of support for other parties was approximately 10 percent higher than ours to try to win that county over.

I missed the live debate due to an illness, however Jake posted up the main points on our team's page, so I was able to write up a post in relation to it. We entered our final week of campaigning after this, as party leader my first three votes were awarded bonus votes, so I consulted Tomas, our strategist, to discern where best to post in. Tomas also posted up on our Teams page three counties each to campaign in for each member of the team. However, it was important to also keep an eye on the opinion polls and the Teams page for developments. For example, I changed my final post from Lucan to Laois on the advice of Tomas as we only had a 0.1% lead on the Shillelaghs in Laois in the final opinion poll and we wanted to win the eleven electoral college votes there. My plan to post up wherever we had a chance of winning at the last minute was spoiled as I ended up in A and E that day, however.

The final results posted by Adrian demonstrated that we had high levels of wasted and surplus votes in the general election, for example in Dublin city we had 94,982 wasted votes and in Tallaght we had 20,543 surplus votes. I feel that better use of the Teams page by all team members on where they were posting would have ameliorated this.

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#### Eibhlín Cannon (Class of 2020)

After graduating as a BA Double Honours student from MU in 2020 (Geography and French), I decided to pursue a career in post-primary teaching. I stayed in MU to do the Professional Master of Education (Secondary) and I'm currently in Year 2 (final year). The course is quite varied - I have studied modules in history of education, teaching methodologies, social justice, and education policy (to name a few!). School placement is the main component of the course - you teach for two to three days per week for the entire academic year, in PME1 and PME2. I am really enjoying teaching geography at post-primary level. I mainly teach Junior Cycle students. In these classes we do lots of pair and group work, class discussion and hands-on activities. For example, we have modelled the rock cycle and made our own soil profiles. This year I have also gained experience teaching Leaving Cert students, which is fantastic. I will hopefully be a qualified post-primary teacher this summer and starting my career in September.

I chose an equal amount of physical and human geography modules during my three years in MU geography. I thoroughly enjoyed both, however the classes that were especially influential for me were Climate Change and Geographies of Pollution. The lectures and readings in these modules offered alternative insights into these global issues and really broadened my perspective. I also loved completing the Research Project in final year. My area of research was Geography of Elections, which was very interesting. It also introduced me to research methods and the structure of a thesis, which is a key part of the PME. I have very fond memories from MU Geography. It gave me the best possible start to my career as a Geography teacher!

#### **Rebecca Geraty (Class of 2021)**

After 3 amazing years as a single major Geography student in Maynooth University I have developed many life long skills that I will treasure throughout my life. The Geography staff in Maynooth University have been incredible on my journey in my Geography studies over the past 3 years. With careful consideration after my graduation I have chosen to follow my dream and I am currently training as with Radiographer UCD training hospitals around Dublin. Studying Geography in Maynooth University has provided me with many skills including critical thinking skills that I still use daily since graduation. Geography in Maynooth has been a major highlight in my studies and I will treasure my memories dearly.

#### **Orla Curtin (Class of 2017)**

My name is Orla, I graduated from Maynooth University in 2017 with a Bachelor of Arts degree in Geography and Theology. After graduating from Maynooth I went on to complete a Professional Masters in Education in Trinity College Dublin specialising in Geography and Religious Education. I graduated there in 2019 and went on to get a job as a Post Primary teacher in an all-boys school in Dublin City Centre. Here I teach Geography to Junior and Leaving certificate students.

I use the knowledge and advice that I gained during my time in Maynooth to inspire and educate the potential geographers of the future. Geography is a fantastic subject with so many topics that are relevant to today's world. I will always be grateful for the amazing time I shared in Maynooth alongside so many fantastic and inspiring lecturers.

#### Eoin Shanahan (Classes of 2017 and 2019)

I did my BA in History and Geography (2014-2017) at Maynooth University, followed by the MA Geography which I took over 2 years (2017-2019). I thoroughly enjoyed my studies with the Geography Department and found my interest in the subject grew more and more with each year. I had an interest in the areas of Globalisation, Economic Geography, Urban Planning and Property Development, as well as Climate Change, but it was Political and Electoral Geography that interested me above all else, and so I decided to focus on this area for my MA thesis. Under the guidance and constant support of my supervisor DJ Kav...er...Dr Adrian Kavanagh, I was very happy with my result and enjoyed the research component.

I made many very useful connections from my research from Politicians to Journalists, Political Organisers, and many more; many of whom I have been in contact with often since and many of whom have become friends too. Career wise, I have worked in the music world the last couple of years and am still based in Maynooth! I work as an organist with St. Patrick's Pontifical University where I play for a range of Church-related events as well as accompanying Carol services and other Choral Events with the MU Music Department and giving some individual recitals too. I found that, even though my current field of employment may not be the typical path for a Geography graduate, the skills I have learned from my Geography studies are very applicable and have helped me greatly in a range of ways in my new role.

One of the main life skills I learned from Geography was the importance of having a broad, open mindset. considering why things might be how they are, and finding the best approach to changing anything that needs to be changed through this considered view of both sides of an argument, regardless of what side you might be on. Geography has helped me gain an awareness of and indeed embrace cultures, traditions, and beliefs from people of all different backgrounds, as well as gain a greater understanding of my own culture, values, and beliefs and why they are important to me. I feel that this broader mindset Geography has given me helps me work better with those around me each day, both in my professional and personal life, and I always feel a sense of excitement when challenges and opportunities present themselves. I would highly recommend studying Geography at MU to any student, as you will develop not just your academic knowledge and skillset, but also ways of thinking that as a person will stand to you in ways you may not even fully realise yet.

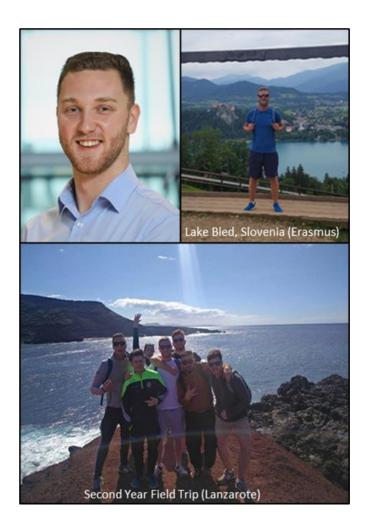
#### Darragh Friel (Classes of 2014 and 2015)

After completing my BSc Single Honours Geography in 2014, I joined the first cohort of the MA in Geography, graduating in October 2015. My interests during my studies at Maynooth was mainly focused on social, cultural and political geographies. One of many fondest memories from the course was our snowy (sub-zero mind you) undergraduate field trip to Berlin in March 2014. The snow-covered urban landscape added to the senses during our visits of sites in the city - I never took real-world experience of places for granted since (that's for sure)! After graduating I was fortunate to complete a Blue Book 'Stagiaire' (traineeship) in Brussels with the European Committee of the Regions in 2017. From 2018 onwards I worked as a contractor with Esri Ireland as a GIS Consultant in Dublin. I carried my fascination with place and space forward and I am currently studying an MSc in Planning & Development at Queen's University Belfast, set to lose more hair!



#### Tim Keenan (Class of 2019)

I was a Maynooth Geography student from 2015 to 2019, including and Erasmus year in Ljubljana, Slovenia in 2017/18. I originally studied geography, business and international development in my 1<sup>st</sup> year before transitioning to the single honours geography stream in 2<sup>nd</sup> year. I thoroughly enjoyed my time at Maynooth University studying geography, and have come away from it with many positive memories and life-long friends. A time that always stands out for me during my degree was the overseas field trip to Lanzarote in 2<sup>nd</sup> year, where we learned all about the physical and human aspects of the island.



I was also very happy to have completed my final year thesis on the topic of microplastics under the expert guidance of my supervisor Helen Shaw. After graduating from Maynooth I decided to pursue a masters in Environmental Sciences at Trinity College Dublin, where I built upon some of the knowledge I was introduced to in Maynooth, as well as some new modules such as environmental entrepreneurship, deep time, and practical skills for environmental monitoring. I now work in corporate sustainability as an Environmental, Social and Governance (ESG) analyst in KPMG Sustainable Futures, which is Ireland's largest dedicated crossfunctional team of experts who help private and public sector clients plan and execute programmes addressing ESG topics. I strongly believe that my passion for environmental matters and making a difference has stemmed from the broad range of modules I studied at MU and TCD.

#### Sinead O'Connor (Classes of 2011 and 2012)

I completed the MA in Society and Space in 2011/2012 and a geography degree before that. After my degree and masters I went into Secondary school teaching where I am not teaching Maths and Geography.

There are many things that stuck with me from my time in Maynooth University. Within my Geography degree that module that stuck with me most was a field trip module with Proinnsias Breathnach. We completed a weeklong fieldtrip to Ballhoura County Limerick. It is something that encourages me to bring out my students into the geography field and gather data as much as possible. There were certain modules in the MA in Society and Space that stood out to me, namely the political geography module with Adrian Kavanagh. This was not your ordinary run of the mill lecture. It was active learning at its finest. One such activity we had took part in was running for President. I'm sure there are still some tweets out there from @billcentbrowne.

These are just some of the things that have that give me inspiration to be better and do better in the classroom

#### **Rachel Cleere (Class of 2012)**

I graduated from NUI Maynooth in 2012 with a single honours Geography degree and since then I have taken a very meandering path to where I am now. After graduation I had no idea what I wanted to do so I took some time working as Nanny in Dublin before deciding I loved Geography so much I wanted to share it with younger generations and applied to train as a secondary school teacher. I studied the professional masters of education in NUI Galway for two years where I realised that not all College Geography departments were as good Maynooth and I was very grateful for thr diverse education I had received! I graduated with a first class Masters in 2016 and decided to move to England as there was a lack of teaching jobs in Ireland. Teaching in England was nothing like back home. It was very regimented and I was working 80 hours a week. My mental health took a turn and I decided happiness is more important than a job! After a few months teaching, I left and worked for another few months in Thames Water, the water company for the South East of England but I wanted

something a bit more interesting, diverse and part of the community.



I then found a job in Reading Borough Council working on the Environmental Protection Team, where my background in Geography definitely helped! I spent six months there before moving to Sector Housing Team in the Private the Council. This is a branch of Environmental Health where I inspect privately rented homes to ensure they are safe and up to standard. A lot of work is around fire safety following then Grennfell disaster. I absolutely love my job and it has given me some very interesting experiences such as being a lead prosecution officer and witness in Court for a rouge landlord who I caught breaking the law! I don't think I would be where I am today without the education I received in Maynooth. I absolutely loved

my lectures. Shout out to Adrian Kavanagh, Mark Boyle, Alistair Fraser and of course Conor Murphy, who always encouraged me throughout my time writing my thesis! Sorry I didn't stay within the climate change sector! I will forever look back on my time in Maynooth with happy memories ♥

#### Annemarie Reidy (Classes of 2008 and 2009)



The four years, I spent studying Geography, in Maynooth, were some of the best years of my life. The Geography Department were always so helpful, and kind and lectures were always the most fun and interesting. I particularly enjoyed Dr Adrian Kavanagh's lectures, as they were interesting and entertaining. I think that's partly why I wanted to work with Dr Kavanagh, for my Masters. He was always on hand, to offer advice and guidance and gave me many opportunities to share my research, on the Eurovision Song Contest, with other universities. My love for Geography has continued, and since 2011, I have lived in the UK and been a Head of Geography. I want to see students flourish and enjoy the subject, as much as I did/do. Thank you all, for making me love Geography!

#### Leila Oakman (Class of 2020)

Since graduating, I started working as a Recruitment Resourcer with Excel Recruitment, and after around three months I was made a Recruitment Consultant. I'm getting on great and working for an amazing company.

#### Ethan Lahiff (Class of 2021)

In September 2021 I graduated Maynooth University after four wonderful years of learning and a lifetime of memories made throughout my studies. One of the most important aspects of my time at Maynooth was discovering and nurturing my passion for Geography, which I majored in as part of the Major with Minor degree pathway. Geography particularly interested me due to its immense flexibility and relatability to practically every aspect of life. When we speak about geography, we often refer to people or to an environment, and how these facets intrinsically interact and change. Rather unironically this has been key to my life and career since my graduation last autumn.

Although I had wished to pursue my Geography Masters directly after my undergrad, an unexpected change in my own circumstance meant taking some time out to begin a full-time working career rather than an immediate continuation of my studies.

I am currently working in pharmaceutical production in my hometown of Wexford, which on the surface may appear somewhat irrelevant to my degree. However, this could not be further from truth!

The knowledge and skills I have gained from my time as a Geography student at Maynooth

University, help me in my everyday work. This includes writing reports, working in a team and by my own initiative, problem solving and gaining confidence in a variety of IT programs. With this I can surely attest to how the skills I have honed at the Department of Geography are just as adaptable and flexible as the content of the subject is itself. The main point I would like to stress to a student considering studying at the Department is that Geography opens up more opportunities than you would imagine.

#### Jennifer Carleton (Class of 2019)

Hello reader, my name is Jennifer Carleton and I graduated from Maynooth in 2019 with a Single Major in Geography. I loved my time in Maynooth and had such a passion for Geography as a whole but in particular in urban planning and development. I thoroughly enjoyed my political modules with Adrian Kavanagh, physical geography modules with Martha Coleman but in particular the planning modules Sinead Kelly. My fondest memory was the international trip to Nice, France and San Remo, Italy. It was very engaging and really cool learning to apply my knowledge beyond the shores of Ireland. After finishing my summer exams in 2019, I applied for a position in An Bord Pleanála and I am still currently still with the Board. I absolutely love it! An Bord Pleanála is the independent planning Appeals Board based in Dublin. The main function of An Bord Pleanála is to determine planning permission appeals and other such matters under the Planning & Development Act. It is a nationwide office so it's busy. Since I started I have dealt with the media about popular cases that are of big interest to the public, dealt with the processing of appeals and public queries. I am currently solely responsible in the organisation for the digitising of appeal site development boundaries using the GIS software ArcMap and ArcPro. Without a doubt, the GIS module undertaken within my degree has help me in this regard. My time in Maynooth studying Geography has truly developed and grounded me as a person. Without a doubt my degree was the perfect choice for me and greatly influenced my career path. I hope to remain with the Board for many years to come. I wish everyone studying Geography the very best with their future careers. All the best!

#### Arlene Conway (Class of 2017)

I began my journey with Maynooth University Geography Department back in 2014 when I began a BA in Irish and Geography. I have very fond memories of my time there and the friends I made along the way. I remember the fear of being late or having to leave a First Year Physical Geography lecture incase Steve McCarron might stop the whole lecture and ask you where you were going – at the time nobody wanted to admit to a fully packed John Hume L1 where they were "really" off to. After surviving year one, I made it to year two where I was introduced to something called GIS or Geographic Informative System Mapping. Many Thursday afternoons I spent on South Campus trying to understand how to work the system under the guidance of the very patient Shelia Waddington.

Another element of the course which I really enjoyed was the Field Trip Module which saw us head off on an excursion of Leinster for a week with Mark Boyle and Adrian Kavanagh trying to convince us all to move to Laois. Days were filled with walking tours, learning about the geology and the landscape of Emo Court, Dublin Docklands and the valleys of Glendalough to mention a few. After graduating in 2017, I went on to study the Professional Masters of Education at Maynooth University. At present, I am working as a Post Primary teacher of Irish and Geography spreading my passion for the two subjects with the next generation. One element of Geography which I particularly enjoy is when I incorporate practical elements into the subject and students get creative. Geography is brought to life in my classroom and students enjoy making, for example, geographical models of earthquake structures, volcanoes and examining how seaflooring spreading occurs. The skills and knowledge I have learned from Maynooth University has definitely helped me progress with my career and I look forward to what the future will bring.

