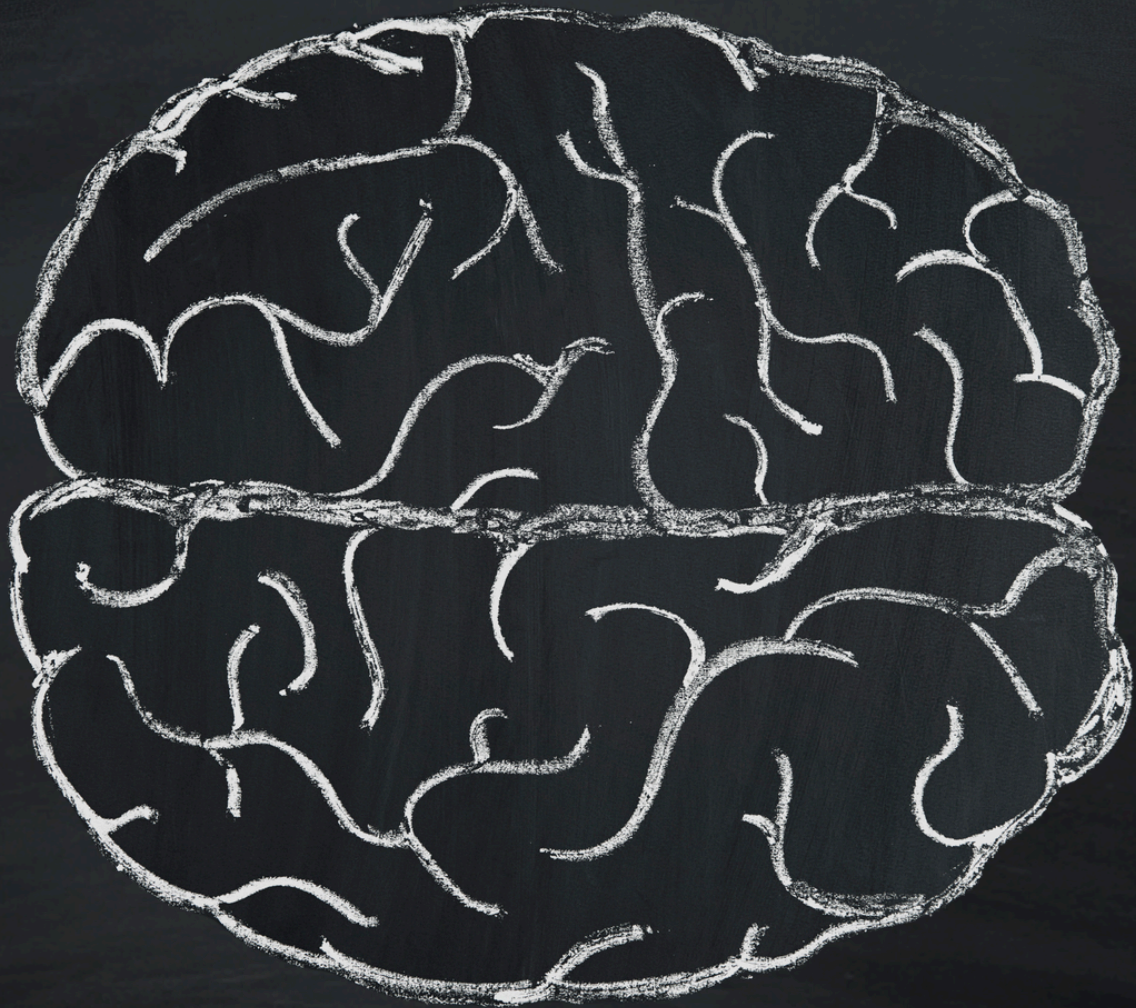


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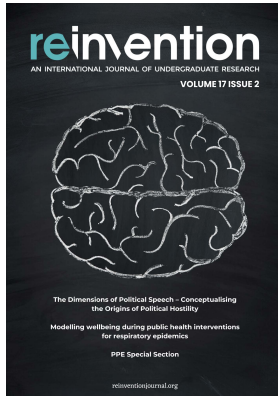


**The Dimensions of Political Speech – Conceptualising
the Origins of Political Hostility**

**Modelling wellbeing during public health interventions
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Editorial

Blueprints of Knowledge

Yit Xiang Wong, University of Warwick

I am glad to announce the publication of *Reinvention*'s third issue of 2024: 'Blueprints of Knowledge'. To close this year's publications of the journal, we present to you a selection of articles spanning across the disciplines, from politics to public health. The theme of this issue is Blueprints of Knowledge, which explores the role of models and frameworks in helping us to understand the world around us. Blueprints give us the power to capture our world on paper, allowing us to continually add detail and nuance to better reflect our reality.

Before I introduce the issue, I want to highlight the development of our *Reinvention* [blog](#) by our outgoing marketing coordinator, Ines Robledo. Our blog has focused on sharing the personal stories of our authors, and currently features an interview with authors from our WorldCUR/BCUR special issue, Lauren Dowdeswell and Halima Nabirye. Additionally, our [Writing for Academic Publishing](#) workshop recording is also now available online via our blog.

In this edition, we bring to you two original papers.

Daniel Knoth's 'The Dimensions of Political Speech: Conceptualising the Origins of Political Hostility' establishes a novel framework to study political polarisation in the United States. Knoth categorises political speech into three distinct dimensions – locutionary, perlocutionary and illocutionary. Through this new framework, Knoth identifies that the source of political hostility originates from the changes in the illocutionary dimension.

Joe Brooks's 'Modelling Wellbeing During Public Health Interventions for Respiratory Epidemics' is one of the two papers we have in this issue that revisits the COVID-19 pandemic. Brooks does exactly what you should do with a blueprint – increase the level of nuance. They build on existing COVID-19 models to include wellbeing in varying social settings. This accounts for the lack of attention given to mental health in pandemic modelling. Brooks finds that the existing strategy of workplace closures was not only effective in reducing the rate of infections but was also beneficial to individual mental wellbeing.

Finally, this issue also features a special section featuring a new module from The University of Warwick's Philosophy, Politics and Economics (PPE) degree programme. As a graduate of the programme, it is with great pride that I introduce to you a series of essays originating from undergraduate students who took the new module on the philosophy, politics and economics of food. The module was led by Laura Gelhaus, an Assistant Professor in the Department of Politics and International Studies and Director of Personal Development for Warwick's PPE degree programme, the special section explores the complexity of food systems in our world.

To echo the theme 'A Social Evolution: Capturing the Essence of Change' of our first issue this year (Volume 17 Issue 1), our authors show how blueprints evolve. The papers in the special section and Daniel Knoth's paper 'Dimensions of Political Speech - Conceptualising the Origins of Political Hostility, create novel frameworks to help us understand issues from a different perspective. Brooks shows how blueprints can be

improved, factoring in unaccounted variables or introducing new technological concepts. In this ever-changing reality, undergraduates will be the architects to design a better world for us.

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The Dimensions of Political Speech – Conceptualising the Origins of Political Hostility

Daniel Knoth, University of Warwick

Abstract

This paper introduces a novel theoretical framework to analyse the increasing polarisation and hostility within US politics. The framework categorises political speech into three interrelated dimensions: locutionary, perlocutionary and illocutionary. By conducting an analytical review of the literature on political behaviour and polarisation and conceptualising the debate within this framework, the paper concludes that the increasing hostility is predominantly influenced by transformations within the illocutionary dimension rather than by changes occurring within the locutionary one.

Keywords: Speech Act Theory, Growing Political Hostility, Conceptualising Polarisation, Issue Versus Identity Polarisation, Conceptualising Partisan Behaviour

Introduction

The US political climate has grown increasingly hostile over the recent decades. Compared to 1960, when fewer than 5 per cent of Republican or Democratic parents expressed negative feelings towards the idea of their children marrying a member of the opposing political party, by 2008, this had grown to 25 per cent of parents, and from 2012, more than half of US parents felt like this (Iyengar *et al.*, 2012). This animosity extends far across various areas of life, affecting social connections, hiring decisions and college applications (Amira *et al.*, 2021; Iyengar *et al.*, 2019; Overgaard, 2024). Reasons for this rise in political hostility are contested within the literature, with explanations ranging from a changing media environment (Steppat *et al.*, 2022), biased exposure to news (Spohr, 2017) and the alignment of partisan identities (Mason, 2016) to issue polarisation driven by party elites (Jang *et al.*, 2024).

This paper aims to clarify this debate by introducing a new theoretical framework that distinguishes between three different dimensions of political speech. By conducting an analytical review of the literature, I argue that conceptualising the debate within this framework can elucidate the area where political behaviour changes occur. I will begin by introducing the paper's theoretical framework based on [Austin's speech act theory](#). I then briefly introduce the theoretical literature on political behaviour and explain how I incorporated this into my framework before discussing the empirical literature and different explanations of the changing political environment. Although this phenomenon is not unique to the United States, with similar changes in political behaviour occurring across Europe (Reiljan, 2020; Wagner, 2024), this paper will focus on the US as it has a broader and more comparable range of empirical evidence.

Analytical framework

In 'How to Do Things with Words', J. L. Austin argues for a distinction between three different so-called 'speech acts' that are present within our everyday speech (Austin, 1975). He defines the [locutionary act](#) as the literal utterances of our words and their immediate content. The [perlocutionary act](#) is defined as the consequences caused by speech, and finally, the [illocutionary act](#) consists of the meaning contained in

speech (Austin, 1975). This speech act theory provides an analytical framework that allows us to conceptualise and understand different aspects of our language beyond the surface level of communication. While other applications of Austin's framework within the political literature have commonly used it as a definitional framework of what falls under political speech (Harris and McKinney, 2020), such as in Langton's prominent discussion of pornography (Langton, 1993), this paper takes a different approach. Instead of using Austin's theory to define speech, this paper will build on the analytical framework it offers to distinguish between and conceptualise three different types of **political speech acts**. I use the term 'political speech act' in the broadest sense, referring to all forms of political expression, drawing on Estlund, who argues that our political actions, such as voting, are political speech acts due to their advocative and expressive nature (Estlund, 1990). Consequently, within this framework, all political expressions, such as wearing a 'Make America Great Again' cap or placing a 'Vote for Biden' sign in front of one's house, are considered political speech acts. Therefore, given the analytical premise that these acts can be considered speech acts, this paper focuses on conceptualising different types of political speech, where, paralleling the Austin framework, it distinguishes between three different dimensions of political speech. The locutionary dimension here contains the literal content of a political issue position. This can be any economic or normative interest position, such as 'a free market is best for the economy' or 'Abortion should be legal'. The perlocutionary dimension will contain all the actions one performs by expressing one's political beliefs, such as voting in an election, demonstrating against a new policy or engaging in debate with others on political issues. Finally, the illocutionary dimension will contain all the personal meaning contained within political speech, such as thinking, 'My team won!' in response to one's preferred presidential candidate winning the election or identifying as a member of a political group by saying, 'I am a conservative'.

In this paper, I aim to reconceptualise the debate surrounding polarisation and hostility in the political climate. To this end, I will first introduce the two most prominent theoretical camps, discussing voting behaviour and political alignment within the literature, before mapping them onto my framework.

Theoretical models of voting behaviour

There are two broad groups of theories on voting behaviour and political alignment within the theoretical literature. I will focus my examples on voting as this has the broadest overlap between theories; however, these theories are also used to explain political behaviour more generally, of which voting is one expression. The two groups of theories differ in the factors they ascribe to influencing the voter's choice. The first group of theories explains voting as a utility-maximising process where voters choose the party they believe will best satisfy their issue preferences. The two most prominent theories describing voting choices as 'issue-based' are the spatial and the valence models. The former, primarily influenced by Downs (1957), supposes that voters can locate themselves on one or more policy dimensions and will vote for the party closest to their preferences on this spatial dimension. If we consider a classical left-right spectrum, voters will simply vote for the party closest to their position on this spectrum. The latter model, based on a critique of the **Downsian model** by Stokes, argues that electoral decision-making is based on 'valence issues' (Stokes, 1963: 373), meaning that voters not only decide based on policy but also on which party or candidate is best suited to enact those policies – for example, based on the evaluation of the candidate's qualifications or the parties past performances (Sanders *et al.*, 2011). However, the unifying characteristic of these theories is that they conceptualise voters as making their choices based on a rational consideration of their policy interest and an issue-oriented decision on which party will maximise it.

The second group of theories, on the other hand, argues for the influence of social ties and identities on political behaviour. The sociological explanation of voting behaviour supposes that voting is driven by social pressure and that it is influenced by 'group influences exerted upon them' within their community (Lazarsfeld, 1944: 330). On the other hand, psychological theories argue that it is not social pressure but psychological attachment to different political groups and parties that influence our voting choices (Achen and Bartels, 2016; Campbell *et al.*, 1960). Contrary to the 'issue' theories, where partisanship is merely the vessel for issue beliefs or represents a 'running tally' of past performance (Bartels, 2002), the psychological theories instead argue that it reflects an internal judgement of what 'people like them' believe (Achen and Bartels, 2016: 266). Group loyalties, therefore, matter far more than the actual policy details, and people will thus adopt the views that match whatever their identity aligns with (Achen and Bartels, 2016: 231).

Both groups of theories explain factors that influence political behaviour. The first group argues that it is largely issues that affect it, whereas the latter emphasises the channel of identity. Mapping this within my theoretical framework, we can draw out the three dimensions here. Observable political actions, such as voting, demonstrating and disagreeing with others in a debate, all fall within the perlocutionary dimension. Issue beliefs fall into the locutionary dimension, and identity considerations and attachments fall into the illocutionary dimension. However, the locutionary and illocutionary dimensions are not readily evident when it comes to observation. As outside observers, we only see the perlocutionary acts that an individual performs. For example, we can observe someone wearing a 'Make America Great Again' cap. However, from this observation alone, we cannot infer the other dimensions of political speech that this perlocutionary act expresses. For example, the perlocutionary act of supporting the Trump campaign by wearing this cap might be motivated by locutionary factors, such as a belief that Trump's proposed policy to decrease the corporate tax rate will be beneficial for small businesses, or by illocutionary factors, such as an identification with a particular idea of US society and values that Trump represents for them. Therefore, we can think of every perlocutionary act to be influenced by factors from the locutionary or the illocutionary dimension. For this, I propose to imagine the three political dimensions as three layers, with the locutionary one at the bottom, the perlocutionary dimension in the middle and the illocutionary one at the top. Now, the issue-centred theories argue for a bottom-up approach, where perlocutionary acts are primarily influenced by the lower locutionary dimension, whereas the identity-centred theories emphasise a top-down approach where perlocutions are primarily driven by illocutionary considerations. However, as both political issues and the human decision-making process are immensely complex, it is probably more plausible to think of every perlocutionary act being influenced by factors from both the locutionary and the illocutionary dimensions to varying extents. For example, one might feel more connected to the identity of the Republican Party but think strongly about a specific issue position, such as abortion, that goes against the party line. Both the top and bottom layers are simultaneously influencing political behaviour. For the purpose of this article, we do not need a definitive answer to the debate within the theoretical literature about how strong the issue channels and the identity channel are compared to each other. Observing a change within one dimension while the other remains constant would suffice to determine the area from which the shift in political behaviour originates without determining the absolute influence issues or identities have on our political behaviour.

In the following section, I will engage with one of the most prominent explanations of the changing political climate – the so-called rise of 'fake news' and biased information. I use this explanation to show how my analytical framework can help distinguish between different political dimensions. By examining it within my framework and conceptualising the empirical evidence, I argue that the change in political behaviour is not located within the locutionary dimension.

The misinformation explanation

One of the most common explanations given for the growing amount of polarisation within the public has been the spreading phenomenon of ‘fake news’ (Allcott and Gentzkow, 2017; Hang Au *et al.*, 2022; Ruffo *et al.*, 2023; Spohr, 2017). While the introduction of social media and the decentralisation of information outlets has offered unprecedented access to information, it has also become increasingly difficult to reliably ensure that consumed information is derived from credible and trustworthy sources. Therefore, while citizens now have access to large amounts of information, they also are subject to being influenced by an unprecedented amount of **disinformation**. Proponents of misinformation explanations usually understand people’s disagreement arising from different preferences or information friction (Azzimonti and Fernandes, 2023). This theoretical view of political disagreement shares the interpretive framework and often explicitly uses models from what I have labelled the ‘issue-based’ group of theories. Here, political disagreement between two people usually originates in their different preferences. However, it can also form through information differences, where people with the same preferences come to different conclusions due to consuming different media and, therefore, possessing different and maybe misleading or false information. When viewing disagreement within this framework, a behaviour change, while preferences stay constant, must necessarily be due to a change in information (Allcott and Gentzkow, 2017; Azzimonti and Fernandes, 2023). The changing media setting offers a convincing cause for this change as it often seems that political disagreement has reached the basis of our democratic foundation – shared factual beliefs. This seems evident in much of the data that proponents of these hypotheses put forward. For example, when Americans were asked factual statements in a political context, such as ‘Has American GDP increased or decreased under the previous president?’, respondents reflected a clear partisan bias to answer in favour of their political party (Hannon, 2021). This means that if the previous president was a Democrat, those responding that GDP had decreased were far more likely to be Republicans, whereas those saying it has increased were more likely to be Democrats.

Analysing this within my theoretical framework, this seems like a case of locutionary disagreement. Two groups disagree about a specific, measurable issue and, based on this, form their political opinions. As this is a quantifiable issue, this form of disagreement should consist of a simple information problem. In contrast to complex normative positions, factual disagreement should be easily resolvable by providing convincing evidence to either side. However, voters are relatively invulnerable to changing their beliefs, even when provided with conclusive data to the contrary (Achen and Bartels, 2016). However, when offered a financial incentive to give correct answers in response to the same factual questions, almost all partisan bias vanished, and even partisan respondents gave correct responses to the same set of factual questions (Hannon, 2021). If, when given an incentive to do so, respondents provide accurate answers to questions they previously answered falsely, their intention cannot have been the assertion of truth. And consequently, their disagreement cannot have been within the locutionary dimension. It consisted of something other than an information problem. Therefore, disagreement must have originated from a different dimension – the illocutionary one. Rather than seeing it as locutionary disagreement, we should shift our perception to seeing the illocutionary speech act behind the responses. It then becomes more than a simple question about the economy but rather a question of which party they support. Instead of taking the answer ‘Obama has ruined our economy’ to be a factual assertion about the state of the economy, it might instead contain an illocutionary speech act expressing ‘Go Republicans!’.

Data from the [American National Election Studies \(ANES\)](#) and other experimental surveys tracking the issue beliefs of the US electorate seem to support the hypothesis that the change in political behaviour is not

occurring within the locutionary dimension. Data from the ANES, which tracks voters' self-reported positions on numerous central political issues, shows little change in polarisation on issues such as the size of government, federal spending on social security, increasing taxation for millionaires, views on gun control policy, US military involvement abroad or health care (ANES, 2024). In total, these datasets suggest that the US electorate is no more extreme in its political views than they were 50 years ago (Fiorina *et al.*, 2008). On the other hand, identification with political parties has rapidly increased over the last 20 years, with less than 50 per cent identifying as either liberal or conservative between the start of the dataset in 1972 and 2004, compared to a rapid increase to more than 60 per cent during the 2020 presidential election (ANES, 2024). Simultaneously, data shows that, on average, Americans perceive the difference in issue positions to be around 200 per cent higher than they actually are (Levendusky and Malhotra, 2016). Although there has been some debate around the extent to which issue polarisation is occurring (Abramowitz and Saunders, 1998), the data offers a convincing account that issue polarisation has stayed rather constant (Dias and Lelkes, 2022; Fiorina *et al.*, 2008; Iyengar *et al.*, 2012) and that there is little evidence suggesting issue polarisation is occurring in the general public outside of the political elites (Hannon, 2021). Instead, it is the feeling towards the rival political party that has drastically changed. Whereas the view of their own party has remained rather constant, voters view the other party as increasingly negative. Data from the ANES measuring the warmth voters feel out of 100 points towards their own and the opposing party shows that, while sentiments towards their own party have remained constant at around 71 points, feelings towards the rival party have dropped from 48 points in 1974 down to 19 points in 2020 (ANES, 2024). Compared to 'issue polarisation', this has been called 'affective polarisation' (Garzia and Ferreira da Silva, 2022), where the public is not polarised on a concrete issue but behaves in a polarised way.

Principally, affective polarisation could be driven by either locutionary or illocutionary factors. One could, for example, be hostile towards another person because one feels strongly about an issue or because of the strong connection one feels towards a political party – similar to how one can be influenced by one's emotional attachment to a sports team. Interpreting these results within the theoretical framework, we can distinguish the dimensions influencing the changing perlocutionary behaviours, such as an increase in hostile attitudes towards political out-groups. Considering that issue positions remained constant, these changes cannot be ascribed to factors from the locutionary dimension. Irrespective of how much absolute influence the locutionary dimension has on political behaviour, the findings that locutionary factors remain constant while the perlocutionary dimension is changing suggest that change is driven by factors from the illocutionary dimension. The changing perlocutions are not influenced by bottom-up locutionary influences but rather by top-down illocutionary changes.

Partisan sorting

When conceptualising the changing political environment within the analytical framework, it becomes clear that change must originate within the illocutionary dimension. As set out in the section discussing the theoretical models of voting behaviour above, those theories that emphasise illocutionary factors influencing political behaviour primarily identify social identity and group connections as the primary influences (Achen and Bartels, 2016; Campbell, 1960; Lazarsfeld, 1944). Indeed, empirical data has found a strong link between the degree to which a voter's political party is a part of their social identity and their degree of affective polarisation (Mason, 2013; Kalmoe and Mason, 2022). Consider a soldier who might identify strongly with the military, which may lead her to feel more strongly about issues connected to military spending or military engagement abroad.

Now, as social identity has been argued to be the most significant channel within the defined illocutionary dimension, changes in this dimension are likely linked to changes in social identities or their relation to politics. One avenue that has been explored within the empirical literature is that of voter alignment. Contrary to the soldier example above, most individuals will not simply be part of one social identity but instead identify as part of a plethora of different social groups and identities to varying extents, in which political parties only make up one part. For example, think of a working-class individual who is also Christian. She might be sympathetic towards the Democratic Party because of her working-class background and her affinity to labour unions, but also towards the Republican Party because of the importance she places on her faith and the traditional values she associates with. This is an example of a 'cross-cutting social identity' (Mason, 2016), an individual who identifies with groups and identities that cross the party line. These individuals act as moderating factors in their parties, decreasing the social distance between their political party and social groups typically associated with the opposing party (Mason, 2015; Röllicke, 2023). Furthermore, they increase the distance between identities within a single political party, as more social groups associated with a party will lead to less alignment between the individual's own social identities and those within their party. More diversity within a political party, therefore, simultaneously increases the distance between a voter and their own party while decreasing the distance between their party and the opposing one.

In recent years, however, political parties have become increasingly socially homogenous, and the distance between them in terms of the social identities they represent is growing (Lang and Pearson-Merkowitz, 2015). The differences between the ethnic identities of Democrats and Republicans have increased from a 26 per cent difference in 1980 to 36 per cent in 2012, and religious differences between the parties have also doubled in the same period (Mason, 2016). These two mark some of US society's most influential social identities (Achen and Bartels, 2016). At the same time, social differences within political parties are rapidly decreasing (Harteveld, 2021; Levendusky, 2009). As argued above, these factors lead to stronger feelings of identification between party members and the political party while also leading to greater distance to the opposing party. Therefore, socially and ideologically sorted partisans express far stronger political sentiments and hostility to political out-groups than unsorted partisans (Ciuk, 2023; Mason, 2016).

Within my framework, this can be conceptualised as follows. We start with the status quo, where the locutionary and illocutionary dimensions influence perlocutionary acts to different degrees, which, for simplicity, we assume are constant. Now, through partisan sorting, the personal meaning that we connect with politics increases, represented by a strengthening of the influence from the illocutionary dimension. Relative to before, this means that the top-down influences – the influences from the illocutionary on the perlocutionary dimension – have strengthened. Consequently, our current political actions should be understood as illocutionary expressions to a greater extent than before.

Conclusion

This paper introduced a novel analytical framework that distinguishes between the locutionary, perlocutionary and illocutionary dimensions of political speech acts. By applying this framework to the debate on political polarisation and the growing political hostility, the paper provided a more nuanced understanding of the origins and nature of these phenomena. Specifically, it challenged the prevalent focus on the locutionary dimension – issue-based disagreements – and instead argues that the growth in hostility is primarily driven by changes in the illocutionary dimension. While the paper suggests partisan sorting as a key driver of these illocutionary changes, future research might explore other factors within the illocutionary

dimension that might contribute to this trend. For instance, the role of media consumption and the impact of social media use could be analysed with a focus on their illocutionary effects. By expanding this line of research, we might be able to gain a more accurate understanding of the factors driving political hostility.

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Glossary

American National Election Studies (ANES): A collection of US national surveys conducted before and after every Presidential election dating back to 1948. The consistency of questions, high number of participants and long timespan make the ANES the gold standard within political science for tracking US public opinion over time.

Austin's speech act theory: A theory from the philosophy of language in which Austin argued that there are three distinct acts present whenever we speak. The locutionary act, containing the literal content of our words, the perlocutionary act, containing the consequences of our words, and the illocutionary act, containing the meaning of our words. He describes these as three different speech acts that can be analysed and conceptualised as distinct from each other.

Disinformation: This refers to the deliberate spread of false or misleading information with the intent to deceive or manipulate public opinion.

Downsian model: Developed by economist Anthony Downs, this refers to a model of political competition where political parties and voters are rational actors seeking to maximise votes. It is based on the idea that in a two-party system, parties will adopt policies that appeal to the 'median voter' – the individual whose preferences lie at the centre of the political spectrum – in order to win the election. The model emphasises voter self-interest and economic motivations in voting choice.

Illocutionary act: Originally used to describe the speech act containing the meaning behind of our words, within this article it is used to describe the political speech acts containing political meaning, such as implicit or explicit considerations about social identities.

Locutionary act: Originally used to describe the speech act containing the content of our words, within this article it is used to describe the political speech acts referring to political content, such as the holding of certain issue beliefs or beliefs surrounding a party's competence at handling an issue.

Perlocutionary act: Originally used to describe the speech act containing the consequences of our words, within this article it is used to describe the political speech acts containing expressive political behaviour, such as engaging in debates or voting.

Political speech act: This refers to any statement or declaration made by a political actor that not only conveys information but also performs an action, such as making a promise, issuing a demand or declaring support. It draws from speech act theory, where language is seen as an action that can influence reality.

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Modelling wellbeing during public health interventions for respiratory epidemics

Joseph Thomas Brooks, University of Warwick

Abstract

Throughout the COVID-19 pandemic, the use of non-pharmaceutical interventions (NPIs), including lockdown measures, by governments around the world has been informed by mathematical modelling. Broadly, these models look to gauge how well NPIs control disease transmission. Here we present a model that not only forecasts the effectiveness of NPIs in restricting contacts but also assesses their influence on the mental wellbeing of affected populations. Our model is informed by data from the United Kingdom Time Use Survey, 2014-2015. This survey recorded the time participants spent in different social settings as well as self-reported enjoyment in these settings, allowing us to augment a quantitative model of social contact behaviour with associated wellbeing estimates. We use this model to assess the effectiveness of NPIs aimed at reducing social contacts in different settings and estimate their impact on population-level wellbeing. Our findings indicate that workplace closures represent the most effective intervention for slowing disease spread, while NPIs targeting other contact locations have comparatively limited impacts on transmission. Our model suggests that workplace closures not only effectively reduce infections but also have a relatively modest effect on population wellbeing levels.

Keywords: Mathematical epidemiology, infectious diseases, COVID-19, wellbeing modelling, mixing patterns, time-use surveys.

Introduction

Since early 2020, governments have worked to control the COVID-19 [pandemic](#). Prior to the development of vaccines, [non-pharmaceutical interventions \(NPIs\)](#) were the primary method of reducing infection for governments (Hale *et al.*, 2021). In the years following the outbreak of the pandemic, there has been a rapid expansion in the literature assessing various NPIs, including mask wearing, school closures, [lateral flow testing](#) and travel restrictions in populations around the world (Banks *et al.*, 2020; Dimeglio *et al.*, 2021; Flaxman *et al.*, 2020; Jarvis *et al.*, 2020; Lai *et al.*, 2020; Leng *et al.*, 2022; Perra, 2021; Firth *et al.*, 2020; Prem *et al.*, 2020; Silva *et al.*, 2021). However, when assessing the success of these measures, it may be necessary to consider the potentially damaging effects that measures such as school and work closures have on the mental and emotional wellbeing of the affected population (White and Van Der Boor, 2020).

Early reports of COVID-19 indicated a strong age-stratified component in epidemiological risk, a suggestion that has been validated over the course of the pandemic (Li *et al.*, 2020; O'Driscoll *et al.*, 2021). Building on previous developments in infectious disease modelling (Anderson *et al.*, 1986; Keeling and Rohani, 2007; Schenzle, 1984), age-structured infectious disease models were widely used to model the dynamics of the COVID-19 pandemic (Davies *et al.*, 2020; Hilton *et al.*, 2022; Hilton and Keeling, 2020; Moore *et al.*, 2021; Prem *et al.*, 2020).

The transmission of respiratory infections such as COVID-19 is driven primarily by social contacts, making it important that relative intensities of the age-stratified transmission pathways in these models reflect high-

quality real-world estimates of age-stratified contact rates. The ‘contact survey’ methodology developed in the widely influential POLYMOD study (Mossong *et al.*, 2008), and which has since been expanded upon in other large studies such as Prem *et al.* (2021), can be used to calculate [contact matrices](#) which quantify mixing patterns in a stratified population. An alternative source for age-stratified contact rate estimates is [time-use surveys](#). These surveys collect data on how individuals spend their time (i.e. location, activities) from which researchers can infer empirical estimates of the mixing patterns of a population. Time-use surveys have previously been used to determine mixing patterns for epidemiological modelling in Zagheni *et al.* (2008), who developed a methodology to estimate time-of-exposure matrices summarising the risk of infection over time in different social settings. [Dynamic models](#) of infectious disease have also been developed using data from POLYMOD (Fumanelli *et al.*, 2012), time-use data (Ajelli *et al.*, 2014) or a combination of the two (van Leeuwen *et al.*, 2022) to inform their mixing patterns. The latter (van Leeuwen *et al.*, 2022) employed time-use data to augment contact matrices to reduce contacts by activity, thereby enabling the simulation of fine-grained interventions.

In this study, we build on previous studies of age-structured infectious disease dynamics by augmenting an age-stratified contact model with an estimate of how changes in social contact behaviour induced by NPIs can impact societal wellbeing. Our model works by estimating the [basic reproductive ratio](#), a fundamental epidemiological quantity determined by both the biology of the pathogen in question and the social dynamics of its host population, from age-stratified estimates of a population’s time-use behaviour. These time-use estimates summarise the time spent exposed to different sections of the population, from which we can estimate the basic reproductive ratio, but also the population’s self-reported enjoyment associated with different social settings, which we use as a proxy for population-level wellbeing. We model the impact of NPIs by manipulating the age-stratified time-use profile to reflect the impact of changes to social contact behaviour (for instance, by reducing average time spent in work settings and increasing time spent in home settings by a corresponding amount), and then calculating the resulting values of basic reproductive ratio and population-level wellbeing under this modified time-use profile. This allows us to identify combinations of measures that are likely to reduce transmission of infection while minimising harmful impact on population-level wellbeing.

Methods

We used data from the UK Time Use Survey 2014-2015 (TUS) (Gershuny and Sullivan, 2017) to generate age-structured contact matrices quantifying the expected amount of social contact between age groups. The TUS covered over 10,000 participants and recorded their location and activities at a 10-minute temporal resolution, providing a highly granular sample of population behaviour. Further details on the TUS and how it was used in this investigation can be found in Appendix A. The age-structured contact matrices we derive are analogous to the social contact matrices estimated in studies such as the POLYMOD study of Mossong *et al.* (2008) and Prem *et al.* (2021). Whereas estimates from social contact surveys will only account for contacts that individuals have remembered and recorded, estimates from time-use surveys have the potential to capture more diffuse casual contacts. Following the methodology of Zagheni *et al.* (2008), the social contact intensities we generate are to be interpreted as the relative risk to an individual of age class i from the aggregate of individuals of age class j in a given location on a single day. This exposure level is measured in person-hours: 1 hour spent in contact with 1 person; if an individual of age class i has probability q of being in location l in hour t and there are an expected Y individuals of age class j in that location in hour t , then the expected number of person-hours is qY . The resulting contact matrices are not symmetric because the probability of encountering an individual in a given age class is dependent on, among other factors, the

proportion of the population that are in that age class. For example, there are many more individuals in the UK aged 25-29 than aged 80-84 (ONS, 2024). This means that a single individual aged 80-84 will make many more contacts with 80-84-year-olds than in the other direction. We generate matrices for each location listed in the UK TUS and aggregate them into three broad location categories: ‘external’ interactions, capturing all non-home locations; ‘within-household’ contacts, capturing contacts between members of the same household; and ‘other home’ contacts, corresponding to an individual’s interactions in a household setting which is not their own home. This aggregation is made to reflect the fact that mixing behaviour in each of these three categories is extremely different and is treated separately; contact within a household are likely to be much more intense than those in an external location such as a workplace. A summary table of the locations recorded by the survey, including the categories into which we placed them, can be found in Appendix C.

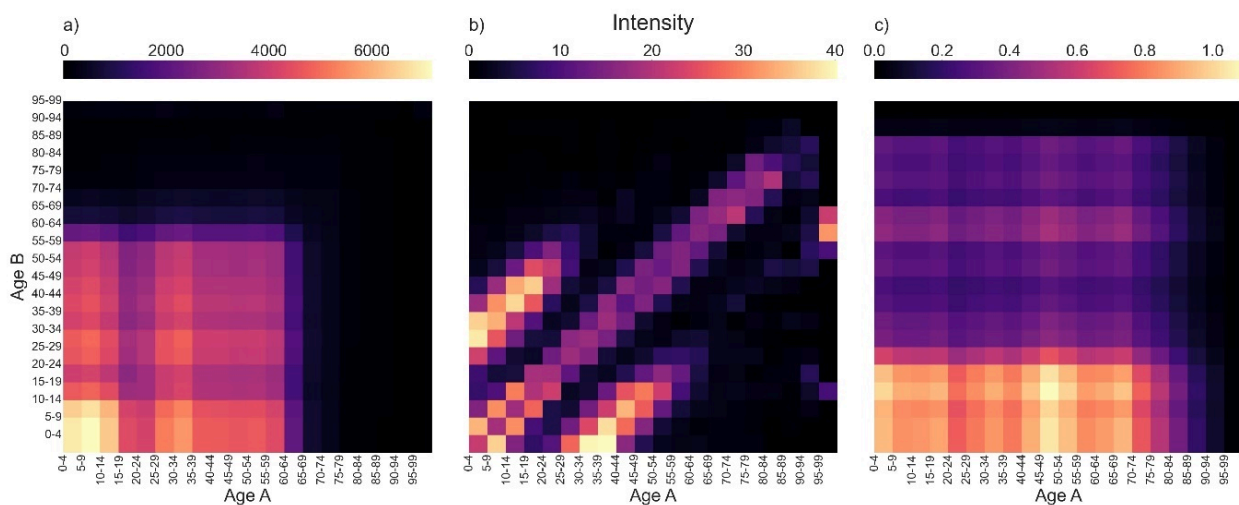


Figure 1: Estimated contact intensity matrices for the following contact settings: a) external; b) within-household; c) other home.

In Figure 1, we visualise the location-specific contact matrices generated from the TUS data. Details on the construction of these matrices can be found in Appendix B. Our contact intensity calculations assume that external contacts involve exposure to the general population, whereas within-household contacts are limited to those individuals present in a single household, and so the ‘external contacts’ intensities are of a higher order of magnitude than both sets of household-based contact intensities. External contacts (Figure 1a) are characterised by intensive mixing of younger age groups, likely at school, and a sharp decrease past age 65. Within-household contacts (Figure 1b) show a highly age dependent structure, with strong mixing of people of the same age as well as contacts between carers and children being clearly visible in the two smaller branches either side. Other home mixing (Figure 1c) is characterised by frequent contact between young individuals and individuals of all ages, indicating that younger people are more likely to be visiting individuals in another home than individuals aged 20+. These qualitative patterns are consistent with those found in previous studies of time-use data (Zagheni *et al.* 2008), and the distinctive three-armed shape of the within-household mixing [matrix](#) is similar to that seen in the POLYMOD study (Mossong *et al.*, 2008).

We analyse the epidemiological impact of NPIs by estimating the [effective reproductive ratio](#) which results from a specific package of NPIs. The basic reproductive ratio, R_0 , is defined as the average number of people infected by an infected person at the early stages of an outbreak, while the effective reproductive ratio, R , is defined analogously as the average number of people infected by an infected person under a given set of control measures. These reproductive ratios can be obtained through [eigenvalue](#) calculations on social

contact matrices (Keeling and Rohani, 2007), such as the ones we obtained from TUS data. We first assume a value of R_0 and scale the contact matrix appropriately so that it reflects this value. We can thus estimate the impact of NPIs by adjusting the contact matrices to reflect behavioural changes and then calculating the resulting effective reproductive ratio, as detailed in our Appendices D and E. Throughout these calculations we assume a constant rate of recovery – assumed to be $1/7$ so that the expected length of infection is seven days. We augmented this projection of epidemiological impact by estimating the impact of NPIs on population wellbeing using the estimates of reported enjoyment by location provided in the TUS data. We make wellbeing calculations first under the ‘best-case scenario’ assumption that additional time spent at home takes the same enjoyment value as time otherwise spent at home. Additionally, we consider a ‘worst-case scenario’ in which all additional time spent at home is assumed to take the lowest enjoyment value of 1. See Appendix F for further details on enjoyment calculations and Appendix G for distributions of enjoyment levels in selected locations.

We analysed the effect of three basic classes of NPI on R_0 and wellbeing levels. These NPIs were closure of workplaces and schools, a prohibition of visits to other households, and the closure of leisure locations such as hospitality establishments, sports centres, art museums and shops. For each of these measures, we calculated reproductive ratios and projected enjoyment scores as a function of the degree of stringency of the measure, defined to be the proportion of total time spent in a location which is replaced by time at home under the NPI. An NPI with stringency a affecting location l should thus be interpreted as scaling the probability that an individual is in location l at a given time by a , with the resulting ‘lost’ time being balanced by an increase in the probability that they are at home at that time. An NPI of stringency $a = 0$ would thus require all individuals to stay home whenever they would usually be at the location affected by the NPI, while an NPI with stringency $a = 1$ would have no impact on time use. Calculations around the implementations of NPIs are covered in Appendix D. To account for uncertainty in the relative contributions to the population-level epidemic made by within- and between-household transmission, we repeat our analysis for three different values of the susceptible-infectious transmission probability (SITP) (House *et al.*, 2022). This quantity, which we denote p , is defined as the probability that a susceptible individual is infected by the index case of an outbreak in their household. For each value of the SITP, we assume a baseline pre-NPI reproductive ratio of $R_0 = 4$, which is largely consistent with the range of estimates for the reproductive ratio of wild-type COVID-19 produced in 2020 (Liu *et al.*, 2020). Our analysis thus focuses on COVID-19-like population-level spread but explores uncertainty in the relative contributions to this spread of within- and between-household transmission, with models with lower SITPs having higher levels of between-household spread to compensate. The effect of the value of p on the contributions to the value of R_0 of different locations can be seen clearly in Table 1.

	$p = 0.25$	$p = 0.5$	$p = 0.75$
Within-household	8.83%	17.66%	26.49%
Other home	0.78%	1.86%	3.67%
Work	85.02%	75.69%	65.69%
Leisure	2.11%	1.88%	1.63%

Table 1: Contributions of different locations to R_0 under varying assumptions of within-household transmission probability.

Results

In Figure 2, we plot the estimated effective reproductive ratio R and the projected mean enjoyment score as a function of the stringency of NPIs affecting schools and workplaces (Figures 2 a)–c)), visits to other households (Figures 2 d)–f)) and locations associated with leisure activities (Figures 2 g)–i)) under the assumption of weak ($p = 0.25$), intermediate ($p = 0.5$) and strong within-household transmission ($p = 0.75$). Our results suggest that school and workplace closures are by far the most effective measure, although achieving an effective reproductive ratio below the critical epidemic threshold of $R = 1$ is only possible with highly stringent measures and when levels of within-household transmission are low. This reflects the much higher proportion of time spent at work (10.5 per cent) than in other people's homes (3.2 per cent) and in locations associated with leisure (4.7 per cent) in the TUS. Additionally, the commonality of a shared work/school day among the working and school-aged population further amplifies the absolute impact of proportional changes in time use, particularly accentuating the significance for work locations compared to other settings.

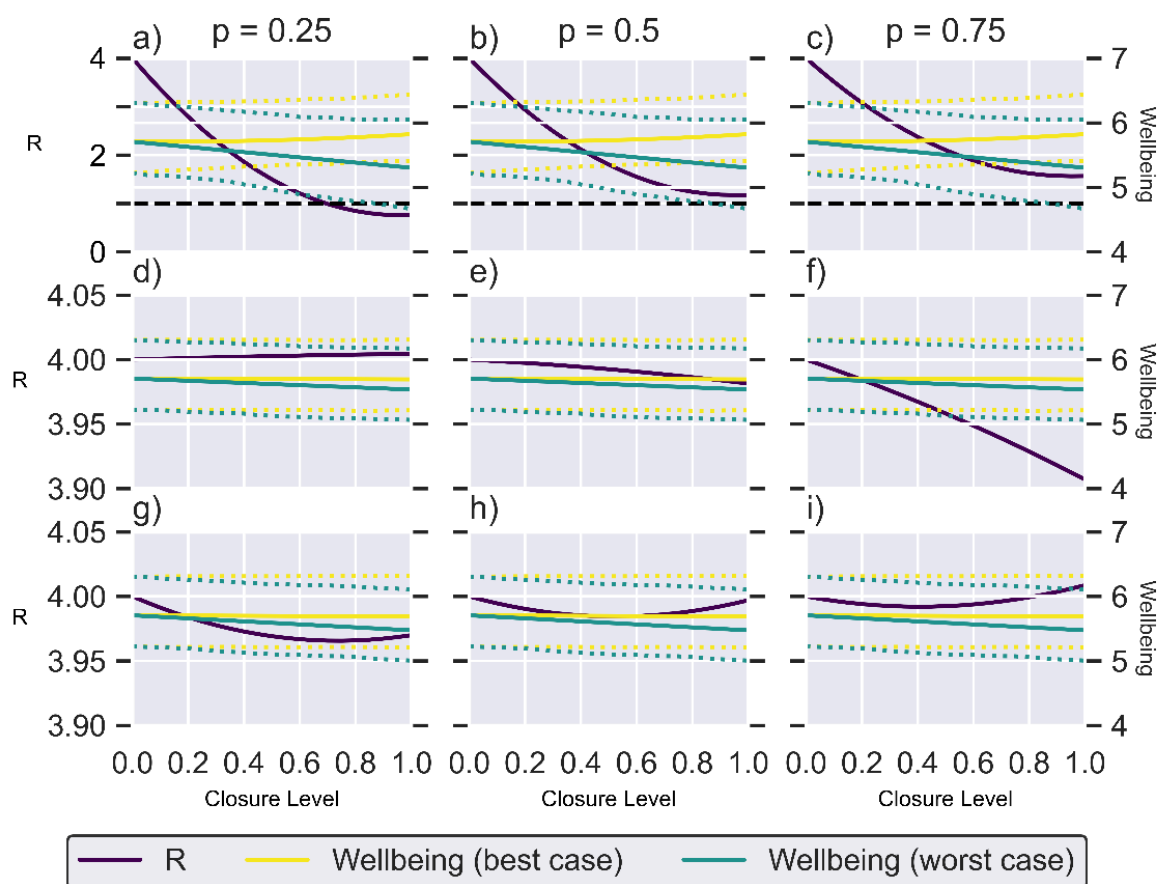


Figure 2: Single location NPI plots. a), b) and c): Projected wellbeing level and reproductive ratio as the closure levels of workplaces and schools varies, for three SITP values. d), e), f): Projected wellbeing level and reproductive ratio as the level of restriction for visits to other homes varies, for three SITP values. g), h), i): Projected wellbeing level and reproductive ratio as the closure levels of leisure locations varies, for three SITP values. Dotted lines represent the inter-quartile range (IQR) for the projected population wellbeing distribution under each of the wellbeing scenarios.

In general, the effectiveness of an NPI decreases with an increased level of within-household transmission because some of the external infections that are prevented by the NPIs are offset by an increased potential for infection within the household. The non-linear shape of the curves in Figure 2 demonstrate this offset, with highly stringent measures offering diminishing returns. This is particularly pronounced for closures to

leisure (Figures 2g)–i)). Since people spend relatively little time in leisure locations – and that time is less likely to overlap with others than say time spent at work – there is lower risk of infection in those locations. Therefore, stringent measures that result in a lot of that time being spent at home, a higher risk location, may result in a higher reproduction ratio than the base scenario with no NPIs.

Under the best-case scenario model, the NPIs have negligible to positive effect on wellbeing levels since individuals in the TUS generally reported higher enjoyment when at home than at work, and similar levels of enjoyment for time spent at home and on leisure activities away from home. Therefore, when NPIs are implemented and time spent at work or in leisure locations is moved to time spent at home, the wellbeing measure increases or is unchanged respectively. At the opposite extreme, the worst-case scenario model predicts a significant negative effect on population-level wellbeing. As is the case for the effective reproductive ratio, we see much more substantial changes in wellbeing under school and workplace closures than under the other NPIs as a result of the large amount of time spent in the workplace. The inter-quartile range (IQR) for the wellbeing under each wellbeing scenario are shown by the dotted lines. This is the IQR for all wellbeing scores, not a projection of the IQR under no intervention.

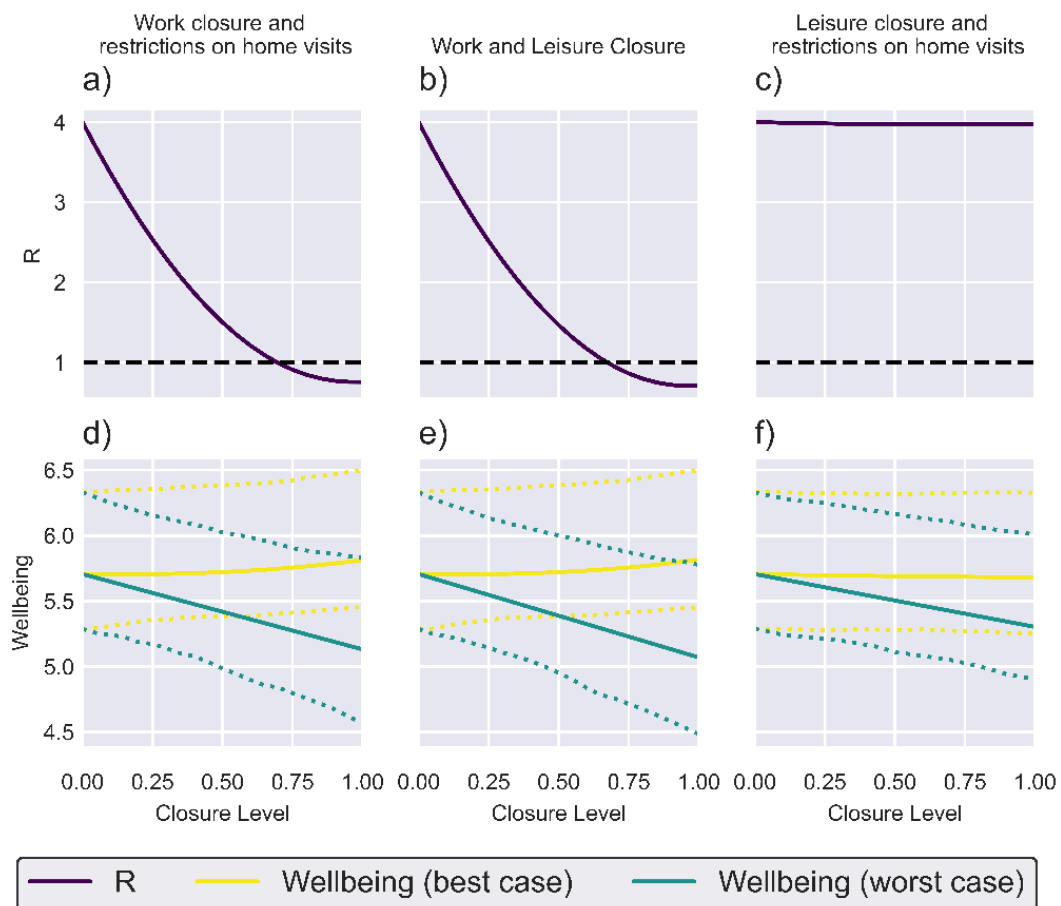


Figure 3: Two location NPI plots. a), b) and c) are graphs showing the effects of implementing the three specified combinations of NPIs on R . d), e) and f) are graphs showing the effects of implementing the three specified combinations of NPIs on wellbeing in both the best- and worst-case scenarios. All results are for an SITP value of $p = 0.25$. Dotted lines represent the IQR for the projected population wellbeing distribution under each of the wellbeing scenarios.

The projected impacts of implementing packages of NPIs targeting two categories of transmission environment are plotted in Figure 3. Packages including work closure measures (Figures 3a), b), d) and e)) are projected to be capable of bringing the effective reproductive ratio below 1, consistent with the single-route analysis which projected that work closures would be substantially more effective than restrictions targeting

other routes of transmission. Our simple wellbeing model suggests that under best-case scenario conditions, these packages will have minimal impact on mean enjoyment levels, while causing a more substantial reduction in mean enjoyment than work closures alone under worst-case scenario conditions. Targeting public leisure activities and visits to other homes (Figures 3c) and f)) is projected to have minimal impact on the effective reproductive ratio while having minimal impact on mean enjoyment under the best-case scenario and substantially reducing mean enjoyment under the worst-case scenario.

Discussion

In this study, we have used a simple mathematical model to assess the impact of NPIs both in an epidemiological sense and in terms of their potential impact on population-level wellbeing. The large sample size and fine temporal resolution of the TUS data allowed for detailed modelling of the behavioural impact of different NPI packages. Our results suggest that reductions in time spent at work are likely to have a much higher impact on the spread of infection than restrictions targeting leisure activity and household visits while having minimal impacts on population-level wellbeing. This reflects the long durations spent at work recorded by many TUS participants and the comparatively low levels of enjoyment recorded there. There is thus a substantial accumulation of person-hours in these locations, concentrating the risk of disease exposure in this location. In scenarios where transmission is primarily along external rather than within-household lines (i.e. the SITP is small), work closures are sufficient to bring R_0 below 1. In contrast, the combination of relatively short durations and high enjoyment levels recorded by TUS participants in leisure locations and at other households means that interventions focusing on these locations are projected to have minimal impacts on infectious disease transmission and negative impacts on population-level wellbeing.

Our epidemiological findings – namely that work and school are the location that contributes the most to the reproductive ratio and restrictions to these locations have the largest impact on infection spread – agree qualitatively with results of van Leeuwen *et al.* (2022). Davies *et al.* (2020) find that NPIs alone are unlikely to be sufficient to reduce the reproductive number below 1, and thus control an outbreak, unless full ‘lockdown’ measures are taken. Van Leeuwen *et al.* (2022) also finds that limiting contacts in only one category of location – for example, other home visits or shops – is not enough to reduce case numbers significantly. This agrees with our findings that the selective closure of environments is insufficient and high levels of closure of workplaces and schools would be necessary to achieve a reproductive ratio below 1.

The wellbeing model we have proposed here represents a simple ‘first order’ approximation of actual psychological responses to NPIs, intended to point the way forward to more detailed and realistic combinations of epidemiological and psychological dynamics. In practice, the like-for-like approach we have taken to our enjoyment calculations, with each block of time taking an independently assigned enjoyment value based on location, is unlikely to reflect actual human psychology. Our model could be expanded upon to take a more holistic approach to reflect overall wellbeing – for instance, by reducing enjoyment levels in proportion to the degree of disruption caused by NPIs. At the finer scale, using recorded activities alongside location to determine projected enjoyment levels could offer an improvement. In particular, our projected increase in mean enjoyment resulting from workplace restrictions may reflect enjoyment levels recorded at home mostly corresponding to leisure time, and it is possible that we will see different responses if we replace enjoyment levels recorded in the workplace specifically with levels recorded for time spent working at home in the TUS.

The main strength of our epidemiological model is its coupling to a model of wellbeing, with our basic approach pointing the way towards more complex models with the potential for much greater public health impact. In this study, we have carried out reproductive ratio calculations rather than generating medium- to long-term projections of the infectious disease dynamics. Dynamic models with social contact structures derived from the UK Time Use Survey 2014-2015 have been used to project the impact of NPIs (van Leeuwen *et al.*, 2022) and are a natural candidate for augmentation with a wellbeing model based on the TUS data. Our calculations focused heavily on the distinction between within- and between-household transmission and could be extended into a fully dynamic household-stratified transmission model based on previous stochastic and deterministic models of infection at the household level (House and Keeling, 2009; Hilton *et al.*, 2022; Ross *et al.*, 2010).

Future iterations of our model could offer improvements in realism by incorporating a more explicit social network structure; one of the reasons for the vast difference in person-hours of exposure at the household-and-workplace level is that we modelled households as a small finite unit of population, whereas all individuals recorded as being 'at work' during a given time slot in the TUS were assumed to have some degree of exposure to one another. In practice, workplaces are highly segregated, with individuals at work typically being exposed mainly to individuals who share their workplace (although individuals in retail or service jobs are an important exception to this principle). A potential solution to this would be to refine the model by incorporating statistics on the size of workplaces so that an upper limit could be placed on person-hours of exposure in the workplace. Alternative aggregation of locations into more categories could also be made to reflect different patterns of mixing and behaviour. For example, one might expect that workplace contacts would be more intense than those in other 'external' locations. However, this would involve adding an extra parameter to the model to distinguish between the per-unit-time transmission rates for work and non-work locations. In this study, we have retained a two-parameter formulation that in a real-world setting would allow the model to be parameterised from population-level incidence data and within-household epidemiological studies, both of which were available during the COVID-19 pandemic. Similarly, the 'leisure' location in our model represents an aggregate of many non-overlapping contact sites. Social contacts in the workplace also tend to be repetitive, with individuals seeing the same set of people at work every day. In a dynamic model, this means that as immunity builds up in a workplace through repeated infection, the workplace will become a less risky site of social contact with respect to infection, and this build-up of local immunity is not accounted for in our approximation of the workplace as a single fully connected population unit. The weaknesses stemming from our unrealistic assumptions around workplace and leisure contacts could be remedied either by incorporating our wellbeing calculations into a model with an explicit household-and-workplace structure (Pellis *et al.*, 2011) or through the use of a network model (Keeling and Eames, 2005). Network models have been applied both in the study of COVID-19 pandemic-era NPIs (Chang *et al.*, 2021; Karaivanov, 2020) and in the context of wellbeing modelling to study the spread of mood within social cliques (Eyre *et al.*, 2017).

Prior to the outbreak of the COVID-19 pandemic, research had suggested that quarantine is linked to adverse psychological outcomes (Brooks *et al.*, 2020). Since the outbreak of the COVID-19 pandemic, numerous studies have been conducted to scrutinise the patterns in mental health before, during and after the introduction of lockdown measures. Longitudinal analyses of UK household data revealed significant increases in psychological distress, particularly among young individuals and women, after one month of lockdown, exacerbating pre-existing disparities in mental health (Banks and Xu, 2020; Chandola *et al.*, 2022; Niedzwiedz *et al.*, 2021). Studies found that risk factors for worse mental health included being female, having a lower income and having pre-existing mental health conditions. Among females, there was found to

be much more variation in mental health compared to males, who experienced a relatively stable trajectory between April and November 2020 (Stroud and Gutman, 2021). Additionally, studies suggested that despite initial 'shock' factors leading to significant increases in mental disorders, anxiety and depression, levels of both declined in the first 20 weeks following the introduction of lockdown measures in England (Fancourt *et al.*, 2020). Studies conducted to specifically look at the mental health of UK university students found that during the COVID-19 pandemic there was a significantly elevated prevalence of depressive symptoms (Evans *et al.*, 2021; Owens *et al.*, 2022). Owens *et al.* in particular found that this heightened prevalence (55 per cent of students), linked to lack of sleep, did not decrease significantly over time (52 per cent of students). These findings could inform future efforts to construct a more sophisticated model of population wellbeing, incorporating the evolution of various wellbeing metrics during an intervention and acknowledging the demographic heterogeneity highlighted by the body of research.

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Table 2: A compilation of potential location values in a specified TUS entry, accompanied by the associated infection pathway, related restrictions influencing social interactions within the location, and the percentage of time allocated (considering day-of-the-week scaling).

Appendix A – Time-use survey data

The model was informed by data from the UK Time Use Survey (TUS) 2014-15 (Gershuny and Sullivan, 2017). Participants in the survey filled out a diary in which they recorded their location and current activity at 10-minute intervals over the course of one weekday and one weekend day, along with a record of who they were currently with, and the level of enjoyment associated with each interval scored on a scale of 1 to 7. The diary was linked to demographic information on the participant, in particular their age. Each 10-minute interval was encoded with one of 38 different location values, which are shown in Appendix C.

Individuals were put into 20 age groups, each one a five-year interval going from 0–4 years old up to 95–99 years old. The survey only recorded diary entries for individuals who were 8 years or older, however; children aged 7 and under were included in the data on household composition. In order to still incorporate contacts involving children aged 8 or under, the assumption was made that the behaviour of children aged 0–7 could

be approximated by those aged 8–9. This will not be wholly realistic, particularly for children who are not yet school age, but any discrepancies are unlikely to be significant.

We construct our pre-NPI contact matrices from time-use survey data using the method introduced by Zagheni *et al.* (2008). For each location option in the TUS, we calculated a contact matrix K_l where $(K_l)_{ab}$ was the approximate number of contacts a person in age group b has with people in age group a at the location l in a day.

We take into account day-of-the-week effects by constructing separate contact matrices for each location based on contacts recorded on weekdays and on weekends, and then taking the weighted average of the two. Hence, the contact matrix for location l , K_l , is calculated by the weighted sum of the two:

$$\text{Equation 1.} \quad K_l = \frac{5}{7} K_l^{\text{weekday}} + \frac{2}{7} K_l^{\text{weekend}}$$

This weighted sum is suppressed in the definitions of the various location contact matrices for ease of exposition.

We use $T = \{t_1, \dots, t_{144}\}$ to denote the set of 10-minute time intervals used in the TUS, so that $t_1 = [0, 10)$ corresponds to the 10 minutes starting at 12:00 a.m. and ending at 12:10 a.m. We use $P_t(l, a)$ to denote the estimated probability that under the conditions of the TUS (i.e. in the absence of NPIs) during a time interval $t \in T$ a given individual experiences a contact event of 10 minutes of exposure to a single individual of age class a in a given location, l .

Our model of the transmission process distinguishes between transmission within a household, between visitors and residents of a household, and at external non-household locations. In order to simplify notation, the locations coded in the TUS data as ‘Other people’s home’ and ‘Home’ will be denoted OH and HH respectively.

Appendix B – Contact matrices constructions

Household contact matrices

Using the household composition data from the TUS, we construct a matrix H where each entry $(H)_{ab}$ is the estimated expected number of people in age group b in a household that has at least one individual in age group a ,

$$\text{Equation 2.} \quad (H)_{ab} = \begin{cases} E[n_b | n_a > 0] - 1 & \text{if } a = b \\ E[n_b | n_a > 0] & \text{otherwise} \end{cases}$$

where n_a is the number of people in age group a in a given household. In the case where $a = b$, 1 is subtracted to avoid counting contacts with yourself. Using this matrix, we can construct a contact matrix for mixing within the household:

$$\text{Equation 3.} \quad (\mathbf{K}_{HH})_{ab} = \sum_{t \in T} [P_t(HH, b)P_t(HH, a)(\mathbf{H})_{ab}]$$

Each term in the summation gives the expected number of contacts with age class a members of their own household experienced by an individual of age class b during a single 10-minute interval, so that $(\mathbf{K}_{HH})_{ab}$ gives the expected number of contacts of this type over an entire day.

Other home–visitor contact matrices

We consider visits to other households as a distinct category of mixing on the basis that these contacts are likely to be with close friends and family members, meaning that they will differ from work/leisure contacts in terms of physical proximity and frequency of touch. This is reflected in the package of NPIs implemented in the UK during the height of the COVID-19 pandemic, which placed separate restrictions on household visits and work/leisure activities.

We calculate the expected number of ‘Other people’s home’-coded contacts with individuals of age class a experienced by an individual of age class b as follows:

$$\text{Equation 4.} \quad (\mathbf{K}_{OH})_{ab} = \sum_{t \in T} [P_t(OH, b)P_t(HH, a)E[n_a]]$$

Here $E[n_a]$ is the average number of individuals of age class a per household. Each term in the summation encodes the probability that an individual of age class b spends time interval t in a household other than their own, multiplied by the expected number of individuals of age class a belonging to that household who are at home during that time interval. While this captures the exposure experienced by individuals visiting a household to members of that household, our model will not capture the effect of cross-contact between separate visitors to a household. Given the relatively small amount of time individuals spend visiting other households in the TUS, the effect of ignoring these cross-contacts is likely to be minor. In particular, cross-contact between members of the same household visiting a second household is very unlikely to make a substantial contribution to population-level infection since infections between members of a shared household are overwhelmingly likely to take place within their own household given the long time periods spent there.

External contact matrices

We define external contacts to be all contacts made in settings other than ‘Home’ or ‘Other people’s home’. We will denote the full set of external locations by L . The expected number of contacts with individuals of age class a made by an individual of age class b in location $l \in L$ during a single day is given by:

$$\text{Equation 5.} \quad (\mathbf{K}_l)_{ab} = \sum_{t \in T} [P_t(l, b)P_t(l, a)N_a]$$

where N_a is the total number of people in age group a in the whole population. This defines a location l -specific contact matrix K_l , and summing these over all the external locations in the TUS data gives the external contact matrix we use in our analysis:

Equation 6.
$$\mathbf{K}_{ext} = \sum_{l \in L} \mathbf{K}_l$$

Appendix C – Location codes table

Location Label	Pathway	Restrictions	Time spent (%)
Unspecified location	ext		0.5753%
Unspecified location (not travelling)	ext		0.8544%
Home	HH		69.0225%
Second home or weekend house	HH		0.1956%
Working place or school	ext	Work Closure	10.5454%
Other people's home	OH	Restrictions on home visits	3.2442%
Restaurant cafe or pub	ext	Leisure Closure	1.1801%
Sports facility	ext	Leisure Closure	0.6378%
Arts or cultural centre	ext	Leisure Closure	0.0618%
Parks/countryside/coast	ext	Leisure Closure	0.4751%
Shopping centres markets other shops	ext	Leisure Closure	1.3722%
Hotel guesthouse camping site	ext	Leisure Closure	0.9423%
Other specified location (not travelling)	ext		2.1841%
Unspecified private transport mode	ext		0.0406%
Travelling on foot	ext		1.6769%
Travelling by bicycle	ext		0.1160%
Travelling by moped/motorcycle	ext		0.0199%
Travelling by car as the driver	ext		1.8169%
Travelling by car as a passenger	ext		0.4595%
Travelling by car – unspecified	ext		1.0611%
Travelling by lorry or tractor	ext		0.1252%
Travelling by van	ext		0.2251%
Other specified private travelling mode	ext		0.0259%
Unspecified public transport mode	ext		0.0030%
Travelling by taxi	ext		0.1087%
Travelling by bus	ext		0.3901%
Travelling by tram or underground	ext		0.0760%
Travelling by train	ext		0.2260%

Travelling by aeroplane	ext	0.0423%
Travelling by boat or ship	ext	0.1096%
Travelling by coach	ext	0.0272%
Waiting for public transport	ext	0.0492%
Other specified public transport mode	ext	0.0199%
Unspecified transport mode	ext	0.7103%
Illegible location or transport mode	N/A	0.0014%
No answer/refused	N/A	1.3782%
Interview not achieved	N/A	0.0%

Table 2: A compilation of potential location values in a specified TUS entry, accompanied by the associated infection pathway, related restrictions influencing social interactions within the location, and the percentage of time allocated (considering day-of-the-week scaling).

Appendix D – Implementation of NPIs

In our model, NPIs act to reduce the probability that an individual is in a specific location or group of locations in a given time interval and increase the probability that they are at home in that time interval by a corresponding amount; since the total amount of time in a day is constant, any reduction in time spent in an external location must be balanced by an increase in time spent at home. We encode a specific NPI as a set of age-stratified vectors $a_l(t) = (a_l^1(t), \dots, a_l^{20}(t))$ where $a_l^a(t) \in [0,1]$ is the probability that an individual of age class a is in location l during time interval t relative to the equivalent probability in the absence of NPIs. The relative reduction in probability is thus given by $1 - a_l^a(t)$. In this study, we will not consider measures such as curfews which only affect mixing during certain times of day, so that $a_l(t)$ does not change with t and we can thus suppress the time dependence and write a_l . We will denote the set of locations affected by the NPI as L^l .

Under the NPI specified by $\{a_l: l \in L^l\}$, the resulting within-household contact intensities are given by

$$\text{Equation 7.} \quad (\mathbf{K}'_{HH})_{ab} = \sum_{t \in T} \left(P_t(HH, b) + \sum_{l \in L^l} (1 - \alpha_l^b) P_t(l, b) \right) \left(P_t(HH, a) + \sum_{l \in L^l} (1 - \alpha_l^a) P_t(l, a) \right) (\mathbf{H})_{ab}$$

which cannot be easily expressed in matrix terms. For the home-visit contact matrix, the new contact intensities will be given by:

$$\text{Equation 8.} \quad (\mathbf{K}'_{OH})_{ab} = \sum_{t \in T} \left(\alpha_{OH}^b P_t(OH, b) \right) \left(P_t(HH, a) + \sum_{l \in L^l} (1 - \alpha_l^a) P_t(l, a) \right) E[n_a]$$

which also cannot be easily expressed in matrix terms. The resulting matrices for an external location, $l \in L^l$, affected by the NPI, is given by

$$\text{Equation 9.} \quad (\mathbf{K}'_l)_{ab} = \sum_{t \in T} \alpha_t^b P_t(l, b) \alpha_t^a P_t(l, a) N_a = \alpha_t^b \alpha_t^a (\mathbf{K}_l)_{ab}$$

namely, $\mathbf{K}'_l = \alpha_l^T \mathbf{K}_l \alpha_l$. The external contact matrix \mathbf{K}_{ext} resulting from the NPI is then given by replacing the matrices encoding locations affected by the NPI with their adjusted versions in Equation 6:

$$\text{Equation 10.} \quad \mathbf{K}'_{\text{ext}} = \left(\sum_{l \in L \setminus L'} \mathbf{K}_l \right) + \left(\sum_{l \in L'} \mathbf{K}'_l \right)$$

Appendix E – Reproductive ratio calculations

In this study we quantify the effectiveness of NPIs by estimating the effective reproductive ratio, R_e , of the infection under a specified package of NPIs. This is defined as the expected number of secondary cases generated by a single case under conditions of low background immunity; our analysis is thus focused on the effectiveness of NPIs in terms of their ability to prevent a new pathogen from establishing itself in the population, rather than in terms of real-time application during an evolving epidemic. We distinguish the effective reproductive ratio under a package of NPIs from the basic reproductive ratio, R_0 , which is defined to be the reproductive ratio in the absence of NPIs. In what follows, we outline the calculation of the basic reproductive ratio using estimates of contact intensities derived from TUS data; the same set of formulae define the effective reproductive ratio under a package of NPIs when the underlying contact behaviours are replaced by projected contact behaviours under those NPIs.

Our model distinguishes three transmission pathways: within-household transmission (HH), defined as transmission occurring with a household between two individuals who live in that household; other household transmission (OH), defined as transmission occurring with a household between one individual who lives in that household and one who does not; and external transmission (ext), defined as transmission at any location other than within the home. Each transmission route has an associated basic reproductive ratio, defined to be the expected number of secondary infections generated along that route by a single case over the course of their infectious period in the absence of immunity, denoted R_0^{HH} within-household transmission, R_0^{OH} for other household transmission, and R_0^{ext} for external transmission. The basic reproductive ratio is given by summing these route-specific reproductive ratios:

$$\text{Equation 11.} \quad R_0 = R_0^{\text{OH}} + R_0^{\text{HH}} + R_0^{\text{ext}}$$

The within-household basic reproductive ratio is defined in terms of the *susceptible-infectious transmission probability*, the probability that a susceptible individual is infected by a single infectious individual within their own household, which we will denote p_{HH} . If an infectious individual transmits to each susceptible individual within their household at rate σ_{HH} whenever both individuals are in the household, then infection events can be modelled as a [Poisson process](#) with intensity σ_{HH} . The expected duration of this process is given by the expected time per day which both individuals are at home, T_{HH} , multiplied by the expected duration of infection, $\frac{1}{\gamma}$. The mean of the Poisson process is thus given by

Equation 12.
$$\lambda = \frac{\sigma_{HH}T_{HH}}{\gamma}$$

The susceptible individual is infected the first time an event occurs in the Poisson process, so that the probability that they are not infected during the infectious individual's infectious period is given by $\text{Prob}(X = 0)$, where $X \sim \text{Poisson}(\lambda)$. The SITP is thus given by

Equation 13.
$$p_{HH} = \text{Prob}(X \geq 1) = 1 - \text{Prob}(X = 0) = 1 - e^{-\lambda}$$

In practice, the SITP can be estimated empirically from longitudinal studies of infection (House *et al.*, 2022), while the pairwise transmission rate σ_{HH} cannot be measured directly. Given an estimated infectious period and an average contact duration T_{HH} estimated from the TUS, we can rearrange Equation 13 to get

Equation 14.
$$\sigma_{HH} = -\frac{\gamma}{T_{HH}} \log(1 - p_{HH})$$

If we assume that infection between residents and visitors to the household happens at the same pairwise transmission rate as infection between members of a shared household, then we can use Equation 14 to estimate an SITP for the other home route of transmission. Denoting this SITP by p_{vis} , we have

Equation 15.
$$p_{vis} = 1 - e^{-\left(\frac{T_{OH}\sigma_{HH}}{\gamma}\right)}$$

where T_{OH} is the expected time per day spent in other households measured by the TUS.

The basic reproductive ratio associated with within-household transmission is given by multiplying the SITP by the expected number of susceptible individuals which the first case in a household will be exposed to during their infectious period. This is precisely the mean household size, N_H , minus one (since the infectious individual cannot transmit to themselves). Thus

Equation 16.
$$R_0^{HH} = p_{HH}(\bar{N}_H - 1)$$

and analogously

Equation 17.
$$R_0^{OH} = p_{vis}\bar{N}_H$$

The basic reproductive ratio for external transmission is given by

Equation 18.
$$R_0^{ext} = \frac{\sigma_{ext} T_{ext}}{\gamma}$$

where σ_{ext} is the transmission rate across external social contacts and T_{ext} is the average duration of exposure across all external settings in a single day.

In a real-world outbreak setting, we generally have population-level estimates of R_0 which are not subdivided by transmission pathway. Given estimates of the SITP, p_{HH} , and the distribution of household sizes, we can estimate the within-household and other household reproductive ratios using Equations 16 and 17 respectively. Given an estimate of the population-level basic reproductive ratio R_0 we can then estimate R_0^{ext} using equation 10. With this in mind, in our study we modelled the impact of NPIs under a range of values of R_0 and p to explore the impact of differences in overall transmissibility and the relative contributions of infection within the household and elsewhere.

The impact of NPIs is to adjust the average exposure times while keeping transmission rates fixed, as outlined in the section titled 'Implementation of NPIs'. In the absence of NPIs, we use values estimated from the TUS data: given an estimate of the person-time exposure matrix K_i for transmission pathway $i \in \{HH, OH, ext\}$, the average daily exposure time T_i associated with this pathway is given by the leading eigenvalue of K_i . The transmission rates across contacts can be estimated from estimates of R_0 and p by rearranging Equations 16 and 18 as follows:

Equation 19.
$$\sigma_{HH} = -\frac{\gamma}{T_{HH}} \log(1 - p_{HH})$$

and

Equation 20.
$$\sigma_{ext} = R_0^{ext} \frac{\gamma}{T_{ext}}$$

Under an NPI which replaces the exposure times T_{HH} , T_{OH} , and T_{ext} with T'_{HH} , T'_{OH} , and T'_{ext} respectively, the effective reproductive ratio is given by:

Equation 21.
$$R_e = R_e^{ext} + R_e^{HH} + R_e^{OH}$$

where

Equation 22.
$$R_e^{HH} = \left(1 - e^{-\frac{\sigma_{HH} T'_{HH}}{\gamma}}\right) (\bar{N}_H - 1),$$

Equation 23.
$$R_e^{OH} = \left(1 - e^{-\frac{\sigma_{HH} T_{OH}'}{\gamma}}\right) \bar{N}_H$$

and

Equation 24.
$$R_e^{ext} = \frac{T_{ext}' \sigma_{ext}}{\gamma}.$$

Appendix F – Enjoyment measure

The TUS data includes estimates of mean enjoyment levels associated with each location category; each survey participant recorded a subjective level of enjoyment on a scale of 1 to 7 during each time interval of the survey day, and the mean enjoyment level for a location is calculated by taking the mean of the recorded enjoyment level over all time intervals associated with that location over all survey participants. These location-specific mean enjoyment levels are stratified by age, so that for each location $l \in L$ we can define an age-stratified enjoyment vector e^l . The true impact of NPIs on wellbeing is likely to be difficult to quantify, so to cover a range of possibilities, we model a simple best-case scenario and a simple worst-case scenario, with more complex real-world responses lying somewhere between the two:

- Best-Case Scenario: any extra time spent at home is assigned the mean enjoyment level associated with time at home based on the results of the TUS;
- Worst-Case Scenario: any extra time spent at home is assigned the lowest possible enjoyment level, i.e. 1.

All the NPIs we consider in our modelling work by keeping individuals at home when they would otherwise be in some other location, and so we only need to consider changes in subjective enjoyment resulting from increased time at home balanced by decreased time elsewhere.

Denote by P the total number of people-minutes recorded by the TUS – 144 times twice the total number of survey participants – and for each location denote the total number of people-minutes spent by people in age group a in location l in the absence of NPIs as P_a^l . We define population-level enjoyment to be the sum over all locations and age groups of the total number of person-minutes spent by members of that age group in that location multiplied by the mean enjoyment associated with that age group and location, divided by the total number of people-minutes

Equation 25.
$$\frac{1}{P} \sum_{l \in L} \sum_a (P_a^l e_a^l).$$

If the effect of an NPI is to replace the person-minute profile P_a^l with $a_a^l P_a^l$, for non-home locations then under the best-case scenario, the total population-level enjoyment is given by

Equation 26.
$$\frac{1}{P} \left[\left(\sum_{l \in L \setminus \{Home\}} \sum_a (\alpha_a^l P_a^l e_a^l) + (1 - \alpha_a^l) P_a^l e_a^{Home} \right) + \left(\sum_a P_a^{Home} e_a^{Home} \right) \right].$$

The worst-case scenario is calculated as

Equation 27.
$$\frac{1}{P} \left[\left(\sum_{l \in L \setminus \{Home\}} \sum_a (\alpha_a^l P_a^l e_a^l) + (1 - \alpha_a^l) P_a^l \right) + \left(\sum_a P_a^{Home} e_a^{Home} \right) \right].$$

Appendix G – Enjoyment histograms by location

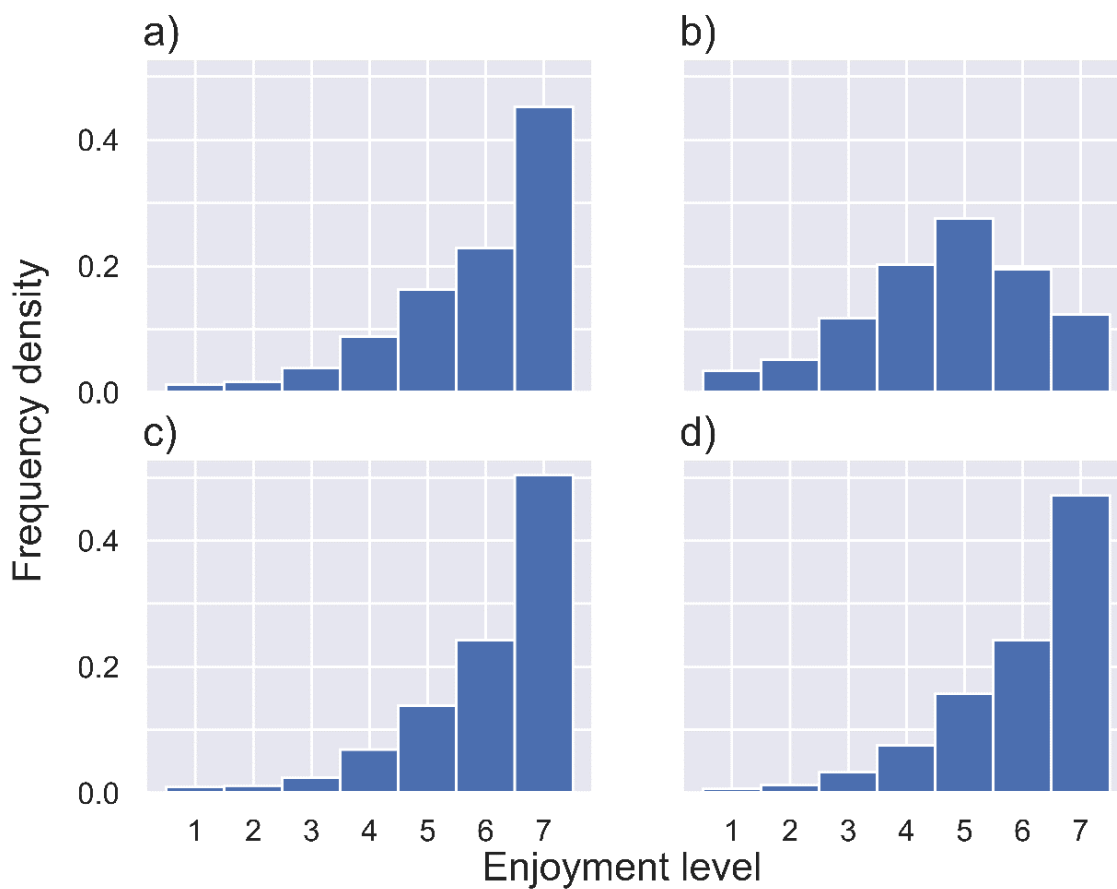


Figure 4: Histograms for the enjoyment levels reported in the TUS at a) home, b) work/school, c) other people's homes, d) leisure locations.

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Glossary

Basic reproductive ratio: Expected number of infections generated by a single infection in a population with no pre-existing immunity and in the absence of control measures.

Contact matrix: A matrix in which the entries quantify the intensity of social contacts relevant to infectious disease transmission between different groups in a population stratified into age or risk classes.

Dynamic model: A mathematical tool used to analyse the evolution of a physical, biological or social process over time.

Effective reproductive ratio: Expected number of infections generated by a single infection in a population during an evolving outbreak of infection, potentially in a partially immune population and with control measures implemented.

Eigenvalue: The scalar multiplier associated with a given eigenvector of an operator.

Lateral flow test: Common testing method which detects antigens that are present when a person has COVID-19.

Matrix: (pl. matrices) A table-like mathematical structure which encodes a specific geometrical transformation in multidimensional space.

Non-pharmaceutical intervention (NPI): Any public health measure that does not primarily use medication, e.g. lockdown.

Pandemic: An outbreak of a disease that effects an entire country, several countries or the whole world at one time.

Poisson Process: A stochastic process in which events occur at a constant rate and independently of one another

Time-use survey: A survey designed to quantitatively study human behaviour by asking participants to record their social activities at different times of day.

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The Philosophy, Politics and Economics of Food. An Introduction to the Special Section

Laura Gelhaus, Lucas Huan, Aaron Smith and Vivek Venkatram, University of Warwick

Abstract

The undergraduate degree Philosophy, Politics and Economics (PPE) has attracted a stereotype of developing future political and financial elites with little regard to the subject material covered in the programme. This clashes with student expectations and university messaging on PPE, which, especially at the University of Warwick, highlight the importance of interdisciplinary perspectives for addressing complex global challenges. This introduction to this special section argues that it is imperative to centre students' voices in defining PPE, and, to this end, showcases a co-creation process aimed at developing an interdisciplinary module. The resulting module on the PPE of food thereby speaks to how students understand their PPE: as a programme that breaks with interdisciplinary silos to answer complex questions relevant to the world we live in.

Keywords: Interdisciplinarity, PPE, Food, Philosophy, Politics, Economics, Co-creation

Introduction

Academia is at a crossroads. A third of students feel dissatisfied with their university, and nearly half of all students believe university does not represent value for money (Friday, 2023). At the same time, UK universities are calling for new funding models to prevent financial collapse (Ogden and Waltman, 2024). For academia to survive and thrive, a change is needed.

This issue is particularly pronounced in the subject of Philosophy, Politics and Economics (PPE), which has come to represent an academic pursuit for future Prime Ministers, political elites and financiers. In 2017, an article in *The Guardian* titled 'PPE: the Oxford Degree that runs Britain' asked whether it 'has produced an out-of-touch ruling class' (Beckett, 2017). At the core of these debates are perceptions that students study PPE mostly as a tool to increase status. The desire to attain an interdisciplinary insight into the most pressing issues of our time rarely features when PPE students are discussed. Yet, PPE is not just a topic reserved for the political elite at Oxford, nor just stimulating discussion only inside debating rooms and exam halls. There is real value to an integrated, interdisciplinary approach in highlighting what would otherwise lie unseen when applied to the important topics of life.

If you were to ask a PPE student or a prospective undergraduate at a university open day what PPE means to them, you would inevitably receive a significant variety of answers. In their own way, these answers would all provide crucial insight into how young people perceive the modern world. Instead of suppressing that creativity and forcing conformity to strict patterns of academic practice, academia could consider a new approach: to let students define PPE, to be active participants in the creation and study of their subject, to be seen as academic minds rather than tuition-fee-paying customers. In doing so, there is a chance to redefine the benefit of PPE and revalue the university experience to a new generation of bright academic minds. It is this thought process that encouraged a group of academics and students at the University of Warwick to recreate the module 'PPE: Interdisciplinary Topics' thinking through the PPE of food.

Defining PPE through co-creation

Funded by the Warwick International Higher Education Academy, ‘the UK’s first institutional academy of educators’ (Warwick Higher Education Academy, 2024), the project aimed to develop a model for student co-creation for interdisciplinary modules in joint degrees (Gelhaus and Ferguson, 2023). The co-creation process comprised two groups, a Curriculum Group and a Directors Group. With a mix of PPE students and staff from the three PPE departments in both groups, the Curriculum Group proposed the module design, which was subsequently discussed and eventually decided on by the Directors Group (Gelhaus and Ferguson, 2023: 5). By involving students in both groups, students developed greater ownership over the module topics, reading lists, structure, delivery and assessment methods.

Much of our discussions focused on how to design a ‘truly’ interdisciplinary PPE module. In PPE and similar joint-degree courses, students rarely engage in interdisciplinary thinking. Instead, they are typically siloed into single-discipline modules offered separately by the respective departments. However, this may contrast students’ expectations of their degree (Gelhaus and Ferguson, 2023: 6). To bridge the three disciplines, this project consistently selected topics and readings with an interdisciplinary approach in mind (Gelhaus and Ferguson, 2023: 11). This means that each weekly topic should be studied through an integration of perspectives from philosophy, politics and economics. Hence, contrasting common PPE stereotypes, the module co-creation process was marked by a particular focus on ensuring interdisciplinarity throughout the module.

Students in the co-creation group also highlighted that students should take a more active role in shaping their assessments. This would define ‘their’ PPE course further by studying those questions that matter most to them rather than responding to pre-formulated essay prompts. Therefore, following the established student-as-researcher paradigm (Walkington, 2015), the module would also include the development of research skills and encourage an independent exploration of topics beyond lectures and reading lists. Students therefore could design their own research agenda, first through a research proposal and finally a research paper, some of which are included in this special section.

Further to facilitating students to define ‘their’ PPE course, the co-creation process also had other benefits. First, it contributed to decreasing the student–staff divide through fostering an understanding that both sides are passionate about teaching and learning PPE (Gelhaus and Ferguson, 2023: 8). Second, co-creators noted that this process integrated students into the university community and helped them understand different considerations of module design (Gelhaus and Ferguson, 2023: 9f.). Finally, module co-creators noted that the project presented them with unique opportunities to venture beyond the beaten track of similar modules (Gelhaus and Ferguson, 2023: 10f.).

A PPE lens for food

Students in the co-creation process also emphasised the importance of understanding PPE in connection to challenging real-world problems as well as to their everyday lives. The topic of food is an ideal starting point.

Few of the pressing challenges for the global food system can be understood, let alone addressed, through a single disciplinary lens. In March, an Integrated Food Security Phase Classification report noted that 96 per cent of the population in Gaza faces high acute food insecurity and imminent famine (Integrated Food Security Phase Classification, 2024: 1f.). Not only is Gaza yet another reminder of the importance of understanding famine (see e.g. De Waal, 2024), it also clearly raises questions of the moral and political

responsibility to address it. Russia's ongoing war on Ukraine has had unequal economic consequences and particularly affected some of the world's poorest populations (Parasecoli and Varga, 2024: 4f.). The war has also highlighted the connection of food and national identity through debates on the UNESCO Intangible Cultural Heritage Protection for the Culture of Ukrainian borscht cooking (UNESCO, 2022) and raised normative questions of whether the Ukrainian government should focus on the support of large Ukrainian agri-businesses or family farmers (Mamonova *et al.*, 2023). Overall, in what McMichael (2009) has conceptualised as the corporate food regime, questions of politics and economics are easily blurred in understanding the relative power of large food-processing firms and local producers or the role of national governments in a world marked by globalisation. Any understanding of global food regimes will also be incomplete without questions of philosophy. Should there, for instance, be a moral economy based on ethics of care (Goodman, 2004)? And how should we conceive of non-human entities in answering key questions on our food regime, such as animals or the environment (Jamieson, 1998; Singer, 2015; Zangwill, 2021), especially in times of excessive habitat destruction and climate emergency?

Global food systems, while seemingly abstract, have concrete effects on how we eat, and thus affect deeply personal choices. For example, questions discussed in the module included the ethics of buying locally or consuming meat, as well as how much we as consumers value food beyond its sustenance. For instance, are we willing to pay more for commodities with Fair Trade labels, those that are produced close to us, or that are protected as local specialities, and if so, what do our consumption choices imply for producers (Bowen and Zapata, 2009; Ferguson and Thompson, 2021; Wilson and Jackson, 2016)? How does public health messaging affect the choices of not only what we consume, but also how infants are fed, and is existing messaging reflective of parents' moral obligations to their children and themselves (Moriarty and Davies 2024)?

Connecting the dots: The special section

The papers in this special section approach many of the above questions through the lens of PPE. Students developed these papers throughout the module 'PPE: Interdisciplinary Topics', first as research proposals and then as full research papers. While many papers connect to themes discussed in the module, all ventured independently beyond the syllabus to explore what the PPE of food means to students, and this is reflected in the wide variety of topics discussed. Despite this variety, the papers in this section can be broadly categorised into two categories: those papers that discuss how philosophical questions inform food choices, and those that are focused on the consequences of these choices.

The papers in the first category investigate how questions of ethics, morality and freedom (may) inform both personal and political choices on food. Oliver's contribution takes on the question of value, as it investigates whether private or national brands are morally superior. While private brands, also referred to as supermarket's own brands, are often presented as morally superior through a perception that they offer cheaper alternatives than national brands, the paper indicates the shortcomings of these arguments. This includes that effects on price are not uniform as well as other drawbacks – in particular, private brands' negative effect on innovation.

Gunalan tackles a key challenge of humankind: environmental degradation and deforestation. She considers this through a moral analysis of the European Union's Regulation on Deforestation-free Products, primarily focusing on the implication for palm-oil producers. Crucially, she investigates whether the European Union, given especially European histories of colonial exploitation, has a moral obligation to palm-oil producers in the Global South.

Knoth investigates the puzzle of why tobacco and junk food are regulated differently in the UK, even though both have been demonstrated to have detrimental effects on individuals' health. Arguing that one piece of the puzzle may be how policymakers conceive personal freedoms, he demonstrates that parliamentary debates on junk food are characterised by a negative conception of freedom, focusing on the freedom of humans from external intervention and the assumptions that humans know what is best for them. On the other hand, debates on tobacco centre around positive conceptions of freedom, in which the government presents itself as promoter of individuals' supposedly 'true wish' to stop smoking. Primarily, this difference can be explained by different conceptions of rationality in consumption decisions: while for tobacco, consumers' choices are presented as irrational due to nicotine's addictive potentials, the addictive potentials of junk foods are not discussed.

The set of papers in the second category instead discuss the consequences and performance of food politics. More specifically, both papers in this category explore questions of food and national identity. Bye's paper explores processes of gastronationalism in Cornwall. By analysing promotional material by Cornish tourist boards, he finds that Cornish food is presented as an integral part of Cornish identity, and that Cornish identity here is constructed as national, rather than simply a regional identity. Thereby, he offers insightful reflections on the existing understanding of gastronationalism. First, Cornwall represents a curious case in which foods are used to construct a national identity vis-à-vis a hegemonic national identity, in this case, an English identity. Second, it contributes an argument on cultural revivalism, which has been less pronounced in the literature on gastronationalism.

Finally, Huan's paper shifts our attention to the intersection of national politics and international trade as he analyses Malaysia's ban on exports of chicken as well as its representations in government and media discourse. Drawing on insights from securitisation theory, Huan finds that while government actors and local media downplay the relevance of the export ban for Singapore, foreign media engaged in securitising speech. These media sources explicitly constructed the process as a crisis and drew connections of the ban to chicken rice as being Singapore's de facto national dish, thereby constructing the ban as an existential threat. Hence, this paper adds two interesting insights to the securitisation literature: First, it investigates food as a seldomly explored sector. Second, it does so in a context in which local actors aimed to de-securitise in contrast to foreign media.

The collection of papers in this special section spans an impressive range of relevant questions, all of which require breaking free from strict disciplinary silos. If we accept this module as reflecting an understanding of PPE as a subject that focuses on the most important topics in our lives and studies them from an interdisciplinary angle, then perhaps this harnesses potential for future PPE-educated Prime Ministers as being equipped to face the challenges we face.

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Are Private Brands Morally Inferior to National Brands?

Albert Oliver i Ribé, University of Warwick

Abstract

This paper investigates the moral distinctions between private brands (or private labels) and national brands within the context of economic, sustainability and innovation impacts. Private brands, owned and controlled by retailers, increasingly dominate the market, raising ethical concerns. Key areas of analysis include economic effects on consumers and producers, sustainability practices and the ethical implications of innovation and image copying. The findings suggest that private brands are morally inferior to national brands due to their detrimental impact on sustainability and innovation. The paper concludes with proposed political interventions aimed at mitigating these ethical issues, highlighting the need for more stringent regulations to ensure fair practices and enhance sustainability within the industry.

Keywords: Private Brands, National Brands, Ethical concerns about private brands, Retail sustainability, Brand innovation, economic impact of branding

Introduction

Private brands and national brands compete in a market full of ethical issues such as economic balances between producers and consumers, the equilibria between sustainability and price competitiveness, or the morality of copying other companies' innovation. In this confrontation between national brands and retailers, the latter have an increasing advantage because of their bargaining power against producers, intermediaries, national brands and consumers (Gore and Willoughby, 2018). The intention of raising the question of whether private labels are morally inferior to national ones is to raise awareness of the possible differences between these two types of label and invite consumers to reflect on whether they should or not be buying from private brands, while also to set an ethical base that could possibly trigger political intervention in this matter.

To assess the morality of private brands with respect to national brands, this paper draws on previous philosophical research which analysed questions of moral superiority with reference to food consumption. Primarily, I will use a similar approach to the one developed by Ferguson and Thompson (2021) in assessing local and global foods adapted to private and national brands. In their paper, Ferguson and Thompson construct a debate around local and global food through three core sections in which they compare both food types: sustainability, economics and impact to local community. However, instead of analysing the impact of private and national labels on these aspects, I will be comparing them on the economic effect, both to consumers and producers, sustainability and image and innovation. Unlike the case for local and global food, image and innovation are key components that allow us to distinguish between the two products, while doing so through a local community lens would not add any relevant value. These three aspects are key to retail practices because they do not solely focus on affordability or demand and supply to assess the moral impact of private and national brands. The economics aspect reflects how fairly both producers and consumers are treated, balancing affordable prices for consumers with fair compensation for suppliers. Sustainability highlights the environmental and social responsibility of brands, ensuring that brands contribute to a global sustainable development. Finally, innovation touches on whether brands contribute meaningfully to market development or engage in free-riding by imitating competitors' intellectual property,

and not contributing to the natural development of society, while image reflects on the physical plagiarism of private brands against national brands, undermining the national brands' efforts in marketing.

For the economics section, I will compare how consumers and producers are affected by private brand's irruptions in the market and the consequence competitive reaction from national brands. For the sustainability section, I will refer to the market of cocoa, as it is a product that features aspects not only related to climate action but also that makes sure that there is [fair trade](#) and that human rights are respected, which will show the differences of the actions taken by national and private brands to mitigate these externalities. For the image and innovation section, I will be using innovation in Spain to illustrate the negative impact of the lack of restrictions on parasitic copying.

Through all these aspects, I will demonstrate that private brands are morally inferior to national brands because of their disregard of sustainable development, with all details that this implies in terms of green development and innovation. Once I have discussed this, I will proceed to explain and further develop two solutions proposed by the EU that work towards the direction of limiting some of the problems arising from private labels.

Brands' prices effects

One of the most prominently discussed differences between private and national brands is the potential differences in price. In many cases, national brands are forced to reduce their prices to be competitive against cheaper private brand alternative products. To achieve this, they need to cut cost, presumably from marketing expenses. Given the fact that the competition of the market does not allow a reduction of investment in marketing as national brands would lose all their competitive advantage in terms of branding, companies will generally opt for either producing for retailers or introducing a lower-cost alternative (Hoch, 1996), which will be worse in terms of quality. This will benefit low-income consumers in a situation of crisis, as they will buy an inferior good (Hoch, 1996), but it is likely to harm producers because of the cost constraints and generate [negative labour impact](#), and negative environmental consequences, as we will see in the next section.

Moreover, research has found that there are other price effects that can have moral impacts. An example of this is research suggesting that retailers may be increasing their own brand prices. To increase their profitability, they include both national brands and their own brand on their shelves, so that national labels attract the consumer, and by setting a slightly lower price, but still higher than its worth, the consumer buys the private label and the retailer makes as much profit as possible from the private brand (Corstjens and Lal, 2000). Another reason to inflate the price of their brand is to improve the brand image, so that it generates more confidence in the buyers, and also generates the mentioned profitability (Geyskens *et al.* 2023; Gielens *et al.*, 2021; Vahie and Paswan, 2006). This confidence is also increased by creating similar designs, as I will discuss in the section on image and innovation. This shows how private brands can also have a negative impact on consumers by misleading them with very similar images, while having lower standards in either quality, innovation or sustainability.

Even if we suppose the situation in which private brands force national brands to decrease prices, this benefits consumers, but producers are more likely to be economically worse off due to worse living conditions because they will be paying the burden of companies reducing their costs to maintain the same profit margins. It is not easy to reach a conclusion from these two different outcomes as both producers and consumers have basic needs that have to be fulfilled – consumers will want to subsist by buying a cheaper

alternative, while producers' working conditions will be worsened –, so the economics section does not help determine the outcome of my discussion. This happens because both national and private brands prioritise profit over both consumer and producer needs, so trying to maximise profit through damaging producers or consumers, are two equally wrong alternatives.

Sustainability and human rights

In the second section, I will compare the differences in sustainability between national and private brands. Given the price difference and the increase of the bargaining power of retailers, there is reason to believe that the source of products is not the same for private labels as the one from national brands. This can happen because of the bargaining power that retailers have over producers, who are not able to defend their rights and therefore agree to non-ideal deals. To analyse sustainability, I will refer to the traceability of cocoa because of the number of problems that its production generates in the countries of origin. Traceable cocoa is considered to be cocoa where companies can verify their origin, and therefore know the environmental impact and the labour conditions, thus preventing many cases of child labour or exploitation.

I compared the five largest chocolate companies in the UK in terms of sales: (Móndelez, Mars, Nestlé, Lindt and Ferrero; Global Data, 2021), and the largest five supermarket chains (Sainsbury's, ALDI, Coop, Lidl and Waitrose). I did not include Tesco, Asda and Morrisons because data was not available. Each company was scored from 1 to 4 in the following categories, where 1 was the best score, and 4 was the worst: traceability and transparency, living income, child labour, deforestation and climate, agroforestry, and pesticides. The best score of 6 can be attained through a score of 1 in all categories and the worst score of 24 can be achieved by scoring 4 in each category (Be Slavery Free *et al.*, 2024). When analysing the largest five retailers and national brands, we see that the average of the chocolate companies is better than the average obtained from retailers. That would show that national brands are doing a better job at achieving sustainability goals.

However, it is true that some retailers are starting to change their attitude and have begun caring about their social responsibility, following a higher awareness of consumers towards the products they consume (Fuller and Grebitus, 2023; Konuk, 2018). In the market of cocoa, this is shown by initiatives such as the Retail Cocoa Collaboration, which notes the intention of the main retailers collaborating to be able to trace cocoa (Scott *et al.*, 2022). This could mean that private brands improve their results in the following years (Gielens *et al.*, 2021), but there is still a lot of improvement to be done, as the OXFAM studies suggest (Vollaard, 2022).

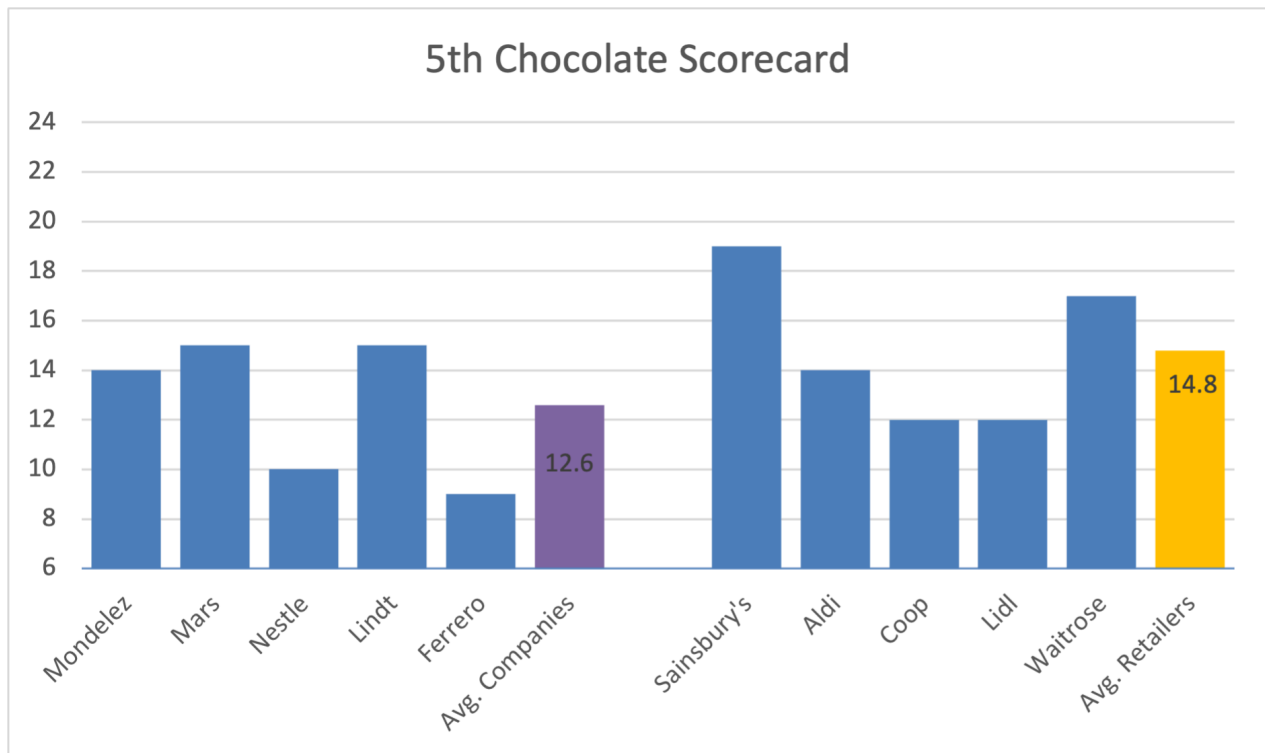


Figure 1: Top five chocolate companies and retailers result in 5th Chocolate Scorecard. Data retrieved from Be Slavery Free *et al.* (2024). Own Work.

If industries such as the cocoa supply fail to reduce their impact on sustainability or human rights, significant negative consequences will emerge. Private brands often prioritise cost-cutting and market share, which can come at the expense of ethical and sustainable practices. In comparison, national brands tend to invest more in commitments to environmental and social responsibility, making their practices more aligned with positive industry standards.

Image and innovation

One of the most common critiques by national brand managers for private brands is that the latter benefit from the investments made by national brands (Larracochea, cited in Mundi, 2018). In this section, I will consider if there is reason to believe that private brands are morally inferior to national brands because of their lack of innovation and image copying. Despite not influencing directly the most vulnerable parties – consumers and producers – I believe that innovation is crucial in many industries to guarantee progress, and if all companies went on to diminish the spending on innovation, consumers would ultimately be affected when reaching a point in which progress would cease. However, there are pressing needs for innovation, including to transition to a greener society, with packaging solutions that pollute less and are environmentally friendly (European Commission, 2023b) or that offer better products for people with allergies or with special dietary requirements.

The case of Spain illustrates how this decrease of innovation has been noticeable and has started to become a possible threat. During the period from 2010 to 2020, the innovation in Fast Moving Consumer Goods (FMCG) levels decreased by 44 per cent (KANTAR, 2020). One way to understand this situation is by looking into private and national brands. In 2019, more than 95 per cent of the innovation was carried out by national brands, while private brands only accounted for the remaining 5 per cent (KANTAR, 2020). Data suggests that the lower the percentage of innovative products of national brands introduced by retailers or supermarkets, the higher the percentage of private brand products sold (ESADE Creapolis, 2018). This results

in innovative products not reaching the final consumer. Between 2007 and 2013, the number of national brand products in the main supermarket chains reduced by 16 per cent (ESADE Creapolis, 2018). All this data combined shows that private brands are contributing to the reduction of national brands by not allowing them to enter the supermarket. Instead, they copy innovations that national brands create while not putting the original product on sale. It has been calculated that around 40 per cent of the innovations carried out by national brands are copied within the first year of the launch (ESADE Creapolis, 2018). These two facts demonstrate that even if private labels in some ways pushed national brands to continue innovating (George, 2011), the way in which they do that is not morally appropriate, and the decrease in innovation shows this. In Spain, innovation decreased by around 20 per cent between 2012 and 2015 (KANTAR, 2020). If innovation had not decreased and had remained constant, it would have resulted in the value of the sales of FMCG increasing 5.8 per cent, increasing the GDP by an extra EUR €1.1B (KPMG, 2016). Without the mentioned decrease in innovation, 2700 people would have been directly employed. Including indirect employment, that number could be approximately around 8100 new jobs (KPMG, 2016). These numbers reflect the impact that the reduction of investment and innovation has on society. Putting together all the data and seeing the attitude that private brands have on innovation indicates that private brands are contributing to a decrease in innovation. Also this misleads consumers as private brands produce a very similar design with a different quality.

Against national brands, it can be argued that the investment in marketing only incentivises overconsumption because beautified designs generate attraction. This argument would seem valid if private brands did not copy their content and focused on providing products without any sort of marketing, but instead, private brands copy even the design and packaging and sell the product at a lower price, with differences in quality, profiting from the similarities, which mislead consumers. This is shown in the case between ALDI and Baby Bellies, in which Hampden Holdings – owners of Baby Bellies – took legal action against ALDI, accusing the German company of copying the design of their snack products (Figure 2). The case is yet to be resolved, but it is unlikely that ALDI will be fined for copying the product (Pattabiraman, 2023).



Figure 2: Hampden Holdings v ALDI snacks. Obtained from: Inside FMCG (2023).

Both economically and morally, motives seem to point to the fact that private brands are profiting from the innovation carried out by national brands, generating large profits for private brand distributors. I have argued that the lack of innovation will have to be addressed by policymakers with regulations that I will discuss later.

Conclusion

After analysing private and national brands through the economic aspect, sustainability and the image and innovation perspectives, I have concluded that private brands are morally inferior to national brands because they do not offer a clear economic benefit in general, as they benefit consumers but tend to worsen the conditions for primary producers. In terms of sustainability, all insights indicate that private brands put pressure on – or at least do not do enough to support – the ethical production of chocolate. Finally, in terms of creativity and image, I have shown that there are many reasons to believe that there is some wrongness in the way that private brands act, which has been a determinant factor to show the moral wrongness of private brands with respect to national brands.

After answering the main question and arguing that private brands are morally inferior to national brands, I wanted to give some remarks on possible political interventions that would regulate this situation.

One of the ways that the EU has found to limit the sustainability damage caused by some companies is by creating a new law that forces all companies that take products into or out of the EU to be able to prove the product's origin. This is to demonstrate that the company is not collaborating to damaging the environment and that human rights are enforced during the supply-chain process (European Commission, 2023a). Even if this law does not directly tackle private brands, it will set some minimum standards that should level up sustainability practices of both national and private brands. From the moment of its enforcement in 2025, it

should ameliorate the poor results that some companies show – especially retailers seen in the Cocoa Scoreboard (Figure 1). By applying this measure, we might observe a deviation of the offer from the EU to other parts of the world, as companies will be more interested in selling in other locations where less restrictions will be applied. Another result could be an increase in prices because of the lack of appropriate supply and the due diligence that will have to be carried out. This law is very likely to shape the next decade of supply in the EU (Retamales *et al.*, 2023), so it should solve many of the concerns I raised in the sustainability section.

Regarding the issue of the lack of innovation in the EU (European Commission, 2023b), a subsidy has been allocated to incentivise innovation across the consumer goods industry – in this specific case for food products. The subsidy is not directly aimed at private companies, so the issue is not fully resolved with this policy because innovation is still not incentivised enough.

In terms of the image, the EU also proposed the Unfair Commercial Practices Directive (UCPD; European Commission, 2005), which was a European law against practices like parasitic copying or unfair practices from business actors. The main problem with this law, applied in 2005, is the disparity of criteria of different countries in applying the regulation, making plagiarists tackle some countries, depending on the characteristics within the law. Even in countries where this law has been applied more strictly, like Germany, innovator companies have faced some problems in reporting ‘lookalikes’ and getting compensation when their products were not differentiated. Countries like the UK, are even more permissive, and allow these copies to succeed easier (Freeman *et al.*, 2013). This suggests that one of the approaches to take in this sense is to rewrite the UCPD law in a more concise way that leaves less space for interpretation, and ensures that it is applied in a more unified way, which could be done by letting specialist courts take control of the matter (Lovells, 2012). Seeing that even in the most restrictive countries there are still difficulties in applying the regulation, there should be a more restrictive approach to copying and allowing parasitic copies, independently of their reputation in the market.

To sum up, I have answered the question on whether private brands are morally inferior to national brands through their impact on sustainability and image and innovation, while also analysing the impact on economics, which ended up being irrelevant to the outcome of the discussion because of the positive and negative factors. In the last section, I have shown some possible solutions to lessen the wrongs of private brands and make sure there is a fairer approach. As further research, it would be interesting to see what the most appropriate way is of ensuring effective fairness between private and national brands when it comes to sustainability and innovation.

List of figures

Figure 1: Top five chocolate companies and retailers result in 5th Chocolate Scorecard. Data retrieved from Be Slavery Free *et al.* (2024). Own Work.

Figure 2: Hampden Holdings v ALDI snacks. Obtained from: Inside FMCG (2023).

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Glossary

Bargaining Power: The ability of a retailer or producer to influence the terms and conditions of trade to their advantage, often due to their market dominance.

Economic Impact: The study of how different market choices impact producers and consumers, as well as the broader societal implications of these economic interactions.

Fair Trade: A movement and certification focused on ensuring ethical production, fair wages, and sustainable development for producers, particularly in developing countries.

Morally Inferior: Ethically deficient or less justifiable when compared to other alternatives, often due to practices that compromise fairness, sustainability, or social responsibility.

National Brands / Commercial Brands: Brands that are developed, marketed, and sold by manufacturers to a wide range of retailers.

Negative Labour Impact: The adverse effects on workers' conditions and livelihoods, such as wage reductions, job insecurity, poor working environments, or exploitation, often resulting from companies' efforts to cut costs, increase profits, or compete in the market.

Private Brands / Private Labels / Own Brands: Brands owned, controlled, and sold exclusively by retailers, often as alternatives to national or commercial brands. (Sethuraman and Cole, 1999: 340)

Sustainability: Practices that meet the needs of the present without compromising the ability of future generations to meet their own needs, including environmental, economic, and social aspects.

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Conceptions of Freedom in the Regulation of Junk Food and Tobacco

Daniel Knoth, University of Warwick

Abstract

This paper examines the regulatory disparities between the junk food and tobacco industries in the UK, focusing on the underlying conceptions of freedom that shape public policy. While both industries contribute significantly to public health challenges, tobacco is subject to far stricter regulations. Through an analysis of parliamentary debates within the House of Commons, the paper explores the application of positive and negative freedom in discussions of junk food and tobacco. I find that the presence of addiction in tobacco discourse is used to apply a positive conception of freedom, leading to more stringent regulations. Conversely, junk food discussions emphasise individual choice, aligning with a negative conception of freedom and resulting in softer regulatory approaches. This paper argues that these differing narratives on freedom contribute to the observed regulatory differences and suggests that emphasising the addictive nature of junk food could shift regulatory perspectives.

Keywords: Conceptions of freedom, Obesity Discourse in the UK, comparing discourse between junk food and tobacco, positive and negative freedom in discussions of tobacco and obesity, obesity regulation

Introduction

Smoking and [obesity](#) have caused significant health challenges in Western societies. However, while the tobacco industry has experienced far-reaching regulation, the [junk food](#) industry, which has significantly contributed to the obesity epidemic, has received far less regulatory attention.

More than a decade ago, obesity overtook smoking as the leading cause of preventable death in the UK (Ho *et al.*, 2021). Around a third of all deaths from cancer and cardiovascular diseases (Dubois, Griffith and Nevo, 2014) and around 10 per cent of all hospitalisations (Humphreys, O’Flaherty and Ambrosini, 2023) can be directly attributed to poor diet and the over-consumption of so-called ‘junk foods’ (Boaz and Temple, 2023). These numbers have surpassed the estimated 15 per cent of all deaths (NHS, 2023) and the estimated 5 per cent of hospitalisations caused by smoking (NHS, 2020). Further, both smoking and obesity rates are highest among socially [disadvantaged groups](#) (Azétsop and Joy, 2013; Hiscock, Dobbie and Bauld, 2015), thereby making them the two most prominent drivers of [health inequalities](#) (Adams, 2020). The parallels between the two industries further extend into the literature on market failure. Both industries create large externalities through public health costs and productivity losses, estimated at around GBP14 billion a year caused by tobacco (ASH, 2023) and as high as GBP65 billion a year caused by obesity (Griffith, 2023). These large externalities and other distorting practices, such as [asymmetric information](#) – which is especially problematic within the junk food industry (Cawley and Wen, 2018) – give way to a broad consensus within the literature classifying both industries as cases of market failure, which necessitate government intervention (Feliu *et al.*, 2019; Gilmore, Branston and Sweanor, 2010; Lobstein, 2008).

The improvement of public health outcomes, the reduction of health inequalities and the prevention of market failure are three prominent criteria governments use when deciding on potential regulation (Friel,

2021; Mercer *et al.*, 2021; Wallis and Dollery, 1999). However, despite satisfying these three criteria to a similar degree, tobacco is regulated much more strictly than junk food, with age limitations on cigarette purchases, rules on where adults are allowed to smoke, high taxes and even proposals on complete bans for coming generations (ASH, 2021; Franks, 2024). Meanwhile, most regulations on junk food have followed a much softer approach, with interventions being limited to subtle taxes, information campaigns in schools, and minor interventions on advertising aimed at children (Metcalf and Sasse, 2023). This raises an interesting question on why tobacco is so much more strictly regulated than junk food.

When it comes to more restrictive regulatory policy, the issue of freedom is often discussed as a constraint on what policymakers can legitimately enact, both within the public attitude and the theoretical literature (Christensen, 2021; Dawson, 2016; Diepeveen *et al.*, 2013; Morphett *et al.*, 2023). For the remainder of this paper, I will, therefore, explore whether the differences in regulatory attitudes between junk food and tobacco are informed by different [conceptions of freedom](#). I begin by outlining the concepts of positive and negative freedom, the assumptions underlying them, and how they differ as a constraint for policymakers. I then go on to analyse the debates on junk food and tobacco within the House of Commons to determine how each industry is narrated and which conception of freedom policymakers apply. Here, I argue that the presence of addiction leads policymakers to apply a positive conception of freedom within tobacco discourse while applying a negative conception of freedom to junk food. I find that this difference in conceptions of freedom aligns with the difference in regulation.

Conceptions of freedom in policymaking

Within [liberal democracies](#), policymakers are constrained by individual freedom due to legal frameworks and societal values prioritising personal autonomy (Dworkin, 2015). However, the degree to which this serves as a constraint depends on the conception of freedom that policymakers adopt. As first argued by Isaiah Berlin in his 1958 lecture, we can broadly distinguish between two different conceptions of freedom – a negative conception of freedom and a positive one.

Negative freedom refers to the freedom the individual has from any form of external interference by other human beings (Berlin, 2002). The key assumption here is that individuals know their own interests best due to having a special insight into their own good that no other actor possesses and are capable of advancing them (Christensen, 2021). To possess freedom in this conception is to be free from constraints (Collignon, 2018). Within this conception of freedom, permissible government intervention tends to be based on Mill's harm principle (Christensen, 2021), which posits that it is only permissible to restrict individual freedom to preserve the freedom of others (Mill, 2011). Policies that restrict individual freedom on the grounds of advancing that same individual's own health are viewed as unjustified under this principle. Think of a law to wear a seatbelt. Here, the subject is mandated to engage in a security measure that aims to protect the same individual that is mandated to do so, thereby violating Mill's harm principle. They are therefore argued to be overly 'paternalistic' – a term used where the state proscribes certain behaviours to its citizens, which are often argued to fail at treating people as agents capable of making their own choices (Dworkin, 2015).

Broadly speaking, there are two categories of [paternalism](#). 'Soft paternalism' refers to policies that aim to guide individual behaviour through information and small nudges, whereas 'hard paternalism' refers to policies that outright prohibit or prescribe certain behaviours, denying individual choice (Lund and Saebo, 2024). Within a negative conception of freedom, soft paternalism can be justified with adequate reasoning, whereas hard paternalism is impermissible (Sunstein, 2014).

The second conception of freedom that Berlin describes is that of positive freedom, which he defines as the individual's capacity to lead a self-determined life that aligns with their 'true self' (Berlin, 2002: 185). Within this conception, freedom requires more than simply the absence of external restrictions; it also necessitates the presence of certain characteristics – usually set by a collective, such as the state or the church – that society as a collective wants to strive towards (Berlin, 2002). An individual's choices and momentary desires are viewed as fallible, so they must at times be 'rigidly disciplined if [they are] ever to rise to the full height of [their] "real" nature' (Berlin, 2002: 179). Contrary to the negative conception, therefore, positive freedom often requires the state to intervene so that citizens can act in their higher, real or longer-term interest. Here, paternalism is not only less problematic; it might even be necessary for the state to force citizens to act in certain ways that they otherwise would be unable to do on their own. For example, think of a law that mandates compulsory education for children. While a child might prefer not to attend school due to the lack of immediate interest, the state enforces education to cultivate their long-term potential and ensure they develop essential skills and knowledge. This intervention reflects a positive conception of freedom, where the state guides individuals towards their higher self, enabling them to develop into autonomous adults. Although some critiques have been made to this model – most prominently the discussion about the omission of the role of enabling factors such as money in how individuals can acquire freedom (Cohen, 2015) – these do not obstruct the analysis of this paper as this research utilises Berlin's model as a theoretical lens to understand different perceptions of freedom and does not discuss the truth values of it.

I have now introduced the negative and positive conceptions of freedom. In the following section, I will go on to analyse the debates within the House of Commons to determine which conceptions of freedom are used within the debates on junk food and tobacco. Discourse informed by a negative conception of freedom will emphasise individual choice and freedom from external restrictions, often arguing for policies limited to soft paternalism or based on Mill's harm principle. In contrast, discourse informed by a positive conception of freedom highlights the concept of 'true' interest, critiquing individual choices and advocating for more restrictive policies, including those classified as hard paternalism.

Tobacco and junk food discourse in the UK

Consequently, it is possible that some of the regulatory differences are informed by different conceptions of freedom. In this section, I will analyse the discourse surrounding tobacco and junk food legislation within the House of Commons over the last decade. As the primary arena where health policy is shaped and debated while providing detailed transcriptions, it provides the ideal basis for analysing the regulatory attitudes within the UK. My analysis will draw from all the debates within the last decade related to the keywords 'smoking' and 'tobacco' and those related to the keywords 'junk food', 'obesity' and 'sugar' that explicitly discussed the issue of junk foods. I will consider debate contributions by all Members of Parliament, giving special weight to statements made by key actors within the policymaking process, such as the Secretary of State for Health. Not counting minor mentions and brief statements, within this timespan (2014-2024), there were 32 debates on tobacco and 19 related to junk foods, making smoking a more salient topic than obesity, despite the declining numbers of smokers and the growing cases of obesity (Baker, 2023; Revie and Mais, 2023). I will begin by analysing how each issue is discussed before then comparing them and analysing possible reasons for their differences.

Between 2014 and late 2019, tobacco discourse largely centred around the negative health outcomes and [social costs](#) associated with smoking. Out of the 17 debates within this period, 16 began by highlighting the deaths, health inequalities and social costs caused by tobacco, with these being the main criteria used to

advocate for government intervention. However, the broad consensus among MPs was that if people know about the risks associated with smoking, then it should be left 'up to them' (Hansard HC Deb., 13.10.2016). The government should only step in to enable citizens to make an 'informed choice' (Hansard HC Deb., 19.10.2017). Policies that went beyond informative measures were justified along the lines of Mill's harm principle, where intervention is justified to ensure the protection of another person's freedom (Sunstein, 2014). For example, the prohibition of smoking in cars carrying children was justified based on protecting children from second-hand smoke (Hansard HC Deb., 13.10.2016), and high taxes on tobacco were regularly justified by referencing the indirect harm that smoking has on others in taking up the NHS capacities that could have otherwise helped other people (Hansard HC Deb., 30.10.2018). This argumentation aligns with a negative conception of freedom, which places high value on individual choice and only views restricting it as legitimate when it causes harm to others. Despite already some MPs invoking a positive conception of freedom, mentioning addiction as a reason why the government must enact stricter measures (Hansard HC Deb., 19.07.2018), these were infrequent and were not mentioned in the argumentation of key government actors.

However, in late 2019, the structure of tobacco discourse changed. Whereas the previous discourse began by outlining the negative health outcomes and social costs, now each of the 15 debates on tobacco began by emphasising addiction or nicotine, with the previously focused health outcomes and social costs being reframed as a cause of this dependency. Further, the presence of addiction is increasingly used to undermine the framing of tobacco consumption as a free choice, stating that 'nobody chooses to smoke 60 cigarettes a day. Addiction forces them to do so' (Hansard HC Deb., 16.04.2024) and that 'there is no choice because one is addicted' (Hansard HC Deb., 09.05.2024). Policymakers also frequently referred to statistics such as 'three-quarters say that if they could turn back the clock, they would not have started' (Hansard HC Deb., 16.04.2024) to highlight tobacco consumption as something that goes against the citizen's 'true' interests, which would be to not smoke and to never even have started. These are clear denials of the assumptions that underlie a negative conception of freedom, namely of individuals' capability to pursue their own best interests. The Secretary of State for Health even framed government intervention in the tobacco market as offering those affected the 'freedom to live longer, healthier and more productive lives' (Hansard HC Deb., 16.04.2024). This is an application of a positive conception of freedom, where the government must step in to advance the individual's 'true' interests, thereby achieving real freedom for them. Freedom here is not the absence of restrictions but instead has a positive connotation where freedom requires the presence of certain things deemed valuable by society – in this case, health and the capacity to make free choices; things that smoking and nicotine are said to take away (Hansard HC Deb., 16.04.2024).

On the other hand, for the entire duration of the junk food discourse, policymakers applied a negative conception of freedom, emphasising individual choices and the need to preserve personal freedom. Similarly to the tobacco discourse before 2020, debates began by emphasising the health detriments that junk foods and obesity can create, combined with the social costs such as loss of productivity and public health costs that are associated with it. The subsequent discourse on policy intervention then centres around how the government can encourage or help individuals to make 'better' or 'healthier' choices, with the Under-Secretary of State for Health arguing that the government's goal is to 'ensure that people can make the healthy choice' (Hansard HC Deb., 13.04.2021). Propositions of more restrictive policies are only made infrequently, and mostly by opposition members. Within the argumentation or proposals of central government actors, they are completely absent. Like the tobacco discourse before 2019, discussions of hard paternalist policies were limited to arguments around protecting children (Hansard HC Deb., 16.01.2018). For adult members, however, the extent of intervention that policymakers deemed acceptable besides providing

information was to make ‘the best choice the easiest one’ (Hansard HC Deb., 07.02.2018). This focus on individual choice and the opposition to restrictions that go beyond information and slight nudges reflect a firmly held negative conception of freedom within the discourse on junk food.

These two different conceptions of freedom align with the different regulations that are made between the two industries. Between 2014 and 2019, when the discourse surrounding tobacco was informed by a negative conception of freedom, the legislative output that can be classified as hard paternalism was only aimed at preventing harm towards children, while legislation affecting the general population was limited to information campaigns, nudges and support for people wanting to quit (ASH, 2021). The shift towards a positive conception of freedom then aligned with the proposal of the smoke-free 2030 agenda set to prohibit the sale of tobacco products to all citizens born after 2009 (Balogun and Harker, 2023), which marks a shift towards a hard paternalist policy attitude even for the adult population. Meanwhile, the legislative output regarding junk food, such as information campaigns and minor tax policies aimed at nudging individuals to make better choices and other proposed policies, such as providing more information in schools, informative apps that teach healthy eating and more funding for sports clubs (Hansard HC Deb., 27.02.2024) entirely consists of soft paternalist policy. As the two conceptions of freedom align with the differences in regulation, they provide a possible explanation for these discrepancies.

Conclusion

Junk food and tobacco have both been shown to have similarly strong negative health effects while also inflicting large social costs on society. Yet, tobacco is regulated much more stringently. Within this paper, I explored how the curious regulatory disparities between junk food and tobacco are connected to underlying conceptions of freedom and government intervention. Through an analysis of the discourse within the House of Commons debates on junk food and tobacco, I found two things. First, that a positive conception of freedom is indeed associated with more stringent regulation; and second, that the application of a positive conception of freedom in the case of tobacco is largely connected to its addictive characteristics. Interestingly, while junk food has also been linked to addiction (Cawley and Wen, 2018; Garber and Lustig, 2011), this is only highlighted in the case of tobacco, whereas junk food discourse remains centred around individual choice. Although the addictive potential of nicotine is clearly absent in the case of junk food, there are numerous other factors, such as economic barriers (Azétsop and Joy, 2013) or the physical lack of healthier local options (Janatabadi, Newing and Ermagun, 2024) that go against junk food consumption being a free choice. The findings of this research, therefore, suggest that if we want to advance interventions in the junk food industry, it may be valuable to place greater and more salient emphasis on the addictive potential of junk food, thereby warranting a shift towards a positive conception of freedom. Future research might explore how this change in discourse might be achieved by looking into the reasons behind the change in discourse that occurred within the tobacco industry.

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Glossary

Asymmetric Information: A situation in economic transactions where one party has better information than the other, leading to an imbalance in decision-making. This often results in market inefficiencies, such as consumers being unaware of the health risks associated with the purchase of products such as junk foods.

Conceptions of Freedom: a>Different philosophical conceptions of what it means to be free. The most prominent distinction is between positive freedom (freedom to) and negative freedom (freedom from).

Disadvantaged Groups: Populations that experience social, economic or political disadvantages and which therefore often face additional challenges in health, education and employment.

Health Inequalities: Avoidable and non-genetic differences in health status experienced by different population groups, due to factors such as socioeconomic status, ethnicity or gender.

Junk Food: Foods that are high in calories but low in nutritional value, typically containing excessive and unhealthy amounts of salt, sugar, unhealthy fats and additives. This usually includes processed snacks, sugary beverages and fast foods.

Liberal Democracies: A form of government that combines representative democracy with the protection of individual rights and freedom. The latter constrain leaders in their ability to impose policies that infringe on these personal freedoms without special legal justification or consent.

Obesity: A medical condition characterised by excessive body fat accumulation and typically defined as by a Body Mass Index (BMI) of 30 or higher.

Paternalism: Derived from the Latin word pater, meaning "father", it refers to a policy approach where governments limit individual autonomy or make decisions on behalf of individuals in the name of their good, often justified by the belief that it protects or benefits them, even if it goes against their personal preferences.

Social Costs: The total cost of an economic activity, including both private costs incurred by producers and consumers and external cost borne by external parties not directly involved in the transaction. Examples often include negative social impacts such as environmental pollution or private health issues that incur costs on society as a collective.

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To What Extent Were There Attempts to Securitise the Malaysian Chicken Export Ban In Singapore? A Comparative Analysis of Frames Between Government and News Media

Lucas Huan Zhi Kai, University of Warwick

Abstract

This article focuses on exploring the securitisation of the Malaysian chicken export ban that took effect on 1 June 2022. The effects of the chicken export ban seemingly went beyond the economics of food, and expanded into the realm of national identity, as the de facto national dish of Singapore got compromised. As food and national identity is intricately linked to societal security and a key part of securitisation theory, this research paper seeks to explore the extent to which the chicken export ban was securitised. Through the use of a frame analysis, three different categories of news media were analysed: governmental media, local news media and foreign news media. The analysis showed that the foreign news media had attempted securitisation, but the local news media and governmental media refrained from securitisation, and rather engaged in a prognostic framing to reframe the chicken export ban into a proactive management of the situation which desecuritized the ban.

Keywords: Securitisation of Food, Societal Security and National Identity, Securitisation Frame Analysis, Malaysian Chicken Export Ban, News Media Securitisation

Introduction

On 1 June 2022, Malaysia implemented a ban on the export of live chickens to Singapore in response to a domestic shortage that had caused local chicken prices to rise significantly (Chen, 2022). This ban disrupted 34 per cent of Singapore's total chicken imports, resulting in significant unease regarding [food security](#), food inflation and business uncertainty within the food industry (Moss, 2022). The ban not only impacted the economic landscape but also sparked concerns over the socio-cultural fabric of Singapore (Lin and Chu, 2022), particularly affecting the availability and quality of Singapore's de facto national dish, chicken rice (Chen, 2022). The repercussions extended beyond economics into political realms, as Singapore diversified its imports and reduced reliance on Malaysian chicken (Gov.sg, 2022). The differing stances between the Singaporean government and media outlets on the severity of the ban's impacts set the stage for this research. While some news media outlets proclaimed the ban as a crisis and stipulated that Singapore's national dish was in danger (Chen, 2022), the official stance was that it was inconsequential in the bigger scheme of things (Gov.sg, 2022). Hence, the research seeks to determine whether news media is the main actor of [securitisation](#) regarding the chicken export ban in Singapore, and to analyse the resulting [securitisation frames](#). To answer this question, this paper will utilise a [frame analysis](#) to understand the framing of the chicken export ban from a securitisation theory standpoint. It finds that, under the topic of food and culture, the assumed traditional actor in securitisation theory, the government, is no longer the sole securitisation actor. Rather, media outlets begin to function as a voice of societal security. This has ramifications on traditional securitisation theory as it refutes the mainstream securitisation theory that the government is the main securitisation actor and opens doors for more research into potential securitisation actors, such as media and news agencies.

Securitisation theory

Securitisation, developed by Ole Wæver (1993) in what has been framed as part of the wider [Copenhagen school of thought](#), describes that a security issue does not necessarily relate directly to traditional concepts of security or crises. Rather, an issue has to be labelled and described as a security issue or crisis. For an issue to be securitised, it must undergo a process of being labelled as a security threat, thus justifying a bending or breaking of governmental and political rules to an unprecedented level for the purpose of mitigating said threat (Stritzel, 2014). Therefore, under this framework, events need not be initial security threats. Rather, in labelling them as a security threat, they become a security threat and is accepted as such. (Peoples and Vaughan-Williams, 2021). Formally, the steps to securitise an issue include 1) identification of existential threats, 2) emergency actions and 3) effects on relations through breaking free of the rules (Taureck, 2006). Traditionally, such securitisation acts are often from governmental or state actors to allow for emergency measures to take place. An example of such is the securitisation of the climate crisis, in which securitisation was used as a tool of mobilisation to ‘mobilize urgent and unprecedented responses’ to environmental issues (Wæver, 1993: 12).

Food is typically not discussed in securitisation analysis; however, it is an important part of national identity (Ranta and Ichijo, 2022). Hence, if an event can be characterised by its impact on national food, it can be understood through securitisation theory. Securitisation commonly refers to events that concern the survival of the state (Buzan *et al.*, 1998); however, there is also a societal security aspect that is often neglected, which is defined as the ability of a society to maintain its language, culture, religion and customs (Uzun, 2023). The importance of this is explored by Wæver (1993: 15), who states, ‘A state that loses its sovereignty does not survive as a state; a society that loses its identity fears that it will no longer be able to live as itself.’ As further explained by Koczorowski (2010: 45), ‘Food is clearly of cultural importance, hence why culture has made its way into the definition of food security.’ Thus, this distinction of societal security allows for events which are characterised as having national food-related impacts to be securitised, and lets food be a strong topic in securitisation theory.

As news media is a non-traditional securitisation agent, the formal securitisation steps mentioned by Taureck (2006) potentially changes. Without the power to enact emergency actions and affect relations, and being a voice of societal security (Wæver, 1993), securitisation from a news media standpoint would solely look at how media identifies an existential threat within a social-cultural context (Vultee, 2022). This would thus make securitisation easier from a media standpoint as there is no need for formal action and relations to change. Thus, in further investigation of the topic, frame analysis will need to be utilised to study how media frames threats within a social-cultural context.

Methodology

A frame analysis methodology was employed to explore mainstream perspectives about the Malaysian chicken export ban and its effects on Singapore. A frame analysis was chosen over discourse analysis as the focus of the research is to study the portrayal of the chicken export ban. The research examined three different types of securitising news media: governmental, local and international. The news media was studied because the government is the traditional securitisation agent for a nation state, while news media outlets tend to be the informal ‘voice’ or representation of societal security concerns (Wæver, 1993). Moreover, in Singapore, local and state media is under government control and regulation, but foreign media is not; hence, there could be differences in motivation and frames created by local news and foreign news

(Infocomm Media Development Authority, 2022). This directed the three different categories of news media studied. In total, 14 online sources were selected, including eight foreign news media, three local news sources and four government media publications (see Appendix 1 for full breakdown). Both local and foreign news media were chosen through an online Google search of the search term 'Malaysian chicken export ban'. The search term purposely left out leading words such as 'chicken rice crisis' or 'national dish' to avoid the possibility of skewing the search results towards possible crisis frames. The sources selected were also limited to a week before or after the commencement of the chicken export ban (1 June 2022) to focus on the framing of the effects or potential effects of the ban. The foreign and local media sources selected were different articles from different newspapers. They included well-known media outlets such as Channel News Asia (CNA), *The Straits Times*, Cable News Network (CNN) and the British Broadcasting Corporation (BBC), and aimed to explore a wide range of potential frames from different newspapers. For the governmental media publications, due to the distinct lack of published articles except for a guidance published on Gov.sg (2022), the governmental website, other forms of publications were selected. This included a brief media interview by then Prime Minister (PM) Lee Hsien Loong, which was taken from a broadcast in *The Straits Times* of his response, and Facebook posts by current Prime Minister Lawrence Wong, and Minister of Sustainability and Environment, Grace Fu.

The first part of the research was a frame analysis of the different categories of news media. The second part of the research involved a comparison of the different frames across the three categories of news media. The comparison was conducted in respect to the [securitisation framework](#) as previously explained, with the aim of identifying the different frames and determining any coherence or alignment between them.

Analysis of foreign news media: Crisis for Singapore

The chicken export ban was framed by foreign news media as a crisis to Singapore's national dish, chicken rice. The focus of all the foreign news media was on the chicken export ban, and how it has caused Singapore to 'face a shortage of "chicken-rice" supplies' (Ong, D, 2022). Some foreign media outlets opted to utilise a price analysis, detailing that chicken 'traders warn [...] poultry products are expected to see a sharp rise from \$3 to \$4 or \$5 per bird' (Ong, K. J, 2022) to show an expected price rise in chicken cost. Other outlets, like National Broadcasting Channel (NBC), used interviews with chicken rice business owners to show that the price rise from the ban would affect their business performance. An example used by NBC is Daniel Tan, an owner of seven chicken rice stores, who said that 'Malaysia's ban will be "catastrophic" for [chicken rice] vendors like him[self]' (National Broadcasting Company, 2022). Moreover, the foreign news media also highlight that the rising cost of chicken would have a detrimental effect on the quality or availability of chicken rice. *The Guardian* cited that some chicken rice businesses 'would stop serving chicken dishes if it could not get fresh supplies' due to the export ban (Ratcliffe, 2022), while the *Financial Times* (2022) resigned Singapore's cooks to 'embrace chilled chickens' over fresh chicken. Thus, the foreign media framed the chicken export ban as a crisis for chicken rice in Singapore.

It is possible to explore this as a societal securitisation issue as Singapore's chicken rice is seen as Singapore's national dish, thus allowing the crisis narrative to be extended from chicken rice to Singapore's societal security. The foreign news media highlighted the importance of chicken rice to Singaporeans and their national identity. Through metaphors, *The Guardian* and the BBC respectively likened the absence of chicken rice in Singapore to 'McDonald's with no burgers' (Ratcliffe, 2022) or 'not having pizza in New York' (Liang and Cai, 2022), suggesting that chicken rice is an essential part of the Singaporean identity. Moreover, many of the foreign news media, including NBC and CNN, explicitly referred to chicken rice as the 'city-

state's de facto national dish' (Chen, 2022), further reinforcing the idea that chicken rice is part of the national identity. In fact, it was also made clear that the quality of chicken rice in Singapore is also a source of national identity, as CNN quoted a hawker saying 'Frozen chicken? [...] It will not taste good [...] if] you're happy with that kind of quality, you might as well go to Malaysia' (Chen, 2022). This reflects the underlying debate over which country, Singapore or Malaysia, has better food, and shows that the high quality of chicken rice is a source of national pride for Singaporeans. Thus, by linking chicken rice to the national identity of Singapore, foreign news media has taken their crisis frame for chicken rice and extended it into a crisis for Singapore's national identity, and thus securitising the Malaysian chicken export ban for its impacts on Singapore national identity.

Analysis of news media (local): The chicken export ban does not affect businesses

The local news media covered the same crisis that Singapore and its chicken supply chain was undergoing. They explored many different perspectives on the ban, avoided [prognostic framing](#), and instead focused on redefining the diagnostic frame of the issue by highlighting two contrasting points: that the chicken export ban significantly affected Singapore, and that it did not.

Local news media highlighted the negative impacts of the chicken export ban and framed it as a challenging situation. However, they did it without referring to chicken rice as a national food. CNA underscores this with bold section headers such as 'NO POINT REMAINING OPEN' and "NO CHOICE" BUT TO SELL FROZEN CHICKEN' (Yeoh, 2022), while Today Online uses 'S'pore F&B outlets, importers and markets brace for "traumatic" disruption, price increases' instead (Lee and Zalizan, 2022). The local news media also uses quantifiable evidence, like comparing specific prices of chicken before and after the ban, to substantiate this impact (Heng *et al.*, 2022). This approach creates a diagnostic frame that portrays the chicken export ban as a problem creating significant challenges. The narrative is further enriched by personal interviews conducted by all three news outlets in [wet markets](#) – a distinctive part of Singapore's heritage – using ethos to engage the reader and reinforce the current frame. All this is done, however, without engaging with chicken rice as a dish symbolic of national identity.

However, articles then typically shift towards a frame of normalcy or adaptability. CNA depicts a vivid scene of normalcy: 'well-stocked displays and a lack of queues at some wet market stalls' (Yeoh, 2022). This introduces the idea that business is as usual. This idea is maintained throughout the articles by bringing up adaptability or pre-emptive protective actions that the businesses or government is doing whenever detrimental effects on the poultry market is mentioned in the articles. This technique instils a sense of normalcy, and that the challenges could be overcome. For instance, the CNA article mentions business owners contemplating shutting down due to the chicken shortage, which is then contrasted with descriptions of fully stocked displays over several consecutive days (Yeoh, 2022). This is similar in *The Straits Times* article, where they cite that 'some chicken rice hawkers said they plan to sell different dishes or use frozen chicken to continue making a living', after discussing how the export ban has raised chicken prices (Heng *et al.*, 2022). This further supports the running theme of business as usual and effectively creates a script that runs parallel to the previous narrative. Today Online follows a similar dual narrative (Lee and Zalizan, 2022), undermining their narrative of trouble by constantly highlighting the steps being taken to mitigate it, thus framing the export ban as a challenge rather than a crisis. By weaving in how companies are increasing chicken production, slow price adjustments to avoid significant impacts and expanding of the chicken import market in Singapore, all these steps highlight the resilience of the Singaporean consumer and retail market and emphasise that the chicken export ban poses challenges that can be overcome. Furthermore, by briefly

mentioning the Singapore Food Agency and summarising the actions taken to address the export ban, all three articles portray the government as reliable and effective (Heng *et al.*, 2022; Lee and Zalizan, 2022; Yeoh, 2022). By introducing these government actions in the context setup, the articles reminded readers of government role each time the dual narratives conflict, highlighting the government's role in maintaining the status quo. Hence, both narratives work together to establish a frame of normalcy or challenge within the situation and undermine the crisis frame presented earlier.

By presenting these two contrasting diagnostic frames, local news media appeared to try to maintain impartiality in its reporting, acknowledging the complexity of the situation and its varied effects. However, narrative structure used to convey the frame of normalcy serves to undermine the frame of challenge imposed by the chicken export ban. By depicting a minimised impact and following comments about the challenges from the export ban, the local news media enforces a frame of normalcy and casts the crisis frame in an exaggerated light. This was perfectly encapsulated in the final line of the CNA article, a quote from a passerby in the supermarket: 'Still got so much chicken. Why people say don't have? [sic]'. Through this framing, local news media appears to diagnostically reframe the chicken export ban into one of business as usual and normalcy (Yeoh, 2022).

Analysis of governmental media: Proactive management to overcome the situation

Singapore's then Prime Minister Lee's response to a question about the chicken shortage in Singapore, taken from a broadcast by *The Straits Times* (2022) is a good representation of the governmental framing. He provided a succinct and direct answer that underscored the government's stance on the issue, offering both diagnostic and prognostic framing (refer to Appendix 2 for transcript) In a six-sentence response, PM Lee addressed two main points: one advocating proactive management to handle the situation, and another suggesting that the situation has been exaggerated. This frame is carried on by all members and organisation of the government, such as the current Prime Minister, Lawrence Wong, Minister Grace Fu and the key agency for food, Singapore Food Agency.

This aspect is emphasised throughout all governmental sources. PM Lee provided a prognostic frame by stressing that the government's response involves proactive management (The Straits Times, 2022). He highlighted this through the use of a contrasting sentence, 'The answer is not what we do now, but what we have been doing', and reinforced it with a conditional clause, 'if any single source is interrupted, we are not unduly affected'. This message is reiterated through the repetition of phrases such as 'provided', 'build up', and 'diversify', active verbs that underscore Singapore's longstanding strategies. By consistently focusing on this theme, PM Lee portrays Singapore as an active and capable participant in its own governance. The significance of his message lies in his avoidance of any sort of securitisation, refraining from using any form of 'crisis' or 'emergency' and rather opting to focus on how Singapore is proactively managing the situation. A similar message is repeated in PM Wong's and Minister Fu's Facebook posts (see Appendices 3 and 4) and the government website (Gov.sg, 2022), all highlighting the active steps that Singapore was taking, such as growing local and diversifying food sources, and crucially refraining from, or highlighting the absence of, any sort of [security speech acts](#). This cohesive frame is constantly repeated throughout the government's narrative, suggesting that the chicken export ban has been planned for, and that the whole of Singapore's government are on the same page in proactively mitigating the situation.

Former PM Lee also transformed the diagnostic frame of the situation by minimising the effects of the export ban and placing it within a broader global context. Concluding his response, he acknowledges the ban's impact, such as increased cost of living and food inflation, but partly attributes these to broader, ongoing global instability. He states, 'It is a very unsettled world [...] but in the scheme of things, many more disruptive events can occur [than the chicken export ban].' Minister Grace Fu follows a similar tone by referring to the global situation, and their use of concessive syntax, such as 'not be able to completely mitigate the disruptions', acknowledges the nature of the world and yet downplays the current crisis as a minor issue within a global context, encouraging a perspective that the situation could be worse. PM Wong carries out this framing in another manner. In his Facebook post, he uses a photo of himself in a food court, eating chicken rice after the chicken export ban took effect. This has the effect of portraying the situation as business per usual, nothing has changed. Moreover, in his caption, he uses 'occasional disruptions' – not even choosing to highlight the chicken export ban in particular but focusing instead on Singapore's need to be strong and work together to face 'occasional disruptions'.

This response by Singapore's leaders is significant as it seeks to reframe and transform the current narrative. By emphasising proactivity, Singapore is not a victim but a proactive actor in addressing its challenges. Moreover, by omitting any reference to food, cultural identity or chicken rice, the leaders detract from the potential securitisation of the issue, instead promoting a global economic perspective on the situation through the diversification of supply chains and Singapore's active engagement.

Conclusion

This research aimed to determine whether news media is the main actor of securitisation regarding the chicken export ban in Singapore, and to analyse the resulting securitisation frames. Utilising the securitisation framework, the study analysed three distinct frames from governmental, local and external news sources to identify any references to security or crisis. As seen from the three different analyses, the media sources each present distinct frames. Notably, foreign media seem to engage in securitising speech by portraying an economic crisis that impacts the Singaporean way of life, linking this to the national identity associated with chicken rice and thus framing it as a societal crisis. In contrast, the governmental frame adopts a stance of desecuritisation and stability. By highlighting Singapore's proactive measures and situating these within the broader context of global instability, the government aims to transform the frame, diagnosing the situation as purely economic. The absence of a securitisation speech act serves to desecuritize the situation, helping to alleviate concerns amid perceived threats to societal security. Interestingly, the local media adopts a neutral stance, recognising both sides of the argument but not explicitly using the terms 'crisis' and 'national identity'. Nonetheless, their coverage aligns more closely with the governmental narrative, promoting a frame of normalcy and business as usual, which implicitly supports desecuritisation. The stance of local media is unsurprising because state media is under government control and regulation (Infocomm Media Development Authority, 2022), and hence it is understandable that local media and the government's narratives are closely aligned, emphasising normalcy and the stability of the situation. This frame alignment amplifies reassurance to the public that everything is under control. External media portrayal of the chicken export ban starkly contrasts with that of local news media and the government, framing it as an economic issue with metaphysical and political implications for Singapore's identity. Conversely, the government and local news media depict it as a purely economic issue that can be managed by diversifying trade to reduce over-reliance. Therefore, there was a securitisation of the chicken export ban, but only by external news media, and not by local news media or governmental media.

The findings reveal that only the external news media engaged in a securitisation speech act, clearly linking the ban to its effects on Singapore culture and national identity. In contrast, both the local news media and the government adopted a desecuritisation approach, deliberately shifting the focus away from national identity and reframing the situation to avoid the portrayal of a crisis. These results also have an interesting implication for securitisation theory. Traditionally, securitisation speech act has always been limited to the governmental actor, where the government uses it to justify immediate drastic actions (Wæver, 1993). However, in this case, a role reversal occurs, where external media is the securitising actor, while the government is the desecuritising actor. This raises the question on whether such cases could be more prevalent when studying the securitisation of societal security, as societal security does not have its own 'voice' (Uzun, 2023), and must rely on actors that represent society, such as news or social media, to voice out relevant concerns (Wæver, 1993).

For an issue to be considered a security concern, it must not only be represented as such but also be widely accepted as such (Buzan *et al.*, 1998). This study is limited in its focus on the representation of the Malaysian chicken export ban, rather than its acceptance, omitting a crucial aspect of the debate and leaving room for further exploration. Future research could consider why external media adopts a different stance from local news media and governmental media, which was not done in this paper. Possibly, being independent of Singaporean state control, they may be driven by different agendas, whether those are related to their affiliations or a desire to attract more viewers with sensational headlines. Lastly, because of its limited scope, the research aimed to identify cohesive frames in the various groups identified and did not have time to delve into the differences in framing within each group, leaving more areas for future research.

Appendix

Appendix 1: List of sources

Source	Source Name	Source Type	Title
Foreign	CNN	Online News Article	'Chicken-rice crisis' as Singapore's national dish hit by Malaysian export ban
	BBC	Online News Article	Chicken rice: Why Singapore's much-loved dish is under threat
	NBC	Online News Article	Crisis for Singapore's national dish after Malaysia bans chicken exports
	Guardian	Online News Article	'Like McDonald's with no burgers': Singapore faces chicken shortage as Malaysia bans export
	Financial Times	Online News Article	Chicken rice: Singapore's cooks suffer an unlucky setback
	International Business Times	Online News Article	Singapore Faces 'Chicken-Rice' Shortage As Malaysia Bans Export
	The Independent	Online News Article	Distress in Singapore as Malaysia bans chicken export
	Bloomberg	Online News Article	In Singapore, a Chicken Ban Is a Serious Threat
Local	CNA	Online News Article	Chicken rice run: Customers dig in as Malaysia export ban looms
	The Straits Times	Online News Article	Malaysia bans chicken exports from June 1: How Singapore consumers, businesses are coping
	Today Online	Online News Article	Malaysia's chicken ban: S'pore F&B outlets, importers and markets brace for 'traumatic' disruption, price increases
Govt	Gov.sg	Governmental website	No need to chicken out – Supplies of chicken and other protein alternatives still available
	The Straits Times	PM interview	Nil
	Grace Fu	Facebook Post	Nil
	Lawrence Wong	Facebook Post	Nil

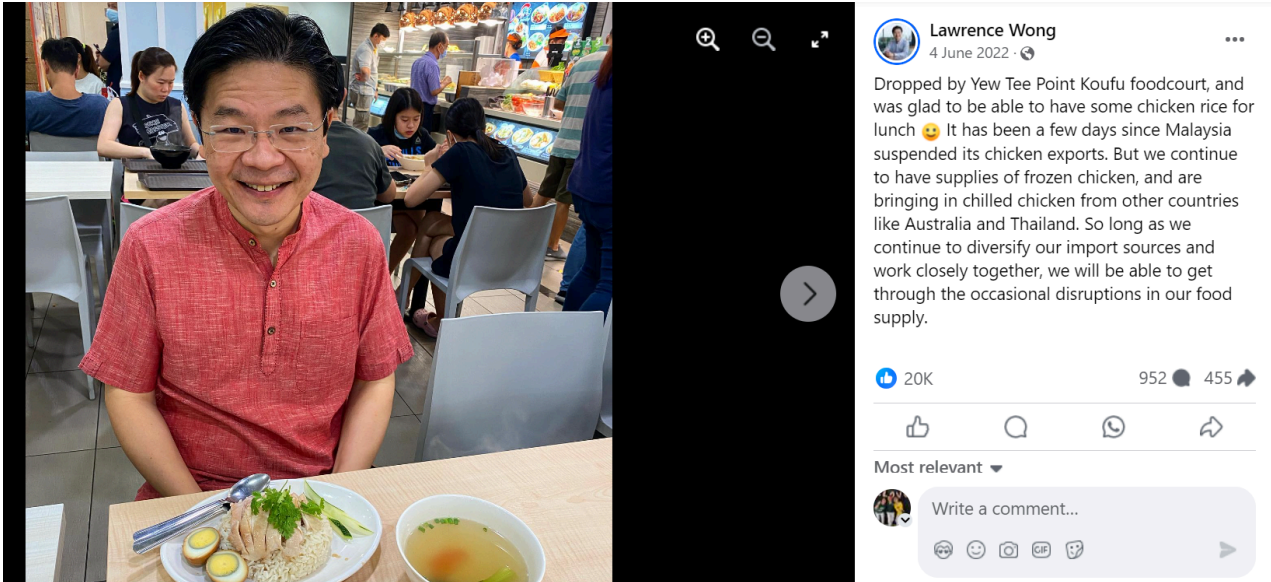
Appendix 2: PM Lee's response to being asked about the chicken export ban

The answer is not what we do now, but what we have been doing, now, for several years, which has been to provide, build up our buffer stocks and our resilience, and diversify our sources. So that if any single source is interrupted, we are not unduly affected. And if you can't buy chicken from one place, well, you can get chicken from other countries. And this time is chicken, next time maybe something else. It is a very unsettled

world and inflation is a problem, cost of living is a problem. But in the scheme of things, many more disruptive things can happen than some price adjustments, and we are seeing some of that now.

Transcribed from: THE STRAITS TIMES. 2022. 'This Time It's Chicken, Next Time It May Be Something Else': PM Lee / THE BIG STORY [Online], available at <https://www.youtube.com/watch?v=j26mBnlMz9k&t=196s>, accessed on 21 February 2024

Appendix 3: PM Lawrence Wong Facebook post



<https://www.facebook.com/photo.php?fbid=563338605151623&id=100044264657476&set=a.258648418953978>, accessed on 21 February 2024

Appendix 4: Minister Grace Fu's Facebook post



Grace Fu ✓

24 May 2022 · 🌐



Malaysia has announced a suspension on the export of chickens from 1 June.

While we have been strengthening our food supply resilience by diversifying our sources and growing local (30x30), we will face disruptions in our food supply from time to time due to climate change and volatility in crop yields, geopolitical developments such as the war in Ukraine, and unexpected policy changes by other countries. While we can minimise the impact, we will not be able to completely mitigate the disruptions in food supply that may come our way.

On the export ban of chicken from Malaysia, [Singapore Food Agency \(SFA\)](#) is working with the industry to manage the chicken supply situation in Singapore, such as activating supply chains to increase imports of chilled chicken from alternative sources and frozen chicken from existing non-Malaysia suppliers, and drawing from existing stocks of poultry.

As consumers, we can all play a part by remaining flexible and adaptable. We can switch to other protein options (e.g. fish) and other forms of chicken meat (e.g. frozen whole or parts of chicken, or canned meat) when fresh or chilled meat is not available.

[#SGToaether](#)

<https://www.facebook.com/gracefu.hy/posts/malaysia-has-announced-a-suspension-on-the-export-of-chickens-from-1-june-while-/575084437310629/>, accessed on 24 February 2024

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>Glossary

Copenhagen School of Thought: An approach to security studies that argues that security is not an objective condition, but a process in which public actors transform issues into security matters, commonly through public discourse and the speech of declaring an issue as a threat.

Food Security: A state in which people, have at all times, access to sufficient, safe and nutritious food that meets their dietary needs and food preferences.

Frame Analysis: A social science research method that focuses on how certain issues are presented by media or public figures, and what is the resulting influence on public perception and behaviour.

Prognostic framing: A component of frame analysis. It refers a frame that outlines potential solutions or approaches to overcome a challenge, often used in a context of social movements or policy challenges.

Securitisation: A process important to the Copenhagen School of Thought, where issues are transformed into urgent security concerns when a political actor identifies an existential threat that requires extraordinary measures.

Securitisation Frames: Refers to frames produced by media or public figures that represents issues as an existential security threat necessitating extraordinary measures.

Securitisation Framework: The overarching framework introduced by the Copenhagen School of Thought which encompasses the analysis of actors involved, the speech acts used, and the socio-political context in

which securitisation occurs.

Securitisation Speech Act: A key concept in the Copenhagen School of Thought which refers to the act of declaring an issue to be an existential security threat through speech or discourse.

Wet Market: A type of marketplace typical in Singapore where fresh produce such as fruits, vegetables and meat are sold. The name “Wet Market” is derived from the frequent washing of floors for hygiene purposes.

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Rethinking the EU's Deforestation Regulation: A Fairer Approach to Palm Oil in the Global South

Abirrami Gunalan, University of Warwick

Abstract

This paper explores the debate on the European Union's Deforestation Regulation on the Palm Oil Industry. While most of the existing literature focuses on the implications of the regulation on the Global South, I explore whether the EU is obligated to revise the regulation on moral terms. In addressing this question, I argue that the European Union has a moral obligation to revise the deforestation regulation or find an alternative way of promoting sustainable agri-food production. The justification is in line with the theory of 'global distributive justice', where the benefits and burdens of the policy should be fairly distributed, taking into account the nation's capabilities and historical contributions to the problem.

Keywords: European Union Deforestation Regulation (EUDR) and Palm Oil, Moral Obligations in Climate Policy, Utilitarianism in EU Environmental Regulation, Distributive Justice in Global Climate Action

Introduction

Palm oil is the most consumed vegetable oil in the food industry, with 90 per cent of the supply contributing to edible foods for purposes such as, but not limited to, cooking oil, baking and emulsifiers (Mba, Dumont and Ngadi, 2015). It has topped other alternatives for decades due to its affordability and efficiency of producing the highest yield of oil per unit area of cultivated land (Mba, Dumont and Ngadi, 2015). A repercussion of its demand has been its contribution to 2.3 per cent of [global deforestation](#) as producers clear land for palm oil farming (European Commission, 2024). The EU, one of the biggest consumers of palm oil, announced a Regulation on Deforestation Free Products (EUDR); the legislation aims to stop the consumption of deforested commodities such as palm oil from being imported into the EU through compliance checks that prove that products do not have traces to deforested land or have contributed to forest degradation (European Commission, 2023). The supply chain of the [global food system](#) will be affected as the policy requires systematic changes that will pose [transition risks](#) to stakeholders. Notably, the Global South received the policy with outrage in 2023; the most vocal countries included Indonesia and Malaysia, who comprise 85 per cent of the world's total palm oil supply, one of the seven commodities covered in the EUDR (Cohen, 2024). The countries believe that the policy will have a substantial negative impact on their economies and, most importantly, the livelihoods of individuals, as the EU is the second-largest palm oil export market for both countries (Haizan, 2023). These actors do not deny the need to fight deforestation but question the unjust conditions. Malaysia's environment minister said, 'It's not fair when countries that have deforested their land for centuries or are responsible for much of our deforestation can unilaterally impose conditions on us' (Cohen, 2024). Although this argument gives us insight into the belief that the EU's policy is 'unfair', advocates also believe that the regulation is morally justified. Therefore, is the EU morally obliged to consider the 'unfairness' of its policy, or does it stand by its reasons?

Responding to this debate will depend on how the concept of ['moral obligation'](#) is defined. Existing literature examines the policy for potential implications (Kumeh and Ramcilovic-Suominen, 2023), yet no

full moral assessment has been done. An insight into nuanced moral arguments adds value to developing a more comprehensive conclusion, especially in an area of such great discourse and misinterpretation.

The subsequent sections of the paper are as follows: Section 2 will provide an understanding of 'moral obligation' through the theoretical frameworks of [utilitarianism](#) and global [distributive justice](#). Sections 3 and 4 explain the moral reasons for each alternative viewpoint, against and for the regulation. The final section concludes with an overview of the discussion.

Conceptualising moral obligation

Moral obligation is the responsibility to perform the right actions (Pink, 2022). However, the dilemma is what constitutes 'right'. In this context, is it right to protect the environment at the cost of economic loss, or is it better to exploit natural resources to develop the economy? In this case, the dilemma becomes a matter of international justice as the EU's gain comes at the opportunity cost of developing countries that generate income from natural resources.

Building on the definition of 'right actions', this paper evaluates moral arguments through the principles of utilitarianism and justice, providing a comprehensive ethical framework. Utilitarianism focuses on the outcomes of actions, while justice examines the fairness of the processes by which those outcomes are achieved. Both perspectives offer valid justifications for determining the [right action](#), making it crucial to evaluate both sides of the argument. Furthermore, these frameworks align with the differing stances of the EU and the Global South concerning regulation: the EU emphasises environmental protection. In contrast, the Global South is primarily concerned with ensuring fair and equitable processes.

As founder of classical utilitarianism Jeremy Bentham states, utilitarianism holds that 'moral principles and policies should strive to achieve the greatest happiness for the greatest number of people' (Crimmins, 2015). Utilitarianism, therefore, focuses on the consequence of an action and whether it brings the most benefits. Although Bentham primarily applied his theory to humans, later utilitarians like Peter Singer expanded the philosophy to consider all sentient beings in the utilitarian principle (Dardenne, 2010). One limitation of this theory is its lack of consideration towards non-sentient entities such as the natural environment. However, it can be argued that the environment's health, such as forests, is directly tied to the overall welfare of current and future sentient beings, as it plays a critical role in sustaining life and preventing catastrophic harm from climate change. Thus, policies such as the EUDR can be justified for seasons as it generates the 'greatest good' for current and future sentient beings.

Carol Bacchi makes the case that it is a state's responsibility to consider the broader implications of policy debates. Coined as 'problem representation', she states that policies 'have a range of ethical implications for targeted groups and individuals and the general population' (Bacchi, 2007). Bacchi's comments interpret that policies have implications that may only represent a particular interest group and have adverse effects on others (Bacchi, 2007). Her explanation shows us the importance of considering the representation of a problem as the benefits and burdens among individuals should be regarded as fair. The theory of distributive justice by John Rawls, known as the '[difference principle](#)', states that all fundamental liberties are to be distributed equally; inequalities are only justified if they benefit the least advantaged members of society (Rawls, 1971). However, the caveat in Rawl's principle is that it only applies to society and is not applicable in a global context. Philosophers such as Simon Caney have extended Rawl's principle by defending a global justice view known as a [cosmopolitan perspective](#), where the principles of justice on the domestic level are

also transferable to a worldwide level (Caney, 2005). Therefore, another approach to deciding whether something is morally right is whether the cost and benefits of a policy are equally distributed.

Both theoretical frameworks offer distinct yet comprehensive approaches to evaluating the policy. Utilitarianism focuses on maximising overall benefits, while global distributive justice examines fairness in the distribution of resources and opportunities. These frameworks are ideal for assessing both the practical and ethical dimensions of the policy.

Moral argument against the EU deforestation regulation

Advocates against the EUDR argue against the regulation for two main reasons: the regulation is unfair to individuals of export nations, and there are double standards regarding the EU's neocolonialism behaviour. Both points are empirically well supported and will be justified by the case of [global distributive justice](#).

The first moral reason against the EUDR is that the EU's intention to save forests will disproportionately hurt the livelihoods of smallholders. Smallholders are classified as independent farmers with plots of less than 100 acres (RSPO, n.d.). Smallholders represent 40 per cent of palm oil production in Malaysia, and these workers are the main breadwinners for their families. The palm oil business has been an instrument for generations that has protected families from experiencing the extreme adverse effects of poverty (Rahman, 2020). Executive Director of the International Trade Centre, Pamela Coke Hamilton, said that smallholders will be 'kicked out of the market' as many remain unaware of how to prove compliance due to their lack of education and technical skills (Cohen, 2024). Even if successful, the upkeep of this new approach will be rather costly due to the added price premiums that must be borne on top of the current low-profit margins. Empirical results showed that smallholders could barely afford basic needs, with many earning an average income below the poverty line (Ahmad *et al.*, 2023). Meanwhile, upfront compliance checks are estimated to range from 16 to 39 per cent of mean annual incomes, proving an additional financial burden that some may not even be able to afford (Suhada *et al.*, 2018). All in all, such a regulation will place a great burden on a large number of individuals who are solely dependent on palm oil as a means of survival.

The second moral argument and probably the most widely discussed opinion is the case of double standards (Cohen, 2024). To lay the foundation, we will first trace back the EU's contribution to deforestation to exploit natural resources to exhibit contradicting behaviour. Today, the EU is still liable for deforestation and pollution due to its dependence on wood burning as a source of renewable energy (EIA, 2022). Although wood burning is not considered 'as high of a threat' since cut trees are supposed to be replaced within two years, the reality does not tell the same truth (UNECE, 2022). Environmental groups have reported large areas of woodland that have not been replanted and remain depleted (Robinson, 2020). From this, we can judge that the EU is placing checks and balances on developing countries for carbon emissions and deforestation while acting contrary to what they preach by burning wood for biofuels.

Considering both arguments from a global distributive justice perspective, this reasoning opposes the principle of distributive justice as it exacerbates inequality in the developing world. According to distributive justice, inequalities are only justified if they benefit the least advantaged, but in this case, the worst-off are made worse. Additionally, states are not treated equally, as affluent nations, having built their wealth through similar means, now have the capacity and resources to thrive, yet deny developing countries the same opportunities, creating a double standard.

Moral arguments for the EU deforestation regulation

While the moral arguments against the EUDR focus more on its economic impacts, these moral arguments for the EUDR centre around the importance of protecting the environment. Below, we go through two moral reasons that support a possible utilitarian justification of the EU's position that there is no moral obligation against publishing the regulation.

Consumer patterns have shown a decline in palm oil consumption as consumers move to other oil alternatives, specifically vegetable oils. Trends have observed that the use of palm oil in food will fall by 35.7 per cent by 2032 as consumers are more conscious of the association of 'palm oil' with 'deforestation' (European Commission, 2022). Consumers prefer food products ultimately 'free from palm oil' rather than being produced from sustainable palm oil sources (Hinkes and Christoph-Schulz, 2020).

Other than consumers having this negative perception of palm oil, there has also been a lot of vocal awareness against palm oil. In 2019, a Dutch margarine brand led a marketing campaign that promoted an anti-palm oil message on their product, stating, 'Eat Plants, Not Palm Please' (Solidaridad, 2019). Although the advertisement was taken down for misinformation, this campaign is only one of many examples of anti-palm oil campaigns showing EU consumers moving further away from the palm oil market. Governments can react to growing consumer expectations because it is a catalyst towards 'sustainable' practices that will slowly help progress towards sustainable commitments.

Objecting to the argument for governments to follow the market demand of EU consumers that will, in return, 'catalyze sustainable consumption within the market', palm oil has a misinterpreted representation on the global stage (Lieke *et al.*, 2023). It cannot be denied that palm oil has led to deforestation, specifically 2.3 per cent of global deforestation; however, this is due to the mismanagement of rapid production expansion (European Commission, 2024). Palm oil is one of the most sustainable types of oil as it can produce the most yield and ten times less land per tonne of oil used (Ukpanah, 2024). Therefore, although the EU Deforestation Regulation does not outright ban palm oil consumption, the increased costs associated with compliance may limit producers' ability to access EU markets with significantly smaller suppliers. Consequently, this could lead them to seek less sustainable alternatives, ultimately failing to benefit the greater good.

The second moral reason for the regulation is that it is a collective benefit that contributes to the EU's sustainable goals. The EU has multiple environmental policies, two of which are reducing net greenhouse gas emissions by at least 55 per cent by 2030 and achieving climate neutrality by 2050 (European Parliament, 2023). Statistics show that the EU's consumption carbon footprint from international trade was responsible for 16 per cent of deforestation, making them part of the problem as the second biggest importer of deforestation (WWF, 2021). In addition, some may argue that there is a moral obligation to uphold sustainability commitments as 'we owe future generations a global environment no worse than one we can enjoy' (D'Amato, 2017). Furthermore, the justification is favourable to the EU by reducing its carbon footprint and the Global South as it will help protect against future destruction of biodiversity, such as the habitats of critically endangered animals (Dhandapani, 2015).

A reason to object to the argument for upholding sustainability commitments is that this methodology does not address deforestation. With more than half of the world's population using palm oil, discouraging its production through stringent rules and price premiums does not address the problem. Instead, it perpetuates potential 'unsustainable' production by shifting the load to countries accepting palm oil. Consequently, following the publication of these regulations, Malaysia approached China for a deal of 'additional uptakes in palm oil' to offset the loss of the European Market (Goh, 2023).

From a moral standpoint of both arguments, we may argue that the EU can justify its moral reasoning using the utilitarian principle, stating that they are acting for the greater good in the context of its consumers while also upholding its sustainability values, which, if unmet, may lead to more significant long-term repercussions. However, as the counterarguments highlight, these intentions may manifest in counterproductive outcomes that do not benefit the greater good.

Conclusion

The most constructive approach to addressing environmental issues is through greater collaboration, supporting relevant countries in targeting their specific problems rather than imposing more stringent measures. Stringent measures alone will likely hinder progress. As discussed earlier in this article, from the perspective of global distributive justice, the costs and burdens should be distributed fairly, according to each country's capacity. In this case, the EU has the capacity and expertise to aid developing nations.

While a utilitarian approach – justifying the policy as promoting the greatest good – might seem valid, it may not fully achieve its intended impacts. Revising it to foster greater collaboration through financial assistance and technological alternatives would likely lead to more constructive outcomes.

At the same time, the extreme importance of protecting biodiversity from deforestation and managing carbon emissions cannot be overstated. A more constructive and balanced agreement must address these critical concerns. This paper's conclusion does not advocate for the removal of the policy but for its revision and improvement to create a more effective and equitable regulation.

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Glossary

Cosmopolitan perspective: Belief that there is a duty to ensure equal respect and consideration to all.

Difference principle: Social and economic inequalities can persist if they maximize the benefit of the least advantaged.

Distributive justice: Equal distribution of benefits and burdens amongst members of society.

Global deforestation: Removal and destruction of forests that occur around the world.

Global distributive justice: Equal distribution of benefits and burdens globally.

Global food system: Interconnected network chain involved in the production, processing, distribution and consumption of food.

Moral obligation: Duty to pursue an act.

Right actions: Morally appropriate actions.

Transition risks: Potential negative implications associated with change.

Utilitarianism: The morally right action is the one that yields the greatest happiness for the greatest number.

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Gastronationalism in Cornwall

Reuben Bye, University of Warwick

Abstract

Discussions of gastronationalism have largely focused on nationalist politics at the state level, especially in the realm of European integration and Americanisation. This paper, therefore, explores how gastronationalism is manifested at the subnational level by asking the question ‘*What role does food play in the construction of Cornish national identity vis-à-vis England?*’ This paper first reviews the literature around gastronationalism to explore how the concept has developed. It shall raise the example of Cornwall as having much in common with previous case studies of gastronationalism in how heritage foods are protected in a politics concerned with homogenisation. A contrast will then be drawn between the generally discussed contexts, with the strong economic incentives to develop an inclusive food culture as part of a national brand that appeals to tourists in Cornwall, which also contributes to the ‘lived brand’ of Cornwall. To investigate this question, a thematic and qualitative content analysis of local tourist boards’ promotional content is conducted in comparison to other English counties. Finally, it shall conclude that gastronationalism is conceptually relevant to the Cornish context, but the specific nature of cultural revivalism suggests the concept should be expanded to better account for subnational gastronationalist efforts.

Keywords: Gastronationalism in Cornwall, Cornish Nationalism, Nation branding in Cornwall, Food politics, Cornish food, Subnational integration politics

Introduction

The concept of ‘[gastronationalism](#)’, developed by DeSoucey (2010), refers to the use of heritage foods as central to national identity and as political tools to assert cultural sovereignty. DeSoucey’s study highlights how fears about [cultural homogenisation](#) have led to states institutionalising foods to preserve national identity. Scholars, like Leer (2018) and Wright and Annes (2013) build on this by introducing [banal nationalism](#) – everyday forms of nationalism – into gastronationalism, emphasising food’s role in shaping national discourse. One critique of gastronationalism is its focus on state-level cultural policies, overlooking subnational dynamics. Aronczyk’s (2013) concept of ‘[nation branding](#)’ suggests that branding not only has economic value (attracting tourism and investment) but also strengthens national identity by encouraging a sense of unity.

Cornwall offers an especially interesting case when examining the subnational dynamics of nationalism. It is the smallest [Celtic ‘nation’](#) in the UK, but, unlike Scotland, Wales and Northern Ireland, Cornwall’s economy and legal framework remain integrated with England. Using [Smith’s \(1996\) criteria of nationhood](#), this paper argues that while Cornwall does not fully meet these criteria, it does exhibit incipient nationalism.

This paper takes a top-down approach to gastronationalism as ‘nation branding’ at a local level. It first conducts a literature review into gastronationalism and nation branding to understand how and why food is institutionalised to protect and project national identity. It then explores the context of Cornwall as a poorly defined entity within the UK that is subject to strong homogenisation pressures from England to the extent that the Cornish language is nearly extinct, and that Cornwall is administered as a part of England. The role of food as a vehicle of national identity in Cornwall is then examined as a realisation of national branding

and banal nationalism. To gain insight into the subnational dynamics of Cornish nationalism, this paper poses the question ‘*What role does food play in the construction of Cornish national identity vis-à-vis England?*’ A thematic and qualitative content analysis comparing tourist boards across Cornwall and six other counties is conducted to understand how representation of locally defined food varies between Cornwall and other English counties. Finally, it shall conclude that gastronationalism is conceptually relevant to the Cornish context, yet the context of cultural revivalism suggests the concept should be expanded to better account for subnational gastronationalist efforts.

Literature review

Gastronationalism

DeSousey (2010) developed the concept of gastronationalism in her examination of foods as institutionalised vehicles of national cultural identities. Beyond the mere intersection of food and nationalism, the concept specifically refers to the role of heritage foods as core tenets of national identities. These tenets then act as political constructs in the promotion of these identities (DeSousey, 2010: 433). She also highlights the role of integration politics as key to gastronationalism in practice. In her case study, responding to pushback against global and regional homogenising pressures, the French government gave official protections to certain foods to assert cultural sovereignty, such as foie gras. Global – and especially European – integration has generated homogenising pressures on cultures, which have provoked a reactive emergence of modern identity politics (Inglis, 2005), and this process is often characterised by populism and polarisation (Croucher, 2018). [Integration politics](#) is especially present in the European context where states are deeply integrated politically and economically with others in Europe, as well as other global economies worldwide. This gives rise to greater focus on Americanisation and European integration in national politics.

Scholars working on gastronationalism such as Leer (2018) and Wright and Annes (2013) have introduced the concept of banal nationalism – a concept defined in the everyday, often subtle ways in which nationalist sentiments are reinforced and reproduced in society without explicit or overt expressions of nationalism (Billig, 1995). This moves away from DeSousey’s focus on state institutional actors towards IGOs, local government and advocacy groups. Leer (2018) utilises banal nationalism to explain how gastronationalism is becoming an entrenched set of practices in Europe. Similarly, Wright and Annes (2013) integrate these concepts to investigate how French newspapers responded to halal burgers, illustrating that food contributes to the social production of meaning within national discourses – in this case, testing the limits of what it means to be French. This is in line with DeSousey’s argument that globalisation presents a homogenising pressure, but it also entrenches and provokes nationalism. Therefore – gastronationalism, ‘the use of food production, distribution, and consumption to demarcate and sustain the emotive power of national attachment, as well as the use of national sentiments to produce and market food’ (DeSousey, 2010: 433) – represents a mechanism whereby states use food as a vehicle of social meaning. This is a technical definition, distinct from broader ideas around food and nationalism.

One possible limitation of previous discussions of gastronationalism is that they primarily focus on cultural protectionist policies at the state level. This is understandable when observing how emotionally charged public discourse is on topics such as European integration, immigration or multiculturalism (Hameleers, 2019). But the integration dynamic also exists at subnational levels. The UK is made up of several national groups, but it is largely dominated by England. Cornwall represents a particularly interesting case when examining the role of gastronationalism as the smallest Celtic nation within the UK as it lacks the

institutional autonomy granted to Scotland and Wales. By exploring the role of gastrationalism in Cornwall, light will be shone on the relevance of gastrationalism at the subnational level more broadly.

Melissa Aronczyk (2013) explores the idea of 'nation branding' whereby influential stakeholders contribute to a national brand. This has obvious economic value: nations with strong, positive branding are well-placed to compete for tourism and investment. But she also explains how ostensibly commercial marketing is also able to 'articulate a more coherent, cohesive national identity, to animate the spirit of its citizens [...] and to maintain loyalty to the territory' (Aronczyk 2013: 3). It represents a 'transformation of business in the articulation of national identity [... but] also maintains and perpetuates the nation as a container of distinct identities and loyalties, and as a project for sovereignty and self-determination' (Aronczyk 2013: 5). In this way, tourism can act as a vehicle for collective identity-making. In the Cornish context – one characterised by an incipient nationalism rather than a defined nation – the process of nation branding offers a means to further develop national identity.

The Cornish context

It is important to first clarify what Cornwall is, given that it occupies a more loosely defined position within the UK compared to Northern Ireland, Scotland or Wales. Cornwall is a clearly defined territory at the end of the southwestern peninsula of Great Britain, but its political status is contested. Deacon (2013: 9) surmises the nature of Cornwall as 'simultaneously English county and Celtic nation but at the same time not quite a proper English county nor Celtic nation' due to the competition between its administrative status and historical narrative. At the local government level, Cornwall remains an English county, responsible for delivering local services. The Duchy of Cornwall is often used as an assertion of constitutional uniqueness, given it has some legal rights, including *Bona Vacantia* (Duchy of Cornwall, 2024). But Deacon (2013: 19) notes that while the Duchy may notionally offer a semblance of institutional special treatment, the powers and day-to-day influence of this private estate are rather limited.

Cornwall has a unique Celtic heritage, as evidenced by the Cornish language, place names, and historical treatment as a non-English group by outsiders (Deacon, 2013: 15–18). This is also reflected in the UK government's recognition of the Cornish as a national minority under the Council of Europe's Framework Convention for the Protection of National Minorities in 2014 (Cornwall Council, 2024b: 7). More recently, a 2023 deal for greater devolution between Cornwall Council and the UK government included £500,000 'to support Cornish distinctiveness, including the protection and promotion of the Cornish language' (Department for Levelling Up, Housing & Communities, 2023: 7). This same deal also began with an explicit recognition of unique identity within the UK: 'This history and the geography of Cornwall, surrounded on three sides by the sea, fuels a strong sense of place and fosters a proud distinctive identity' (Department for Levelling Up, Housing & Communities, 2023: 4).

Cornwall should, therefore, be understood as being English in the sense that it has long been treated as a constituent part of England, but it should also be understood as a unique entity. Another ambiguity is that the relationship between England and Cornwall is not simply a state–substate relationship. England itself is not a state but is rather a constituent nation within the complicated devolution structure of the UK (Sandford, 2010). This leaves Cornwall as a contestably defined part of a non-state nation.

But does Cornwall itself fulfil the criteria of a nation? Smith (1996: 447) defines a nation as 'a named human community occupying a homeland, and having common myths and a shared history, a common public culture, a single economy and common rights and duties for all members'. Cornwall satisfies most of these

conditions, but its local economy is deeply enmeshed within that of the UK and is subject to the same economic policies as England. Similarly, it shares a legal framework with England, with no devolved parliament. Yet it does meet Smith's definition of 'nationalism', 'an ideological movement for attaining and maintaining autonomy, unity and identity for a population which some of its members deem to constitute an actual or potential "nation"' (Smith, 1996: 447). Deacon (2013) details how constructions of Cornish identity emerged, such as a Royalist tradition, a history of rebellion against England, and connection to ancient Britons – especially since the re-articulation of a Cornish identity emerged during the 1960s. By this conception, Cornwall is not a *nation* per se, but there is a distinct incipient Cornish nationalism, with the potential for a more well-defined Cornish nation to emerge.

Cornish revivalism

Cornish identity has long struggled to maintain its distinct character in a shared institutional and cultural space with England, epitomised by the loss of Cornish-speaking communities. Dunmore (2011) explains that the Cornish language is a foundational pillar of the Cornish national identity and has long upheld a sense of otherness from the English, but its near extinction has opened a void partially filled by the English language and culture. In this sense, Cornish cultural discourse is especially vulnerable to homogenisation with England. This presents a situation where integration pressures are very much present, but the tension of cultural homogenisation arises between a hegemonic English nationalism and a subnational Cornish nationalism. This dynamic, therefore, goes beyond preserving regional cuisines to preserving the distinct food heritage of a national group. Here, the institutional recognition of food in Cornwall should be seen as part of a cultural revivalist movement that seeks to reverse the weakening of its national identity.

Cornish revivalism necessarily focuses on distinguishing itself from England to nurture a distinct Cornish identity. Cultural institutions and practices have been established and reconstructed to support the (re)assertion of a unique identity in a pushback against anglicisation, in line with other Celtic revivalism movements (Schlink, 2015: 243–65). The establishment of the Cornish Language Office by Cornwall Council to promote the language's usage (Cornwall Council, 2024a) indicates broad institutional support for promoting Cornishness in Cornwall from both the community and local institutions.

Food in Cornwall

Cornish foods have been afforded official protected status by the UK government. In the case of the Cornish pasty, the Protected Geographical Indication document states that recognition was sought to acknowledge the 'importance of the Cornish pasty as part of the county's culinary heritage' (European Commission, 2010: §4.2i) and to protect 'the link between the Cornish Pasty and the defined geographical area and the enduring reputation of the product', noting the importance of the pasty to Cornwall's tourism and food industries (2010: §4.2ii). This emphasises that institutions have acted to protect heritage foods in a space dominated by integration politics, establishing the presence of key factors featured in past discussions of gastronationalism.

As a living practice, Cornish food culture represents a powerful, bottom-up, banal approach to nation-building, where participants are actually 'performing the nation' (Fox and Miller-Idriss, 2008). International self-projection allows the possibility for 'gastrodiplomacy' – where a food culture produces soft power capabilities (Ichijo and Ranta, 2022). Diplomacy in the formal sense is not applicable to Cornwall as a non-state actor, but the cultivation of a national brand is hugely beneficial to a region heavily dependent on

tourism (Meyrick, 2021). Indeed, the idea of ‘gastrodiplomacy’ is relevant as ‘the use of food [production, distribution and consumption] in the construction of a nation brand [...] increase[s] the attractiveness of a country’s culture’ (Rockower, 2012: 236–38) is accurate in emphasising an international projection of Cornish identity, including within the UK.

Gastronationalism in Cornwall

Cornish food and food practices play a vital role in the assertion of Cornish identity. Cornish food culture has experienced two major developments in recent years. Firstly, the UK government has formally recognised the cultural significance of four Cornish heritage foods under the UK Protected Geographical Indication scheme (UKGI) (Defra, 2024). These are Cornish clotted cream, Cornish sardines, Cornish Cyder Brandy and the famous Cornish pasty (Defra, 2024). Secondly, Everett and Aitchison (2008) explain that with the rise of food tourism, demand for local products has led to the establishment of many small and medium food producers alongside the traditional, but still economically significant, agricultural and fishing sectors. Such artisanal products supply local hospitality businesses. These two developments, representing the old and the new, have contributed to the emergence of a strong sense of culinary self-consciousness.

The tourism sector makes up a large portion of the Cornish economy and employment in one of the poorest parts of the UK (Meyrick, 2021). High dependency on tourism presents a challenge for local policymakers. To attract tourists and investment, Cornwall must differentiate itself from its domestic competitors, such as Devon or Pembrokeshire. Strengthening Cornish identity, therefore, goes beyond identity: cultural strength contributes to prosperity. In response, Cornish tourist marketing strategies have changed from emphasising natural beauty to focusing on Cornish heritage and culture (Hale, 2001). Everett and Aitchison (2008) emphasise that despite historical suspicions towards the economic impacts of tourism, there is a growing consensus that tourism is a means to support otherwise struggling local industries. They contend that tourists spend more on locally produced goods, and the growth of food tourism has extended the Cornish tourist season, boosting employment. A strong tourism industry hence also supports a flourishing ecosystem of suppliers (Everett and Aitchison, 2008). Such clear economic incentives strengthen the Cornish national brand, and further the idea that gastronationalism in Cornwall is an inclusive and proactive means of promoting a distinct national identity. Hence, food represents an important space of resistance against homogenisation pressures from England.

Methods

To better assess the role that gastronationalism plays in Cornwall in the promotion of a unique Cornish identity, a thematic and qualitative content analysis of outward-facing tourism marketing materials is proposed to answer the question: ‘*What role does food play in the construction of Cornish national identity vis-à-vis England?*’ This is to ascertain (a) the extent to which Cornish food culture features in the projected identity of Cornwall, and (b) the extent to which advertised Cornish food culture is discussed as unique to the Cornish experience (i.e. distinct from the rest of England). Local government-run and government-adjacent institutions, such as tourist boards and visitor information centres, work with local governance institutions as their sponsors and beneficiaries. Because of the economic dependence of Cornish communities on tourism, local government bodies have an incentive to offer narratives that differentiate their local area from alternative domestic tourism destinations. By analysing the content of such bodies, data can be collected about how food is featured as a marketing strategy and whether the Cornish identity of food is expressed. The media produced by these boards is not wholly representative of how Cornwall projects itself, but this

remains a useful source of insight as a series of bodies that project a positive Cornish identity in line with Aronczyk's (2013) notions of nation branding.

Woodrum (1984) explains how a [content analysis](#) methodology is advantageous for the provision of a systematic and structured approach for the analysis of qualitative data. Clear coding procedure is able to limit the risk of researcher bias impacting analysis. Emergent categorisation was used to keep track of themes of interest. As Cornwall is a relatively small area, this methodology allows an exhaustive analysis of materials from Cornish local tourism promotion bodies. [Thematic analysis](#) allows investigation into both explicit and implicit content, such as the manner in which food is presented as local. Neuendorf (2018) hence describes the two methods as complementary. By conducting a thematic analysis alongside a qualitative content analysis, this approach is able to explore both latent and manifest content to capture both the structural presence of Cornish identity within the marketing materials and the underlying themes.

Firstly, the source information was recorded, then whether the tourist website featured a dedicated section promoting food, which was a prerequisite to further data collection. Specific mention of Cornish heritage foods was recorded to ascertain whether and how these featured in marketing materials. This looked for Cornish pasties and Cornish clotted cream (including mentions of Cornish cream teas), but also for local seafood. While not technically covered by the UKGI scheme, 'seafood' is a container term recognising the cultural and economic significance of the fishing industry in a very coastal region, and this mirrors the rationale for Cornish sardines receiving protected status. Next, the description of a broader food culture was investigated by searching for whether the local production of the advertised food was used as a marketing tool and the name of this type of non-protected food was recorded. Finally, it was recorded whether the local food scene was explicitly marketed as 'Cornish'. This process was then repeated for six counties across England to understand whether this local branding – in this case of a uniquely Cornish experience – is distinct to Cornwall.

When selecting cases for data collection, the aim was to collect data from across Cornwall and the other counties so that data would be representative of the entire areas. The tourist board websites were therefore chosen to maximise range. The data collected represents the content of local tourism promotion websites at the town, county and area-of-county level. Where a town has its own tourism website alongside a webpage on a regional tourism website, only the content of the town's own site was analysed, as the site representing a wider area was analysed separately according only to the content of its food-focused page, providing a general overview for the wider area that the site represents. This focuses the analysis on accounting for the marketing strategies of multiple promotional bodies regionally, without the data becoming disproportionately representative of a single, county-level board's tourism promotion strategy.

The six English counties selected for comparison with Cornwall were chosen to be widely spread across England. These are County Durham, Devon, the Isle of Wight, Shropshire, Suffolk and Warwickshire. Devon was an especially important county to include as it has many similarities with Cornwall. It is Cornwall's only neighbour, and it competes directly with Cornwall for tourists.

Analysis

Of the 26 selected tourist boards in Cornwall (see Appendix A), 19 contained textual descriptions that could be analysed, 16 specifically mentioned products with institutionally recognised significance (Cornish pasties, Cornish clotted cream or locally caught fresh seafood), and 15 boards explicitly described their food scenes as 'Cornish' (including 'Scillonian') – this did not include instances where 'Cornish' was used as a protected

heritage product name to focus on where descriptive decisions were made. Sixteen websites referred to food as 'local', emphasising that food was being sourced from local producers within Cornwall, especially from within a board's area of coverage and its immediate vicinity. 'Local' credentials are often utilised as evidence of quality through an emphasis on freshness, and benefits from moral assumptions that buying local is somehow virtuous (Ferguson and Thompson, 2021). Notably, every board using promotional text either used the term 'local' or 'Cornish', with 12 (a majority of the 19 boards with textual descriptions) using both terms. Food products that lack institutional recognition but were nonetheless advertised as local, frequently included meat, dairy, produce and baked goods.

Although the other observed counties similarly gave much attention to the locality of food products (see Appendix A), there was a significant difference in how county and regional identities were portrayed. All associated the locality of produce with freshness and quality. Some counties only described food produced in their area as local with very few explicitly associating it with a county identity – for example, County Durham: 'fresh [...] flavourful, heart-warming food [...] from locally sourced ingredients' (The Auckland Project, 2024), 'mouth-watering local food' from 'innovative local producers' (This is Durham, 2024). Devon stood out for its strong use of its county-level identity (19 of the 33 that contained food descriptions), but the specific descriptions largely focused on local speciality. For example, 'Devon is famous for its fruit and dairy, particularly, its cream, custard and ice cream' (Visit Devon, 2024a), or the descriptions boasted of 'Devon produce'. Some Cornish boards explicitly distinguish Cornish cuisine with that of England (e.g. describing the Cornish pasty as the 'national dish' (Visit Cornwall, 2024). Perranporth (in Cornwall) invites visitors to 'experience the warmth of the Cornish people, enjoy a "real" Cornish pasty or [...] indulge in a Cornish Cream tea' (Perranporth Info, 2024); in contrast, Devon's Paignton does offer 'fresh Devon ingredients', but the additional references to 'England's Seafood Coast' and 'the English Riviera' demonstrate the stark descriptive distinctions and accommodation of an English identity (Visit Devon, 2024b). Even the descriptions of locality offered could be quite mundane, such as in Warwickshire where boards merely offer 'local ales' (Love Shipston, 2024) or only provide potential visitors with a list of nearby eateries. This contrast continues when analysing the frequency at which food is described explicitly as of a county, where textual descriptions were available. For example, 79 per cent of boards in Cornwall described food as 'Cornish', whereas other English counties did so at a significantly lower rate. The Isle of Wight and Devon did so most frequently at 60 per cent and 57 per cent respectively, Shropshire was at 33 per cent, Suffolk and Warwickshire only had one mention each, and there were no descriptions of 'County Durham' foods. The Isle of Wight's 60 per cent is rather misleading, however, as there were actually only three uses of county descriptions. This is because only 5 of 12 boards marketed the local food scene with text. Devon is, therefore, most comparable to Cornwall in terms of the usage of county description, but even then, it is at a significantly lower frequency. The overwhelming presence of food-related promotional content described in terms of its Cornishness demonstrates the deep connection between Cornish food and the outward portrayal of Cornwall.

The specific use of 'Cornishness' as a promotional tool explicitly contrasts Cornish foods to the rest of the UK. The regular occurrence of protected foods – more frequently mentioned than non-protected foods – in marketing materials suggests that the institutional recognition of Cornish food heritage is supporting Cornwall's outward projection of itself. It also suggests a relationship between the cultural heritage significance of food and its primacy within promotional strategies, especially since the promotional bodies operate adjacent to local government and institutions.

The 'local' description is especially interesting as it is consistently used in a 'hyperlocal' conception. Local food production is generally described as being done in the immediate vicinity of a specific town such as

ingredients from ‘farms [...] down the road’ (Your Liskeard, 2024), or fish landed at ‘the harbour’ (Visit Newquay, 2024). This is indicative of a belief that to eat local means to eat from food from within or near a community (Beatley, 2016). Only one Cornish tourist board gave a broader description of local, and only one expanded the definition of ‘local’ from exclusively Cornish to ‘the flavours of Devon and Cornwall’ (Visit Bude, 2024), but this is likely due to that town being in close proximity to the Devon border, another county with a significant food industry (Office for National Statistics, 2024). Most of the English bodies observed shared this conception of ‘local’ as ‘hyperlocal’, but often tying locality to quality rather than heritage, especially freshness. In the vast majority of cases, the exclusivity of local food sourcing from Cornwall demonstrates the existence of an external projection strategy that prominently includes a distinctly Cornish food offering, distinct from that of England.

Conclusion

Previous insights into gastronationalism have largely focused on state-level protections of national heritage products to preserve national food cultures in the face of homogenising cultural pressures. To explore how this dynamic is manifested in circumstances of subnational homogenisation concerns, this paper has asked ‘*What role does food play in the construction of Cornish national identity vis-à-vis England?*’ Food and food practices have successfully been instrumentalised by institutional organisations in Cornwall to promote Cornish national identity. Gastronationalism provides a useful framework to analyse the relationship between local and state institutions’ culturally protectionist policies towards food and the identity politics of homogenisation these actions take place within. Such policies are not primarily a reactive measure to avert the loss of heritage practices. Gastronationalism serves to reassert a complex national identity that has been heavily influenced by English nationalism for centuries. Necessarily this entails conveying a cultural distinctiveness to emphasise the distinct heritage and practices of Cornwall. Food culture widely features in promotional materials aimed at encouraging tourists to visit Cornwall and experience its unique culture. These materials often draw on a rich set of traditions in a way rarely seen in parts of England. This represents a divergence from how gastronationalism is usually discussed as promotional bodies associated with local government present Cornish food as an inclusive phenomenon for visitors to sample. These materials offer a limited insight into Cornish identity projection as one form of identity projection; however, as key messengers of Cornish identity to the world that operate alongside local government, this remains indicative of wider gastronationalist narratives. The strong economic incentives to promote tourism have encouraged the role of food to become an essentially uniform marketing strategy for tourist boards and visitor information centres across Cornwall. Cornish gastronationalism should be characterised as a forward-looking movement aiming to expand the tourism sector and support a large network of food producers to further develop its food culture and thereby its national self-consciousness.

Cornish cuisine is clearly only one element of nationalism, yet food plays a major, very visible role in the national branding of Cornwall. Many visitors are relatively innocent to the cultural intricacies of Cornwall, but the outward projection of Cornish identity is not solely aimed at an external audience. Aronczyk (2013) explains the mechanism by which national branding promotes the development of nationalism. Focusing on projecting positive traits and aspirations can unify constructed nationalisms as people in Cornwall view this branding through a wider (international) perspective. Aronczyk also notes that successful campaigns may also promote greater pride in and identification with the ‘nation’ as citizens internalise messaging. Hence, successful campaigns promote a ‘lived brand’ that strengthens banal nationalism. This explains how strengthening the external promotion of Cornish culture, such as its vibrant food scene, can strengthen the sense of distinction with England, which may one day result in greater autonomy for Cornwall within the UK.

The frequency at which Cornish tourist boards associate food with Cornishness reveals how commonly food is portrayed in national branding.

This dynamic strongly indicates that the institutional promotion of food heritage has been effective in promoting a uniquely Cornish cuisine as part of revivalist efforts and shares parallels to other cultural revivalist movements. The promotion of local cuisine in Greenland to promote tourism offers a similar experience to Cornwall. Ren and Fusté-Forné (2024) explain that tourism offers a means of re-production and identity promotion in a colonial context whereby eating Greenlandic foods and ingredients manifests an expression of Greenlandic identity. Chuang (2009) describes how ‘Banal Foods Recaptured by the Touristic Gaze’. Revitalisation of local, especially indigenous, cuisine in Taiwan has been a means of soft resistance against historical mainland rule as well as to help foster a distinctly Taiwanese identity against the hegemonic influence of China. Of course, Cornwall borders the rest of England and is far less autonomous, but the similarities highlight that tourism provides economic incentives for the continuation of practices and can be aimed toward a global audience. Cornwall stands out, however, for the depth of its integration with the cultural hegemony. Further research might examine how this dynamic of homogenisation is manifested for regional cuisines within one nation.

Appendix 1

Cornwall

Tourist board	Where on website	Cornish pasty?	Cream tea?	Local food?	Seafood	Explicitly local?	Which local?	Food explicitly described as Cornish?	Notes	Link
Cornwall	Food & drink	1	1	1	1	0	Produce, ice cream	1		https://www.visitcornwall.co.uk/food-and-drink/
Cambourne	Eat & drink	0	1	1	0	0		1		https://www.visitcornwall.co.uk/visit-cambourne/
Boscastle	Things to do	1	1	0	0	0		1		https://www.visitcornwall.co.uk/visit-cornwall/boscastle/
Bude	Places to eat/cafés	1	1	1	1	1		1	‘flavours of Devon and Cornwall’	https://www.visitcornwall.co.uk/visit-cornwall/bude/
Falmouth	Eat & drink	0	0	1	0	1		1		https://www.visitcornwall.co.uk/visit-cornwall/falmouth/
Fowey	Eating out	1	1	1	1	1	Produce	1		https://www.visitcornwall.co.uk/visit-cornwall/fowey/
Helston									No food section	https://www.visitcornwall.co.uk/visit-cornwall/helston/
Isles of Scilly	Food & drink	0	0	1	1	1		1	‘Scillonian’	https://www.visitcornwall.co.uk/visit-cornwall/isles-of-scilly/
Launceston	Where to eat	0	0	0	0	1		1		https://www.visitcornwall.co.uk/visit-cornwall/launceston/
Liskeard	Eat & drink	1	0	1	1	0	Meat, fruit & veg, cheese	1		https://www.visitcornwall.co.uk/visit-cornwall/liskeard/
Looe	Eat	0	0	1	0	1	Ice Cream	1	Picture of cream tea but not textually referenced	https://www.visitcornwall.co.uk/visit-cornwall/looe/
Lostwithiel									No descriptions of foodscene on website	https://www.visitcornwall.co.uk/visit-cornwall/lostwithiel/

Marazion	Restaurants and Pubs	0	0	1	1	1	produce, gin, ale	1		https://www.marazion.co.uk/
Mevagissey	Food	1	1	1	1	1	Yarg, baked goods	0		https://www.mevagissey.co.uk/
Newquay	Food & drink	0	1	1	1	1	Ice cream	1		https://www.newquay.co.uk/food-and-drink/
Padstow									No descriptions of foodscene on website	https://www.padstow.co.uk/
Penzance									No descriptions of foodscene on website	https://www.penzance-tourism.co.uk/
Perranporth	Homepage	1	1	0	0	1		1	real' Cornish pasties	http://www.perranporth.co.uk/eat-drink/
Redruth									Minimal description of foodscene, only mentions independent businesses	https://www.redruth.co.uk/food-and-drink/
St Agnes									No descriptions of foodscene on website	https://www.stagnes.co.uk/
St Austell	About us	0	0	1	1	0		0		https://www.staustell.co.uk/about-us/
St Ives	Eat & drink	1	0	1	1	1	Meat, produce	0		https://www.stives.co.uk/cornwall/
St Mawes and The Roseland	Food & drink	0	1	1	1	1	'seasonal ingredients'	0		http://www.stmawes.co.uk/food-and-drink.aspx
Sennen Cove	Food & drink	1	1	1	1	1	Produce, dairy, baked goods	1		https://www.sennenboathouse.co.uk/
Truro	Food & drink	1	0	1	0	1	Produce	1		https://www.truro.co.uk/food-and-drink/
Wadebridge									No descriptions of foodscene on website	https://www.wadebridge.co.uk/director/

Devon

Tourist board	Where on website	Local specialty?	Which Food is highlighted as Local?	Local	County?	Region?	England?	How is local food described?	Notes	Link
Devon	Food & Drink	Cream Tea, custard, cider	Seafood, veg, beef, dairy, ice cream, cheese, gin	1	1	1	0	Environmentally conscious, high quality, diverse, local SME-dominated production		Devon Gov (visitdevon)
Exeter	Food & Drink	Pasty	Seafood, ingredients	1	1	0	0	Focus on local businesses	Also mentions international cuisine	Food & Drink (visitexeter)

Brixham	Food & Drink in Brixham		Seafood, Dairy, Fruit, Custard	1	1	0	1		England's Seafood Coast	Food & D (visitdev
Torbay	Food & Drink	Cream Tea	Seafood, produce	1	1	0	0		England's Seafood Coast	Food & D Torquay
Babbacombe									No focus on food	Things to Attractio English R
Newton Abbot	Food & Drink in Newton Abbot		Seafood, Produce	1	1	0	1			Food & D www.Visi
Totnes	Eat and Drink		Produce, coffee	1	0	0	0	Fresh		Totnes Re and Food (visittotn
Dartmouth	Food & Drink	Cream Tea	Seafood, Produce, Drinks	1	1	0	0			Food & D Dartmou
East Prawle									No focus on food	Cultural (visitdev
Salcombe	Food and Drink		Seafood, Dairy, Beef	1	1	0	0			Food and Salcombe (salcomb
Hope Cove	Hope Cove		Seafood, Ice Cream	1	0	0	0			Hope Co
Bigbury-on-Sea	Eating Out	Clotted Cream	Seafood, Meat, Ice Cream, Gin	1	1	0	0			Eating ou
Plymouth	Food & Drink	Cream Tea	Seafood	1	0	1	0		Doesn't specifically say 'Westcountry' but talks about Devon, Cornwall, Somerset and Dorset together	Visit Plym Plymouth Board
Tavistock	Eat & Drink	Cream Tea		0	1	0	0		Focus on Businesses	Visit Tavi Market T (visit-tavi
Okehampton	Food & Drink		meat, fish and vegetables	1	1	0	0			Home - V
Dartmoor National Park	Food & Drink	Cream Tea	Dairy, meat	1	1	0	0			Visit Dart Website
Hartland Quay	Fabulous Food & Drink		Seafood	1	0	0	0			Fabulous Peninsul (hartland
Clovelly	Eating in Clovelly		Lobster, Seafood	1	0	0	0			Eating in
Westward Ho!									Focus on Businesses	Places to North De (visitwes
Appledore	Appledore		Seafood	1	0	0	0			Appledor (visitdev
Woolacombe	Visiting Woolacombe		Seafood	1	0	0	0			Visiting V (visitdev

Barnstaple	Food and Drink in Barnstaple		Seafood, Meat, Dairy, Produce, Cream	1	1	1	0		Food and (visitdev
Ilfracombe	Places to Eat & Drink in Ilfracombe	Cream Tea	Seafood, Meat, Dairy, Produce	1	1	0	0	'Exmoor'	Places to - Visit Ilfr
Lundy Island								Obvs its home to like 28 people	
Combe Martin								Focus on Businesses	EatingOu
Lynnton and Lynmouth	Food & Drink	Cream Tea	Fish & Chips	1	1	0	0		Food & D Restaura Lynmout (visitlynt
Exmoor National Park	Food & Drink		Fruit	1	0	0	0	Crosses to Somerset, 'Exmoor Cream Tea'	Exmoor F and other exmoor.c
Tiverton	Tiverton		Produce	1	0	0	0		Tiverton
Crediton	Food & Drink in Crediton	Cream Tea	Meat, Dairy, Veg, Drinks	1	1	0	0		Food & D (visitdev
North Devon	North Devon		Produce	1	0	0	0		Visit Nor (visitdev

Warwickshire

Tourist board	Where on website	Local specialty?	Which Food is highlighted as Local?	Local	County?	Region?	England?	How is local food described?	Notes
Polesworth									Focus on Business
Atherstone									Focus on Business
Nuneaton	Nuneaton		Produce	1	0	0	0	Fresh	About the market
Coleshill									
Rugby	the rugby town guide		Veg, fruit, beverages	1	0	0	0		
Kenilworth	Food & Drink			0	0	0	0		

Henley-in-Arden									Focus on Business, desc
Royal Leamington Spa									Focus on Business, desc
Warwick	Directory								Focus on Business
Alcester	Eat & Drink		Brews	1	0	0	0		
Stratford-upon-Avon	Eating Out			0	0	1	0		some of the Midlar finest Restaurants
Shipston-on-Stour	Food & Drink			0	0	0	0		
Warwickshire	Food & Drink		Gin	1	0	0	0	Artisan	
Warwickshire	Food & Drink			1	1	0	0		

County Durham

Tourist board	Where on website	Local specialty?	Which Food is highlighted as Local?	Local	County?	Region?	England?	How is local food described?	Notes	L
Consett									Focus on Business	E C
Peterlee									Can't find a board for it	
Stanhope									No Food section	S T (f
Bishop Auckland	Dine with Us			1	0	0	0			E A
Middleton-in-Teesdale									No Food Section	M T
Barnard Castle	Barnard Castle			1	0	0	0			E B C (f
Darlington	Eat & Drink			0	0	0	0		British	E L C
County Durham	Food and Drink		Cheese	1	0	0	0			E P C
Hartlepool	Food and Drink			0	0	0	0	fantastic		E (f

Shropshire

Tourist board	Where on website	Local specialty?	Which Food is highlighted as Local?	Local	County?	Region?	England?	How is local food described?	Notes	Link
Shropshire	Food & Drink			1	1	0	0			Visit Shropshire
Market Drayton	Home		Gingerbread, ale, Dairy	1	1	0	0			Discover Market Drayton
Oswestry	Food and Drink		produce, brewery	1	0	0	0			Places to Eat & Drink in Oswestry
Shrewsbury	Eat & Drink			0	0	0	0			Eat & Drink in Shrewsbury
Telford	Food and Drink		Crops, dairy, sausage rolls, beverages	1	0	0	0			Food & Drink in Telford
Church Stretton	Eat and Drink		Produce	1	0	0	0			Eat & Drink in Church Stretton
Bridgnorth	Shopping		Produce, meat, ales	1	1	0	0			Shopping in Bridgnorth
Clun/Shropshire Hills	Food and Drink		Gin	1	0	0	0			Food & Drink in Clun/Shropshire Hills
Craven Arms	Craven Arms		Produce	1	0	0	0			Craven Arms
Ludlow	Home		Produce	1	0	0	0			Ludlow Events Accommodation Historic

Suffolk

Tourist board	Where on website	Local specialty?	Which Food is highlighted as Local?	Local	County?	Region?	England?	How is local food described?	Notes
Suffolk	Visit Suffolk		Produce, seafood	1	0	0	0		'The Foodie County'
Brandon	Food & Drink			0	0	0	0		
Middenhall	Mildenhall								No Food Section
Newmarket	Eat			0	0	0	0		
Haverhill	Haverhill			0	0	0	0		
Bury St Edmunds	Eating and Drinking		Produce	1	1	0	0		
Sudbury	Dine								No Food Description
Stowmarket	Stowmarket								No Food Description

Ipswich	Food and Drink in Ipswich			0	0	0	0		'global cuisin
Felixstowe	Eat and Drink		afternoon tea, ice creams, fish and chips	1	0	0	0		
Aldeburgh	Guide to visiting Aldeburgh								Only mentio chip shop
Framlingham	Framlingham								Focus on businesses
Saxmundham	Visit								No Food Description
Southwold	Southwold		Ale	1	0	0	0		
Halesworth	Halesworth		Produce, wine	1	0	0	0		
Lowestoft	Information about Lowestoft		Produce, Fish and Chips	1	0	0	0		

Isle of Wight

Tourist board	Where on website	Local specialty?	Which Food is highlighted as Local?	Local	County?	Region?	England?	How is local food described?	Key Descriptions	Note
Isle of Wight	Food and Drink		gin, garlic, cheese, tomatoes, fish and chips	1	1	0	0			
Totland										Focu busir
Yarmouth	Eat and Drink			1	0	0	0			
Cowes	Cowes and East Cowes		Fish, Meat	0	1	0	0			
Newport	Newport									Focu busir
Brighstone	Brighstone		Produce, garlic, breads	0	1	0	0			
Niton	Niton									No se on fo
Ventnor	Eating			1	0	0	0			

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Glossary

Gastronationalism: This refers to the institutionalisation of foods as vehicles to preserve national identities, generally in response to fears of cultural homogenisation. By giving heritage foods protected official status, institutions hope to reinforce national pride and emphasise the cultural products that make their nation distinct.

Cultural homogenisation: This refers to the process through which cultural groups become increasingly similar. Critics argue that this results in a loss of cultural diversity and therefore the erosion of distinct national identities.

Banal nationalism: In contrast to overt nationalism, banal nationalism refers to the often unnoticed, everyday ways in which national identity is subtly reinforced. This might manifest through displays of flags, through the use of language or by partaking in cultural activities (Billig, 1995).

Nation Branding: This concept refers to the process of cultivating an outward facing national brand identity. This promotion has economic benefits, such as allowing a nation to attract more tourists and investments. It also strengthens domestic national identity as citizens are affected by the articulation of what it means to be a part of that nation (Aronczyk, 2013).

Celtic nation: This refers to nations in Northwestern Europe which are characterised by Celtic linguistic and cultural heritage. This includes Brittany, Cornwall, Ireland, the Isle of Man, Scotland, and Wales.

Smith's criteria of nationhood: Smith distinguishes between a 'nation' and a 'nationalism'. He defines 'nation' as 'a named human community occupying a homeland, and having common myths and a shared history, a common public culture, a single economy and common rights and duties for all members' Smith (1996: 447). Whereas he defines a 'nationalism' as 'an ideological movement for attaining and maintaining autonomy, unity and identity for a population which some of its members deem to constitute an actual or potential "nation"' (Smith, 1996: 447).

Integration politics: This refers to the processes and dynamics through which two or more groups pursue greater cohesion and cooperation, such as through economic or political integration. The archetypal example is the European Union where European states have ceded some sovereignty to the supranational body to collaborate more closely with other states across the continent.

Content analysis: This a research method used to systematically interpret textual, visual or audio content by recording the frequency key elements, such as specific words or topics. This method allows researchers to analyse documents and recordings for trends or biases and the systemic approach makes their qualitative evidence more convincing.

Thematic analysis: This method allows researchers to systematically approach qualitative data, especially that with heavy descriptive data, to identify common themes and ideas. Its systematic approach allows researchers to present their qualitative evidence more convincingly.

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