



# There's no such thing as cycle traffic: A critical discourse analysis of public opposition to pro-cycle planning

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## ABSTRACT

Across a variety of low-cycling contexts, there are ambitious targets to reduce private car use and increase cycling to decarbonise everyday mobility practices. A component of many plans to achieve this modal shift is through active travel measures that redistribute rights to space, access or speed in a way that may prioritise cycling over driving. However, public opposition to proposals that might reduce the relative accessibility of driving can limit the possibility and scope of redistributive active travel measures, thereby preventing timely climate action and broader transport system change. In this study, we explored public opposition to a major redistributive active travel scheme proposed in the electoral county of Dún Laoghaire-Rathdown, located within the Dublin Metropolitan Area of Ireland, to examine more broadly how car-based automobility is politically sustained in this unique context. We focused our analysis on 150 public consultation submissions using Faircloughian Critical Discourse Analysis. In this paper, we present several major properties of an oppositional 'technical discourse of transport planning', that is normatively car-centric: 'traffic' as car-based (im)mobility, roads as 'traffic' spaces, 'traffic' as an immutable substance, and traffic demand-led planning. We interrogate the historical origins of this discourse in the context of Ireland and consider its effects on planning practices in relation to reproducing car-based automobility. Lastly, we conclude with recommendations that can form part of a counter-discourse that is more compatible with transport decarbonisation targets: wording cycle mobility as 'cycle traffic', construing redistributive cycleways as spaces of 'traffic conversion' rather than 'traffic diversion', and saliently outlining a principle of vision-led planning in redistributive active travel measures, amidst prevailing assumptions that transport planning ought to continue as a primarily 'demand-led' practice.

## 1. Introduction

As part of a wider shift to multi-modal mobility practices, cycling is viewed as a strategically significant mode that can substitute car journeys and thereby contribute to broader efforts to decarbonise domestic mobility practices across Europe (European Commission, 2022). International research has investigated what policies and programmes can help to promote cycling in contexts where cycling mode share is markedly low relative to driving. Emerging from this research to date, the importance of developing a system of high-quality segregated facilities for cyclists along with broader motor traffic calming and restriction measures that favour cycling have both been stressed as interventions with considerable mode shift potential (Pucher and Buehler, 2008; Pucher et al., 2010). These pro-cycling measures are apparent in European-level policy and planning guidance (European Commission,

2022; European Cyclists' Federation, 2017).

The context of this study, Ireland, is one of the worst performing countries in the EU for greenhouse gas emissions (Climate Change Performance Index, 2021). To meet international 2030 climate targets, Ireland needs to halve emissions within its transport sector (Department of the Environment, Climate and Communications, 2022) – the second largest contributor to greenhouse gases nationally (Environmental Protection Agency, 2022). In order to meet this overall target, the Irish government aims to reduce the daily mode share of private car journeys from the 2018 distribution of 72% to 53% by 2030, by shifting these journeys to public transport and active travel modes. Road space reallocation can be seen as an approach that promotes the 'avoidance' of car journeys while also promoting a 'shifting' of car journeys to more sustainable modes, and is a significant part of Irish transport decarbonisation plans (Department of the Environment, Climate and

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Communications, 2022). This car use reduction strategy can be characterised as both a promotional measure and a broader ‘demand management’ measure, that may reduce demand for car use by decreasing its attractiveness relative to other modes (Department of the Environment, Climate and Communications, 2022; Department of Transport, 2022; Government of Ireland, 2021). As a demand management measure, road space reallocation can co-exist with other measures to manage demand, such as more temporary car access restrictions to particular locations, and the expansion of ‘slow zones’ that aim to limit driver speed through traffic calming measures, signage and enforcement of speed compliance (Government of Ireland, 2021). All of these demand management measures could be seen as ‘redistributive’ rather than ‘additive’ in that they reconfigure rights to space, access and speed within public spaces in a manner that might enhance cycling and walking relative to driving.

The proposal and implementation of redistributive active travel measures – whether at an Irish or EU-level – can be the subject of considerable public opposition (Wild et al., 2018; Aldred, 2019; Hickman and Huaylla Sallo, 2022; Field et al., 2018; Crane et al., 2016; Vreugdenhil and Williams, 2013; Burke, 2022; Halpin, 2021; Kelly, 2021) since these measures present a challenge to the continued privileging of car-based automobility in planning practice. In light of the political challenges of implementing redistributive active travel measures, this Critical Discourse Analysis study explored how car-based automobility as a dominant mobility system is politically sustained in the context of Dún Laoghaire-Rathdown, Ireland. Analysis focused on 150 public consultation submissions explicitly in opposition to a major Dún Laoghaire-Rathdown redistributive active travel scheme. In this paper, one of the major discourses identified as part of this broader study is presented: a (car-centric) technical discourse of transport planning. Within this discourse, the car is constructed as the essential object of transport planning, discounting cycling and cycle spaces as legitimate and plausible transport planning alternatives.

The paper proceeds as follows. First, we provide an empirical and theoretical background to the study, respectively examining research exploring opposition to active travel measures and theories that provide an account of the processes by which car-based automobility is politically sustained as a dominant mobility system. Second, the Dún Laoghaire-Rathdown study context and Critical Discourse Analysis methodology are outlined in detail. Third, we present several prominent discursive features of a what we call a *technical discourse of transport planning* that is normatively car-centric. These features are drawn upon in redistributive active travel planning opposition in the unique context of DLR, Ireland. Fourth and last, we interrogate the historical origins and effects of the technical discourse of transport planning in politically sustaining car-based automobility, and make several recommendations that could be useful in supporting redistributive active travel planning practice.

## 2. Background

### 2.1. Opposition to redistributive active travel measures

While there appears to be growing political will across a variety of low-cycling contexts to invest in and develop segregated cycling networks which may help to develop a cycling system, local and national authorities may face considerable public opposition to their proposals (Wild et al., 2018). Opposition may be particularly strong for proposals that challenge the priority of car use in public space, through restrictions on spatial provision, access and/or speed. Wild et al. (2018) point out that the phenomenon of cycle infrastructure opposition – or ‘bikelash’ – is poorly understood due to a “rationalist, techno-centric planning paradigm” (p. 506) that is not well suited to understanding such sociological phenomena. This lack of knowledge, they argue, may pose a major obstacle to the successful implementation and retention of cycle infrastructure schemes. To date, various researchers have explored public opposition to planning projects that have involved the

introduction of dedicated cycle spaces. Analysing a broad variety of existing literature on the phenomenon of ‘bikelash’, Wild et al. (2018) identified four groups that may oppose cycle infrastructure: i) retailers who fear that reduced car access will affect their revenue; ii) conservative voters who are symbolically attached to automobility; iii) communities that are at risk of being displaced by gentrification; and iv) cyclists who feel marginalised from the planning process.

A variety of studies into this phenomenon and broader active travel measure opposition uncover recurrent oppositional narratives. In the context of the UK, Aldred (2019) examined anti-cycling narratives in relation to a ‘mini-Holland’ scheme in London, which included cycle infrastructural measures. In this study, Aldred (2019) identified ‘congestion’ as a major narrative both for and against cycling. Focusing on oppositional narratives, cycle infrastructure could be framed as the cause of congestion, which was criticised on the basis of delaying drivers, contributing to air pollution and creating ‘bad driver behaviour’. In this way, “problems caused by car use can be incorporated within narratives supporting the car and/or opposing measures to support sustainable modes.” [11, p. 65], including calls for more driving space. Similarly, in a study of two streetspace reallocation schemes in London in which car access was reduced, Hickman and Huaylla Sallo (2022) highlight how taxi and motor interest representatives perceived the proposals negatively on the grounds of their potential impacts on car traffic congestion and the effects this may have on air pollution and the economy. From one motor lobby representative, car mobility was constructed as serving the ‘economy’, unlike cycling, which was depicted as not “commercially significant” (p.407). Alike Aldred (2019), more road space for private cars was argued as the solution to congestion.

Examining ‘bikelash’ in the context of New Zealand, Field et al. (2018) explored opposition to three different cycle infrastructural schemes, in which the effects of these infrastructures on ‘traffic congestion’ and concerns around loss parking were particularly prominent points of contention; however, specific schemes were also objected to by cyclists and cycle campaigners on the basis of poor design quality. In Sydney, Australia, Crane et al. (2016) investigated the perceptions of local community members and businesses in response to the installation of a cycleway. Business respondents in particular raised concerns with reduced vehicular access – and, on this basis, less customers – to their businesses as well as concerns with the redirection of car traffic and ‘congestion’, while some residents saw cycling as the activity of outsiders rather than locals. In the Tasmanian bike network study of Vreugdenhil and Williams (2013), on the other hand, prominent negative perceptions related to the effects of cycle infrastructure on driver safety, due to the potentially increased complexity of driving within such a reconfigured transport network.

Finally, in the context of the U.S., Gibson (2015) provides an account of how cycle infrastructure which formed part of a broader racialised gentrification strategy in Washington DC was instrumental in the failure for a pro-cycling mayor to be re-elected, thereby unveiling another component of potential cycle infrastructural opposition (for more on cycle infrastructure as a potential component of gentrification in the U. S., see also (Stehlin, 2015) and (Lugo, 2018)).

Looking at Ireland in particular, opposition to cycling infrastructure proposals and, perhaps more specifically, opposition to the redistribution of public spaces from ‘shared’ uses that favour driving toward exclusive cycling spaces, similarly presents a political challenge to the institution of dedicated cycling spaces, despite ample investment (Department of Transport, 2021). Within Ireland, there have been many instances of intense political contention over proposals that have involved claiming motor vehicle-orientated road space for cycling exclusively. In the West of Ireland, almost 7000 public consultation submissions were made regarding a six-month segregated cycleway trial that was proposed along a coastal area of Galway. Due to various manifest objections, including that the cycleway would contribute to the “blocking” of traffic, and “impede emergency services, residents, people with disabilities and businesses”, this proposal was voted down by

councillors and did not proceed (Burke, 2022). In another high-profile case of public opposition, a six-month cycleway trial proposed for the coastal area of Sandymount, Dublin, was legally challenged and successfully prevented from being implemented as a result of stated concerns including “traffic displacement” and the “risks for pedestrians, children and local cyclists” such displacement would hypothetically produce (Halpin, 2021). This case was discussed in the media as potentially setting up a precedent for future legal challenges to cycleway projects in Ireland that redistribute formerly shared traffic spaces for cycling only (Kelly, 2021).

## 2.2. Politically sustaining car-based automobility

As we have shown, opposition to redistributive active travel measures, including cycleways, can prevent the timely implementation of active travel systems that might enable to substitution of mobility by private car, despite major increases in funding (Department of Transport, 2021) and significant plans for active travel network development (Department of Transport, 2022). Opposition to redistributive active travel measures such as cycleways can be viewed as one practice among many that may politically sustain the dominance of car-based ‘automobility’, whether conceived of as a system (Urry, 2004), regime (Böhm et al., 2006), or hegemony (Haas, 2020), that privileges private car use and marginalises alternative forms of mobility. Opposition can take many forms, such as legal action and organised protest. However, in this study, we focus on the role of ‘discourse’ in active travel measure opposition and in the political sustenance of automobility more generally for the region of Dún Laoghaire-Rathdown, Ireland.

‘Discourse’ is a conception of language use as a form of social practice, that both shapes and is shaped by social structures, rather than being a product of individuals communicating within a social vacuum (Fairclough, 1989). Most significant to our study, discourse can shape dominant “systems of knowledge and belief” [Fairclough, 1992, p. 64]. In other words, discourse can incorporate and reproduce ideas about the world and particular practices, such as everyday mobility and transport planning. Particularly dominant ideas can achieve the status of being beyond critique through becoming ‘common sense’ (Fairclough, 1989). This operation of ‘common sense’ can arguably be seen in active travel measure opposition, whether this is in constructions of driving as the natural and normal way for people to move around, of cyclists as ‘hazards’ (Bonham et al., 2020) or ‘outsiders’ (Wild et al., 2018; Field et al., 2018; Crane et al., 2016), and/or in depictions of active travel measures as fundamental causes of ‘traffic’ (Aldred, 2019).

Numerous studies have illustrated how policy and planning discourses have distanced cycling from transport, instead relating cycling with slowness, leisure and health (Aldred, 2012; Bonham and Cox, 2010; Van Der Meulen and Mukhtar-Landgren, 2021). The primary discourses used to build public support for cycling and active travel, which often focus on the multi-faceted ‘benefits’ of active travel relative to driving (Department of Transport, 2022), may have a limited impact on the ‘common sense’ ideas – or ‘frames’ (Hommels, 2005) – that might politically sustain car-based automobility as a dominant system. As argued by the OECD (OECD et al., 2022), and as incorporated into the recent National Sustainable Mobility Policy (Department of Transport, 2022), new narratives are needed in order to enable a shift to the relative ‘car-independence’ (OECD et al., 2022) that is imperative to decarbonising the transport sector. The importance of attending to the representation of cycling and cyclists in cycling policies has been raised by Anaya-Boig (2021) as part of an integrated approach to policy and planning that focuses on more than the technical design of cycling infrastructure.

On the basis of this rationale, in this study, we analyse a sample of textual data from 150 public consultations submissions to a major cycle network proposal in the electoral county of Dún Laoghaire-Rathdown, Ireland in order to answer the following research question:

“How is car-based automobility as a dominant mobility regime politically sustained in public consultations submissions that are opposed to redistributive active travel measures?”

## 3. Materials and methods

### 3.1. The study context: Dún Laoghaire-Rathdown, Ireland

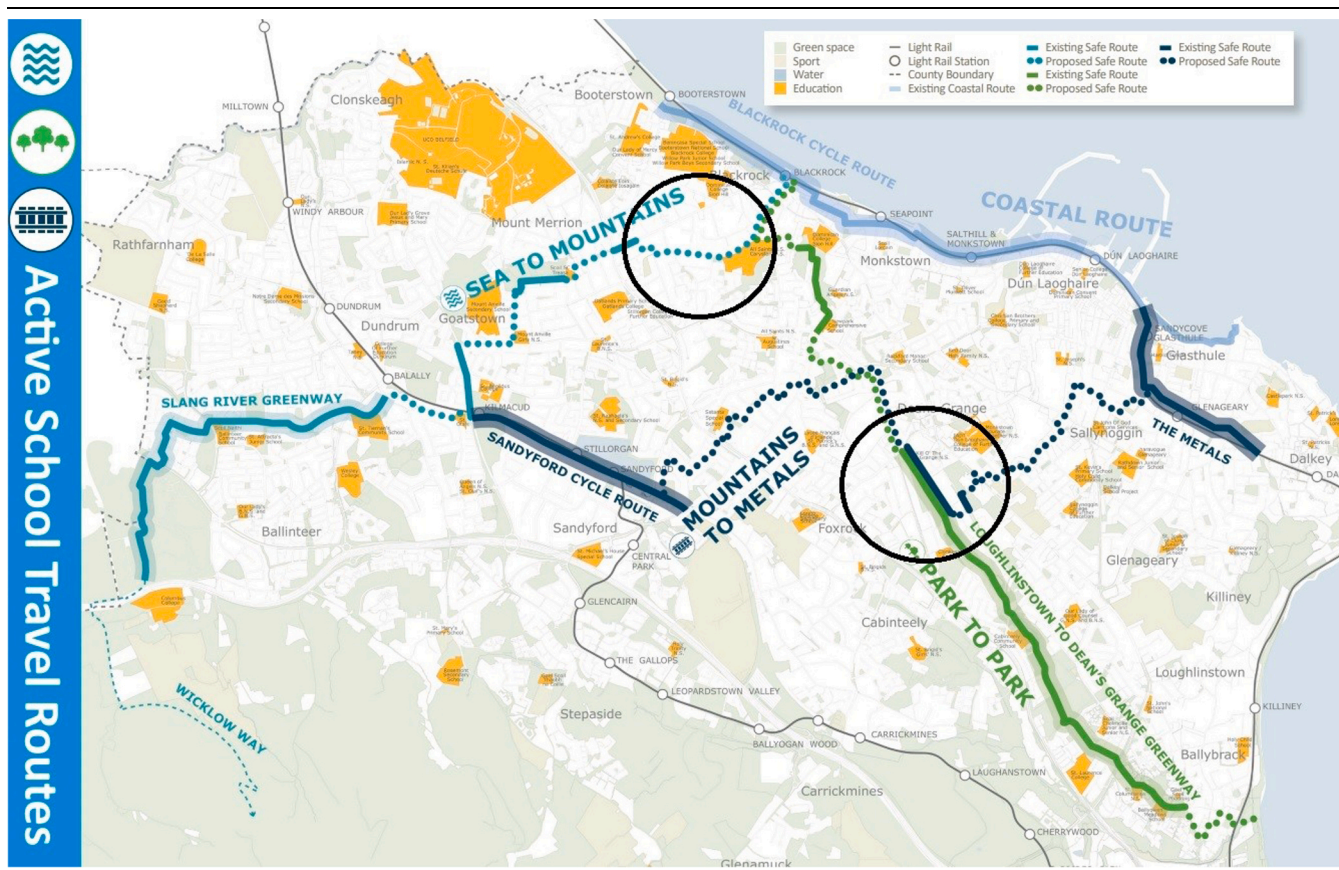
Dún Laoghaire-Rathdown (DLR) – the context of this study – is an electoral county within the wider Dublin Metropolitan Area of Ireland, situated in the province of Leinster. This county has a population of at least 218,000 people (Central Statistics Office, 2021a), with the highest proportion of its population in the managerial/technical and professional socio-economic classes within the Republic of Ireland (Central Statistics Office, 2021b). In terms of transport, Dún Laoghaire-Rathdown has high rates of car ownership (Central Statistics Office, 2021c), and its population has access to a considerable public transport network (Central Statistics Office, 2019). According to Census 2016 data on means of travel to work, school or college for people 5 years and older for this county area, approximately 6.1% of journeys were undertaken by bicycle (Central Statistics Office, 2021d). The Dún Laoghaire-Rathdown County Council (2022) County Development Plan 2022 - 2028 incorporates various policy objectives regarding transport and mobility in the county that imply measures that may privilege active travel through the increased regulation of, and decreased provision and access for, driving. These objectives include ‘Traffic Management’, ‘Travel Demand Management’ (also prominent in the Council’s Official Cycling Policy – see Dún Laoghaire-Rathdown County Council (Dún Laoghaire-Rathdown County Council, 2010)) and various cycle infrastructural provision objectives.

During the pandemic, numerous temporary cycling infrastructures were constructed and designated in DLR (Dún Laoghaire-Rathdown County Council, 2020c), thereby enhancing its cyclability. Most notably, a 3.6 km stretch of dedicated two-way cycling infrastructure was constructed: the “Coastal Mobility Route” (Dún Laoghaire-Rathdown County Council, 2020a). There is evidence that this infrastructure has increased and diversified cycling in the county (Rock et al., 2021; Technological University Dublin, 2022). Building on this progress, further major cycle route developments are being planned in the county, such as the “DLR Connector” (Dún Laoghaire-Rathdown County Council, 2021). This project aims to connect villages and neighbourhoods across the county through the provision of high-quality cycling route. In this way, the cyclability of DLR is positively developing at present.

In this study, we focus on one particularly ambitious active travel proposal: the ‘Active School Travel’ scheme. This pilot scheme aims to upgrade and connect the existing walking and cycling network in DLR, with a particular focus on enabling students to walk and cycle to school (Dún Laoghaire-Rathdown County Council, 2020b). Three interconnected routes are proposed: the Sea to Mountains Route, the Mountain to Metals Route, and the Park to Park Route. Each of these routes incorporate various redistributive active travel measures, such as segregated cycle infrastructures, lowered speed limits, and car access restrictions. For example, a two-way segregated cycleway to replace a one-way mixed traffic lane was proposed for the Deansgrange Road, which is a critical connectivity point for the Sea to Mountains and Park to Park routes. A (reduced) 30 km/h speed limit and restrictions for through motor vehicle traffic, on the other hand, were proposed for Avoca Avenue, as part of the Sea to Mountains Route (Dún Laoghaire-Rathdown County Council, 2020b). With the inclusion of written and email submissions, public consultation for this proposed scheme garnered an historically significant 6341 responses – 63% in favour, 35% in opposition, and 2% not answered (Dún Laoghaire-Rathdown County Council and Ramboll, 2020). Aspects of this scheme, most notably an original proposal and subsequent

alterations for a cycleway through the Deansgrange Road area, have garnered significant opposition (O’Sullivan, 2022) but have recently secured approval, albeit without the reallocation of road space originally planned (Ginty, 2023). Below, we display a map of the original proposed routes, with one black circle indicating the location of Avoca Avenue (North), and another indicating the Deansgrange Road (East).

ecologically sustainable alternative systems. These dimensions relate primarily to the social realities that are constructed and reproduced through drawing on a given discourse, as opposed to the social identities set up and/or social relations that may be enacted (i.e., the ‘identity’ and ‘relational’ aspects) – such as the identities and relations between citizens and planners that might be embedded in a given planning proposal



Active School Travel Routes Map - Image from Dún Laoghaire-Rathdown County Council (2020b).

### 3.2. Study methodology: critical discourse analysis

We adopted the Critical Discourse Analysis (CDA) approach of Fairclough (2010) – also known as the Dialectical-Relational Approach – to answer the research question. In the case of our study, this methodology was adopted to explore how automobility as a dominant socio-technical system (Urry, 2004; Sheller and Urry, 2000) is politically sustained in public opposition to redistributive active travel measures in Dún Laoghaire-Rathdown. In this way, we do not necessarily look at how language is utilised in order to sustain particular unequal social relations (Fairclough, 1989) but rather how it is deployed to sustain the dominance of a socio-technical system of car-based automobility, while suppressing the potential for strategically prioritising alternatives systems prioritising, for example, active travel and public transport (Banister, 2008).

Fairclough (1992) argues that discourse plays a role in the shaping social subjects, social relations and “systems of knowledge and belief” (p. 64). These are respectively described as the ‘identity’, ‘relational’ and ‘ideational’ functions of language use. We focused on the ‘ideational’ dimensions of discourse that politically sustain the dominance of a system of automobility (Urry, 2004) and subordinate more

(Fairclough, 1992). The role of discourse in sustaining and expanding automobility as a system of mass private car use has been raised by various automobility theorists. Sheller and Urry (2000) describe automobility as a dominant discourse in Western societies in conceptions and representations of ‘the good life’ and appropriate citizenship. Böhm et al. (2006) comment on how, as part of a broader ‘automobility regime’, car use is naturalised – among other things – as inherently convenient, efficient, cheap, stylish, liberating, and progressive/modern. Lastly, Haas (2020) remarks on the cultural associations and marketing of the car in relation to the expansion and exercise of ‘freedom’. These distinct ideational discursive components of automobility provided a starting point for our context-specific inquiry, in which a variety of representations of car use and a car system are projected as universal and ‘common sense’ (Fairclough, 1989).

With this social theory of discourse in mind, Fairclough (1989) proposes that CDA might involve three stages: *description*, *interpretation* and *explanation*. These three stages respectively pertain to three components of analysis: *texts* (the product of discourse), *interactions* (the process of discourse practice) and *contexts* (the social conditions shaping discourse practice). Fairclough (Ginty, 2023) usefully proposes that the overall unit of analysis for this form of CDA can be understood as the ‘discursive event’: “the instance of language use, analysed as text, discursive practice, and social practice.” (p. 95). Such a framing also helps to consider the interweaved, iterative approach that analysis will

likely involve, as indicated by Fairclough (1992).

On the basis of our research question, and in light of previous work that have provided empirical insight into the discursive elements that politically sustain car-based automobility as a dominant system with respect to vélomobility (e.g., (Bonham and Cox, 2010; Caimotto, 2020; Freudendal-Pedersen, 2015), we focused our efforts on several aspects of Fairclough's (Fairclough, 1989, 1992) CDA approach. We were chiefly interested in the 'ideational' aspects of discourse in relation to the sustenance of automobility as a dominant mobility regime. With this specific objective in mind, we analysed 150 public consultation submissions that were in opposition to major active travel planning proposal in DLR: the 'Active School Travel' scheme (Dún Laoghaire-Rathdown County Council, 2020b). These 150 samples were selected from a broader total dataset including 1397 submissions in opposition to both particular and general aspects of the proposed active travel scheme, each submitted via an online public consultation council platform. Samples were specifically selected on the basis that submissions incorporated some evidence of opposition to *redistributive* active travel measures (i.e., proposed measures that involved redistributing spaces and/or particular privileges to favour people walking and cycling rather than people driving). These redistributive measures primarily related to the reallocation of road space or car parking space for cycleways, and lower speed limits and/or reduced access rights for people driving (e.g., no 'through-traffic') (Dún Laoghaire-Rathdown County Council, 2020b). Submissions opposing these redistributive measures were selected because such interventions may present a "radical challenge" [56, p. 30] to a system of automobility (Urry, 2004), rather than incorporating active travel as an addition to a system of automobility, such as by widening roads to develop dedicated cycle spaces. An analysis of how automobility was politically contested in supportive public consultation submissions to the active travel scheme was beyond the scope of the study. Instead, we prioritised an analysis of oppositional discourses due to the major role these may play in maintaining car-centric planning practice and in preventing alternative planning approaches that can reduce car use and enable modal shift.

To ensure reasonable coverage across the total dataset, we initially selected 50 samples that fulfilled the selection criterion (i.e., submissions included evidence of opposition to redistributive measures) from the start of the total dataset, progressing to 50 samples from the centre, and finally selecting 50 samples from the end. In this way, samples were selected from across the total dataset. However, it is likely a high majority of the total dataset would meet the selection criterion, since each submission was made explicitly in opposition to the scheme, whose most contentious proposed measures were redistributive in nature. This focus on a smaller body of data is consistent with Faircloughian CDA, which is particularly suited to in-depth analysis of discourse samples (Fairclough, 1992).

Over the course of our analysis, we analysed a variety of textual and discursive features that respectively relate to the descriptive and interpretive aspects of CDA. On the descriptive side, we analysed grammatical features (i.e., 'modality' and 'transitivity'), vocabulary features (word meaning, meaning relations, wording, and metaphor), and the cohesive features of particular samples. On the interpretive side, we identified discourse types and analysed aspects of coherence (Fairclough, 1992, 2015). In the findings section, one can observe the flexible analytic approach adopted, in which multiple textual and intertextual features can contribute to a given discursive construction – such as "traffic as car-based (im)mobility" – within a given discourse. In the discussion section, we focus to greater extent on the explanation stage. In this particular paper – which originates from a wider study – we focus on several key features identified that form part of a broader 'technical discourse of transport planning' drawn upon in redistributive active travel planning opposition in DLR.

#### 4. Findings: car-centric technical discourse of transport planning

The most dominant and prevalent discourse we uncovered in our analysis was what we call a 'technical discourse of transport planning'. Such a discourse and its effects in sustaining the dominance of car-based automobility are well-documented across a variety of studies in transport and mobilities research (Aldred, 2019; Bonham and Cox, 2010; Van Der Meulen and Mukhtar-Landgren, 2021; Caimotto, 2020; Bonham, 2006; Koglin and Rye, 2014; Parsons and Vigar, 2018). This discourse legitimises and promotes planning practices that privilege car-based mobilities and sustains or expands the spaces of automobility. Relatedly, this discourse undermines planning practices that might challenge the dominance of a car system. In this respect, such a discourse can be contrasted with alternative discourses of transport planning that do not normatively favour automobility (i.e., that are not 'car-centric') but instead prioritise public transport, walking and cycling mobility, such as the sustainable mobility paradigm (Banister, 2008). Critically, this discourse is overtly 'technical' rather than 'political' (Doughty and Murray, 2016), giving its content the appearance of being normatively apolitical.

When individuals drew on this discourse in public consultation submissions, it often involved a formal written style (Fairclough, 1992). As will be evident in the excerpts throughout this findings section, the adoption of this formal written style often involved the use of vocabulary from the discipline of transport planning itself, such as "traffic", "vehicles", "congestion", "flow", "capacity", "impact", "volume" (Transport Infrastructure Ireland, 2014, 2022). Drawing on this discourse seemed to involve partially adopting the voice of a transport planner that normatively favours automobility engaging in a traffic impact assessment. Across the discourse samples we analysed, this discourse was drawn upon in a way that sustains automobility as a dominant system in several ways. Below, we present our analysis of central features which we identified across the discourse samples, which primarily reflect the *description* and *interpretation* stages of Faircloughian CDA. We also consider the potential effects of these features in reproducing automobility as dominant and cycling and walking as marginal from a planning perspective, thereby incorporating some degree of *explanation*, which we more fully enact in the discussion section of this paper.

##### 4.1. 'Traffic' as car-based (im)mobility

This discourse is characterised by a focus on 'traffic', which was a key word across public consultation submissions within the sample. 'Traffic' appears to be stably drawn upon as a word to refer to car-based mobility and immobility. In other words, when individuals and groups (i.e., 'text producers') who were opposed to cycle space provision and driving restrictions in the sample referred to 'traffic', they nearly unanimously referred to the movement of drivers and cars (i.e., car-based mobility) and/or the 'impeded' movement of drivers and cars (i.e., car-based immobility). Looking at traffic as car-based mobility, text producers construed how traffic could be conceived of as a 'flow', that may be 'clogged up', 'backed up', 'diverted', 'congested', brought to a 'standstill', and 'constrained'. Text producers also described 'traffic congestion', 'traffic jams' and 'traffic disruption'. These wordings – e.g., the addition of "congestion" to "traffic" to make "traffic congestion" – suggest a meaning for 'traffic' of car-based mobility rather than immobility.

The following text excerpt provides a rich starting point to illustrate how traffic is used to refer to car-based mobility within this discourse, in which the text producer criticises active travel measures proposed for a particular street ("Avoca Avenue") that would involve preventing people from driving from one end of the street to the other:

Closing Avoca Avenue to through traffic would drive vehicles into smaller streets like Sydney Terrace, Green Road, Waltham Terrace, Anglesea Avenue and Sydney Avenue.

What is notable here is that Avoca Avenue is worded as a street that will be 'closed' to "through traffic". Interestingly, this text appears to essentially be drawing on a similar wording provided in a council document outlining the proposal, in which it is described that Avoca Avenue will have a:

Section closed off to limit volume of through traffic on residential street (Dún Laoghaire-Rathdown County Council, 2020d, p. 1).

However, in a more textually-focused proposal document also produced by the council, the plans for Avoca Avenue are alternatively worded as follows:

To improve safety for walking and cycling at this location, the speed limit for motor vehicles will be reduced to 30 km/h and there will be no through access on Avoca Avenue at Avoca Park for motor vehicles (Dún Laoghaire-Rathdown County Council, 2020b, p. 5).

In this latter text, the Avoca Avenue measure is not worded as a kind of 'closure' to 'traffic'. Instead, it is stated that the council aims to "improve safety for walking and cycling at this location" in part through taking away "access" for "motor vehicles". It is clarified in this third text, then, that the Avoca Avenue measure relating to the regulation of driver access does not simultaneously involve the removal of walking and cycling access to travel through Avoca Avenue. The measure aims to enhance cycling and walking through the entirety of Avoca Avenue through improving "safety", including by limiting through access by car. Thus, both the first and second texts appear to equate "through traffic" with "through access [...] for motor vehicles", thereby rendering Avoca Avenue "closed" to "through traffic". Since it is clearly delineated in text three that cycling and walking access will be enhanced through this proposal, it is clear that both text producer one and two construe traffic as car-based mobility. In other words, 'traffic' effectively means car traffic, and does not include cycle or walking mobility in its meaning potential.

This meaning of traffic as car-based mobility is verified further through the claim by text producer one that the measure would "drive vehicles" elsewhere, indicating that "traffic" comprises "vehicles" only. In this way, it is implied that cycling mobility does not qualify as traffic or as a vehicle, since the conditions of Avoca Avenue are intended to enhance the ability to cycle through Avoca Avenue. Equally, the second text reveals that the council's wordings can construe 'traffic' as car-based mobility. Lastly, the exclusion of cycles from the definition of vehicles in text one is a historical point of contention (e.g., Cox, 2012; Longhurst, 2015) and problematises prevailing official definitions of a 'road' which define such an object as a space for 'vehicles', while likewise problematising who constitutes a legitimate 'road user'.

In other cases, 'traffic' can mean car-based immobility. Text producers across the sample construed how one could 'wait in' or be 'delayed in' traffic, and a great deal of words around a given (high) quantity of 'traffic' suggests a meaning of car-based immobility, in which traffic could be construed as 'much worse', 'unacceptable', 'bad', 'at boiling point', 'chaos', and 'significant'. In these instances, these uses of 'traffic' could be substituted with 'congestion' with little change in meaning. In the below illustration, "waiting in traffic" appears to indicate waiting in – or indeed being a part of – car-based immobility, as it would not make sense to be waiting in moving traffic, since waiting implies stasis. This is further verified by the reference to being "in a long queue waiting":

The current route from Blackrock to Newtownsmith is causing me huge time waiting in traffic, it's a disaster and frustrating to be in a long queue waiting for traffic lights to change and looking over at an empty road 90% of the time.

The below text producer, on the other hand, appears to construe traffic as car-based mobility in some instances and car-based immobility in others:

While I support cycle lanes in theory I can't support the traffic congestion and jams that have accompanied the restrictions along the seafront - the lane is so wide and surely there could have been a compromise between car users and cyclists to make it safe for all - during the autumn and winter months when people are resigned to their cars the lanes are unused and traffic is awful [...] I now sit in traffic trying to go about my daily business.

In the first sentence, the text producer refers to "traffic congestion and jams" that have "accompanied the restrictions along the seafront". Since "congestion and jams" are added to the word "traffic", a meaning of car-based mobility first appears to be drawn upon, since it is these car-based mobilities that are being 'congested' and 'jammed'. Later in this first sentence, the use of traffic in "traffic is awful" could mean that car-based mobility is "awful", since it is relatively immobilised. Lastly, in the final sentence, the text producer describes how they "sit in traffic" when driving to complete various everyday tasks. In this instance, since traffic is something that they "sit in", a meaning of car-based immobility seems to be in use.

Within this discourse, then, 'traffic' appears to have a relatively stable and uncontested meaning as car-based (im)mobility. What is most salient about this use of 'traffic' is that cycle mobility and cyclists are nearly unanimously excluded as 'traffic'. This exclusion of cycle mobility as 'traffic' can also be observed in the studies of Field et al. (2018), Bonham and Cox (2010) and Bonham et al. (2020), while Koglin and Rye (2014) demonstrate how cycle traffic has been historically excluded from formal transport planning instruments. The below text excerpt illustrates well an antonymous (i.e., an opposing) meaning relation between cycle and car-based mobility in which "Traffic" is worded as "inhibited" by "two way bicycle flows". This use of traffic appears to primarily mean car-based mobility since cycle mobility is worded using transport planning wording (i.e., as a 'flow'), but is saliently *not* worded as a kind of traffic:

Traffic to and from Richmond will be seriously inhibited by two way bicycle flows blocking their only route.

To conclude, in the following text, dedicated cycle spaces are again construed as spaces that do not facilitate traffic, but cause, traffic – in this case "traffic chaos". This suggests a stable meaning of car-based immobility. Toward the end of this excerpt, cycling mobilities are clearly discounted from the meaning of "vehicular traffic", and there is no equivalent word for cycle traffic used. There is instead an emphasis on the dedicated space for cycling: "cycle route". In this way, cycling mobilities are not traffic nor are (bi)cycles a kind of vehicle.

The new cycle route is creating traffic chaos. Where I live, we cannot use our cars at the weekend most of the year due to the over congestion of summer hill road. During the week it is also chaos. A smaller cycle lane and a rethink of traffic management is critical to a cycle route and vehicular traffic cohabiting.

#### 4.2. 'Roads' as 'Traffic' spaces

This leads us to another major vocabulary feature drawn upon from this discourse, another key word: 'road'. The (car-centric) technical discourse of transport planning legitimises, protects, and supports planning practices that prioritise car-based mobility (and therefore drivers), which we have argued is construed as 'traffic' within this discourse type. These car traffic/driver spaces are stably and nearly unanimously referred to as 'roads'. In contrast, proposed spaces for cycling exclusively (e.g., 'cycleways') were, in the vast majority of cases, worded alternatively and antonymously with 'roads'. An unstable and diverse host of words were drawn upon to describe cycle spaces, most

notably, *route*, *cycle way*, *cycle lane*, *cycle track*, *proposal*, *measures*, and *bicycle lanes*. The use of multiple wordings for dedicated cycle spaces suggests a lack of well-established meaning, in contrast with 'roads'. This instability of wording is evident in the below excerpts, where one can note the use of "cycle ways" and "cycle lanes" to refer to the same object (i.e., proposed dedicated cycle spaces):

I would strongly oppose these *cycle ways* as they will remove footfall to local businesses, creating higher traffic Jams with additional a stress and danger for school kids for *cycle lanes* that is not likely to have the same use as the *roads*.

The same pattern is evident again below, in which dedicated cycle spaces are first called "cycle tracks" and later worded as "cycle lane":

I cannot imagine the chaos that will ensue with the new proposals. I have already been told by a councillor that the *cycle tracks* on carsfort avenue are temporary???? I feel the *road* changes were made without adequate discussion. The *cycle lane* is 2.9 m including the kerb. You cannot take that amount of space away from the *road* without a repercussion.

It is also clear that rather than being part of the road or a kind of road, dedicated cycle spaces are spaces that have been 'taken away' from the road.

Across the discourse samples, 'roads' are recurrently construed as 'traffic' (car-based mobility) spaces. This can be contrasted with dedicated cycle spaces, since 'traffic' does not appear to include cycle mobility in its meaning potential within this discourse. Such a pattern can also be observed in the study of Field et al. (2018), in which cycle spaces were seen as a removal of a 'traffic lane'. The representation of 'roads' and 'traffic' as opposing meanings to dedicated cycle spaces and cycle mobility is evident in the following excerpt:

The sections of Deansgrange Road that the cycle way would be imposed on will have the following serious deleterious effects on my business, the business community of Deansgrange and the community as a whole:-

a. By bringing the cycle lanes down Kill Avenue, around onto Deansgrange Road it will reduce capacity on Kill Avenue thereby backing up traffic and causing terrible congestion to the flow of traffic through Deansgrange which already suffers badly with tailbacks in Kill Avenue and the Deansgrange crossroad.

b. The turning of Deansgrange Road into a one-way it will increase the amount of vehicles using that way as a result of traffic having to circle around. This will be exacerbated each time the flow of traffic is obstructed or impeded by cyclists crossing its' path to get to the cycle ways [...]

e. Surely the obvious route for the cyclists would be along Abbey Road which does have the width for two lanes of traffic and two cycleways

First, "the cycle way" – later worded as "cycle lanes" – is worded as being "imposed on" "Deansgrange Road", rather than being integrated as part of this road. Second, the "cycle lanes" are depicted as a measure that will "reduce capacity" on Kill Avenue. This use of "capacity" is consistent with many other uses of capacity across the wider sample, which suggests, more broadly 'traffic capacity'. In this way, the dedicated cycle spaces are construed as spaces that do not provide capacity for traffic but, instead, reduce the capacity to carry traffic in a given space, presumably by being "imposed on" roads (e.g. "Deansgrange Road"), which *do* provide capacity for traffic. Third, by 'reducing capacity', the text producer construes that cycle spaces will result in "backing up traffic and causing terrible congestion to the flow of traffic through Deansgrange". In this instance, "the cycle lanes" are again construed as spaces that will not facilitate a "flow of traffic", instead they are represented as a measure that will "reduce capacity", and – as

indicated through use of the word "thereby" – cause traffic "congestion" and "backing up". Fourth, the cycleway intervention is worded as "The turning of Deansgrange Road into a one-way". However, the proposed cycleway would provide two-way cycle mobility, while there would be an adjacent one-way mixed traffic space available (Dún Laoghaire-Rathdown County Council, 2020b). In this way, the wording of the interventions as "turning" Deansgrange Road "one-way" suggests that what is meant here is that Deansgrange Road would become "one-way" for people driving motor vehicles. The text producer further depicts that this "one-way" space will have more "vehicles using that way as a result of traffic having to circle around". This claim that "traffic" will have to "circle around", which appears to be the same as the "vehicles using that way" construes that the Deansgrange Road will be made into a 'one-way traffic system', in which 'traffic' (primarily) means car-based mobility (i.e., "vehicles"). The proposed cycleway is therefore not set up as a space for 'traffic' but instead as an appropriation of 'traffic' spaces (i.e., of roads). Fifth, the final sentence reinforces this construal of roads and cycle spaces where roads facilitate traffic and cycle spaces do not. This can be observed in how "the flow of traffic" is set up in an antonymous meaning relation with "cyclists", alike the wordings for roads and cycle spaces. In particular, it is construed that, rather than being part of the "flow of traffic" or a form of traffic, "cyclists" 'cross' the "path" of 'traffic' – which appears to be the hypothetical "one-way" Deansgrange "Road" – en route to the "cycle ways". With this construal, cyclists do not constitute traffic or a form of traffic. "Deansgrange Road" is constructed as a traffic space while "cycle ways" are not – they are instead spaces for "cyclists". Finally, in the last sentence of the excerpt, "cycleways" are set up antonymously with "lanes of traffic" and are depicted as spaces for "the cyclists", as opposed to 'traffic'. In many other instances across the sample, plans for dedicated cycle spaces are described as plans that 'reduce', 'take away', 'narrow', 'close', and 'remove' roads, thereby providing further evidence of the antonymous meaning relations between cycle spaces and roads within this discourse.

Similar to roads as spaces of traffic, a variety of wordings are drawn upon within this discourse that construe roads as spaces of transport more broadly. Dedicated cycle spaces appear to be excluded from such a meaning. Namely, 'roads' appear to be included within the meaning of references to a transport 'system', while dedicated cycle spaces are notably absent from this representation. This is notable in commentary on both a previously implemented cycleway and a planned cycleway, both of which involve transforming a single shared traffic lane (a 'road' within this discourse) into a two-way dedicated cycle space. Drawing on a technical discourse of transport planning, this previous spatial intervention is constructed as having creating a "one way (transport/traffic) system" by a variety of text producers. In the three examples below, both the planned reallocation of space (i.e., on Deansgrange Road), and the previously implemented reallocation of space ("Sandycove/Dun Laoghaire") for cycling are construed as 'one way systems':

I totally object to making Deansgrange Road a one way traffic system.

I think it sounds like a good idea but not to the detriment of the majority of people in the area who are car users. The recent one way system in Sandycove/Dun Laoghaire are causing huge traffic congestion on a daily basis for the people living and working in the area in order to facilitate leisure cyclists at the weekend.

I think making Deansgrange Road a one way system will hugely add to already busy traffic congestion in the area and will have a very detrimental effect on the people living and working in the area.

Critically, if cycling mobilities were considered as traffic/transport and cycle spaces were considered traffic spaces that were part of a broader transport system, these past and planned measures could be described as having created an additional traffic lane (and arguably additional capacity). They would be more accurately be described as, for

example, “three-way traffic systems”, or a “one-way system for mixed traffic” and a “two-way system for cycle traffic”. Instead, cycle spaces are construed as spaces for sporadic recreational use (i.e., they “facilitate leisure cyclists at the weekend”) rather than for present or future transport mobilities akin to car journeys – the mobilities of ‘roads’. This is illustrated again in the below example, where cycle spaces are contrasted in terms of meaning with ‘roads’, ‘traffic’ and transport systems (i.e., “one way” suggests abbreviation for ‘one-way system’):

I think safe cycle routes are a great idea but come up with another route than closing the Deansgrange road to one way traffic.

#### 4.3. ‘Traffic’ as an immutable substance

Having interrogated the meanings of ‘traffic’ and ‘roads’, we examined the meaning and implications of ‘traffic’ as a key word in greater depth. We found a dominant metaphorical construction of car-based mobility (‘traffic’) as a physical substance that is fixed and unchangeable in quantity (i.e., that is “immutable”), or more faithfully, ‘volume’, within a transport network. This metaphor incorporates an assumption that planning measures cannot affect a change of mobility practices from driving to alternative modes (i.e., they cannot create ‘modal shift’/‘behaviour change’). Rather than ‘traffic’ being construed as a malleable, collective practice of car-based mobility, through being depicted as an immutable substance, the possibility of traffic reduction or change is absent. Based on this understanding, reducing spaces that privilege car-based mobility simply redirects these mobilities elsewhere and potentially creates greater car-based immobility. This links in part with the observations of Aldred (2019) in which public construals of cycling and cycle infrastructure as causing car externalities are underpinned by a belief that “change in travel patterns is not possible, and thus restricting motor traffic or reallocating space to sustainable modes is pointless and counter-productive.” (p.68).

Such a metaphorical construction of traffic as an immutable substance is evident in the following text excerpt:

The effect on local residents is very harsh, converting the balance of traffic onto fewer roads that have insufficient capacity [...] It has shifted seafront car parking onto inner roads and further constrained flows of traffic.

In particular, the text producer comments on the effects of a previous intervention that involved the reallocation of a single shared traffic lane into a two-way dedicated cycleway. In this excerpt, “traffic” is conceived of having a fixed “balance” that circulates across a network of “roads” that have varying “capacity” to facilitate these car-based mobilities. Instead of a perception that spatial measures that privilege alternative mobilities may create ‘modal shift’ (as intended), a dominant interpretation appears to operate in which these measures simply create what could be described (within this discourse) as ‘traffic shift’, where fixed, unchangeable volumes of car-based mobilities are redirected elsewhere.

Another text producer provides a similar account that incorporates a depiction of traffic as something immutable in volume, in that any measure that reduces space for car-based mobility means that it “has to be diverted elsewhere”:

Whilst I fully support better more widespread cycle lanes I think we need to be very careful about where we place them and of the knock on effect that it has on surrounding smaller roads, the traffic has to be diverted elsewhere which in turn leads to congestion on these other roads.

In many other texts within the study sample, ‘traffic’ is worded as being “forced”, “pushed”, “moved”, “displaced”, and “driven” to other roads through active travel measures, all of which suggest traffic as an immutable substance that is passively directed elsewhere through planning measures within a network of finite (and potentially ‘reduced’) spaces. For example, in the below text, a “substantial volume” of traffic

which Deansgrange Road might be described as ‘facilitating’ or ‘carrying’ will be “forced” into Kill Avenue through the reallocation of one mixed traffic lane for a two-way cycleway. Importantly, Kill Avenue is described as “already under significant strain”, suggesting that, as a container of traffic, it is already at ‘capacity’.

The removal of the northbound lane will force a substantial volume of traffic onto Kill Avenue, which is already under significant strain.

Indeed, remarking on the same Deansgrange Road proposal, the following text producer states that the same areas referred to in the previous text are now at “absolute capacity in traffic volume”:

The already hugely congested Kill Lane, Kill Avenue and Bakers Corner area’s has now reached its absolute capacity in traffic volume, which will make it totally chaotic by putting more traffic volume into that area

Lastly, the following text provides an exemplary example of the metaphor of traffic as an immutable substance, in which a traffic (car-based mobility) system is represented as a circulatory system that is “already clogged”, with active travel measures introducing another “choke point” through “forcing traffic” onto other roads. With this metaphor, traffic is arguably construed as blood and the ‘congestion’ of traffic could be seen as eventually leading to catastrophic heart attack (also identified in media discourse analysed by Caimotto (2023)) – which could, in other texts, be described as a ‘disaster’ or ‘chaos’:

The intersection at Grange crossroads is already heavily used. Forcing traffic to turn onto Kill Lane / Avenue would add another choke point to an already clogged artery.

Overall, the wordings of ‘traffic’ from this discourse arguably involve a metaphorical rendering of driving practices from the scientific discipline of physics. This involves the construal of ‘traffic’ as a physical substance – rather than a social phenomenon and collective practice – that consists of certain quantity (‘volume’) which ‘flows’ or ‘congests’ through a ‘network’ of ‘lanes’ or ‘roads’ of finite ‘capacity’. Such a metaphorical rendering of traffic is commonplace in professional transport planning (e.g., [Transport Infrastructure Ireland, 2014](#); [Transport Infrastructure Ireland, 2022](#)). It has been observed by Cox (2020) through the metaphor of traffic as a river which ‘flows’ and ‘streams’ through roads. Arguments for ‘traffic evaporation’ clearly extend such a metaphor for traffic as a (liquid) substance in a container of finite capacity, while also challenging a construal of traffic as something that cannot be reduced (Nello-Deakin, 2022). Importantly, active travel measures and active travel itself – if included in the meaning of ‘traffic’ – could be seen as greatly increasing the ‘capacity’ of a transport network and the potential for ‘traffic flow’. This would be a consequential counter-construal of active travel measures in the face of the current transport planning discourse that excludes active travel as traffic, active travel spaces as traffic spaces, and depict car-based mobility as an immutable substance.

#### 4.4. Traffic demand-led planning

A final and powerful property of this discourse is an underlying assumption that transport planning should be based on ‘traffic’ demand, by which we mean the ‘volume’ of observable or predicted use of transport spaces. The following text demonstrates several features that depict this interpretation of planning practice:

I think the concept in theory is a nice one but is not justified by the current volumes of cyclists. There is an increased number using the seapoint route on weekends but during the week it is very under utilised as is Carysfort Avenue and hence I do not support the strategy to reduce road space for cars.

In this text, a cycleway proposal is described as “nice” “in theory” “but is not justified by the current volume of cyclists”. This incorporates



an assumption that cycleways *need* to be “justified” by “current volumes of cyclists” – i.e., they need to be observably demand-led rather than aspirational. This construal of transport planning as a practice that ought to be demand-led is also identifiable in the wording of an existing cycleway (“the seapoint route”) being “very under utilised” “during the week”, despite observable demand on the weekends. The use of “under” suggests that the cycleway is beneath a threshold level of use that might ‘justify’ its existence. This construal of cycleways as not having ‘sufficient’ demand to warrant development is prevalent in many other texts, where it is described that current cycleways are “underused”, “under-utilised”, “lightly used”, “unused”, “not used sufficiently”, and “rarely used”. Relatedly, in other texts from the sample that incorporate this assumption of demand-led planning, roads can be relatively worded as “overused”, “heavily used”, “overburdened”, “over subscribed”, and “overcrowded” – all indicating that there is “not enough” road space for drivers, while there is, as one text producer described “Not enough Cycle traffic On these lanes to warrant such traffic disruption”, referring to an existing cycleway. Lastly, refocusing on the above text, the use of the connecting word “hence” indicates an interpretation of transport planning as demand-led, through linking low observed cycleway demand with opposition to “reduce road space for cars”, where – presumably – the demand for driving in these spaces is not in question.

The following text exhibits similar features that reproduce such an interpretation of transport planning:

The routes are excessive and unrealistic, as should already be evidenced by the cycling highway on Carysfort Avenue. Even in the current pandemic lockdown, that highway is mostly deserted most of the time, occupying road at the expense of safe driving [...] and without proportionate benefit to others.

First, proposed cycleways are worded as “excessive” and “unrealistic”, on the basis of an existing cycleway (“as evidenced by”). In the second sentence, the text producer expands on what this existing cycleway provides evidence for: it is primarily “deserted”, while “occupying road at the expense of safe driving [...] without proportionate benefit to others”. Through the wording of proposed and existing cycleways in this text, and the linking of the use of the present cycleway as a proposed criteria for the practice of planning future cycleways, this text appears to construe that future cycleways are “excessive” and “unrealistic” when current cycleways are not regularly used (i.e., “deserted”). Instead, transport planning ought to function in a way that provides “proportionate benefit”. Judging by the construal that the cycleway proposals are “excessive” due to the perceived poor use of an existing cycleway, this use of “proportionate” may cue an assumption that transport planning should be ‘in proportion’ with observable transport demand (e.g., “driving” on roads), which the cycleways would not be in keeping with (i.e., they are ‘out of proportion’ – “excessive”). Overall, then, this text, like the previous text, implies an assumption that transport planning ought to be based on current transport demand for specific spaces; thus, if current cycleways are not well-used, future cycleways should not be developed.

Furthermore, in the above text, the wording of the existing cycleway as a “highway” – a distinctive word often referring to an exclusive motor vehicle space – could be seen as a creative move by the text producer to incorporate cycleways into a logic of ‘traffic’ demand-led planning without having to give cycle mobility the status of ‘traffic’. This interpretation is supported by a later representation of cycleways by the same text producer in which cycleways are not depicted as traffic spaces, unlike roads, but are instead as an “impediment” to the flow of ‘traffic’: “these cycle lanes are already an impediment to safe and smooth flow of local traffic.”

To conclude, while we have argued here that an assumption of demand-led planning is drawn upon in opposition to active travel measures – particularly cycleways – the primary form of demand we have focused on is that of ‘traffic’. We have shown that, in some instances, cycle mobility can be constructed as ‘traffic’ when this

assumption is being drawn upon, while being almost entirely excluded as traffic in the other major representations of transport planning that are integral to this discourse (e.g., cycleways are a ‘cause’ of ‘traffic’). There is evidence of similar assumptions being incorporated into anti-cycling perceptions in the study of Aldred (2019) in which cycle infrastructure was viewed as ‘not needed’ or as ‘unused’ (see also Crane et al., 2016). However, using ‘demand’ loosely, arguments can also be made in relation to the requirement – or demand – for ‘safe’ cycle spaces. Here, we provide a final text that construes a proposed measure to reduce car access through what could be described as “underused” roads (here worded positively as “modestly used”, “quiet” and “tranquil” – notably wording never used to describe cycleways in broader oppositional discourses) as unwarranted on the grounds of “cycling and walking safety”. This text shows how demand-led planning can be strategically applied to oppose cycleways due to “low volumes” of cycle traffic, while low volumes of car traffic on roads can be strategically represented as evidence that there is no demand or need for cycleways or measures to reduce car use to improve walking and cycling safety. Thus, roads that are “busy” with car traffic are unsuitable for active travel measures since they demonstrate high traffic demand relative to cycleways, while roads that are “quiet” in terms of car traffic are already safe, hence active travel measures are not warranted.

Having lived in DLR for over 20 years, and having known the street for about many years, I am nonplussed by the suggestion that Avoca Avenue be changed utterly. For decades and longer it has been quiet artery between Blackrock and Dublin and surrounding suburbs. We have walked it and driven it countless times. It is a modestly used road, and has been a great benefit for generations to families with children attending St Andrews, Sion Hill, Newpark, Blackrock, Muckross and countless primary schools. If implemented, it would add to car journey times and journey lengths. It’s inconceivable that the proposed change could be explained as an attempt to improve cycling and walking safety; the road is tranquil even now, despite the current spate of roadworks and notwithstanding recent traffic pattern changes arising from the bottleneck created by the cycle lanes on Carysfort Avenue, and by its now chaotic junction with Fleurville Road.

## 5. Discussion

In this study, we provide a unique conceptualisation of a powerful and historically dominant planning discourse based on a Critical Discourse Analysis of public consultation submissions opposing a major active travel planning proposal in Ireland. This discourse can be seen to sustain car-centric planning and automobility as a dominant mobility regime in this context. It comprises the following properties: ‘*traffic*’ as *car-based (im)mobility*, ‘*roads*’ as ‘*traffic*’ spaces, ‘*traffic*’ as an *immutable substance*, and *traffic demand-led planning*. To date, many studies have empirically indicated aspects of this discourse: wordings of ‘traffic’ (Field et al., 2018; Bonham et al., 2020; Bonham and Cox, 2010) and ‘traffic lanes’ (Field et al., 2018) that implicitly exclude cycle mobility, assumptions that modal shift is not possible (Aldred, 2019) (and that ‘traffic’ is therefore ‘immutable’), metaphorical renderings of ‘traffic’ as a physical substance (Cox, 2020; Caimotto, 2023), and implications that cycle planning should be underpinned by observable user demand (Aldred, 2019; Crane et al., 2016). To our knowledge, this study provides the first empirically grounded and conceptually integrated framework of these inter-related features, in which they are drawn upon in public opposition to redistributive active travel measures. In combination, these features constitute a coherent and naturalised (car-centric) *technical discourse of transport planning*. This discourse forgoes the possibility of alternative planning and mobility regimes that displace the car as the dominant object of planning and means of mobility.

Moving to the ‘explanation’ phase of CDA (Fairclough, 1989, 1992), the *technical discourse of transport planning* can be seen as socially

determined by a long legacy in national and local authority policy in Ireland and beyond that has prioritised planning for the private car and motor vehicles at large – or, as Haas (Haas, 2020) describes, the ‘integral state’. This legacy has arguably resulted in conditions of precarious entitlement to public space for cyclists in Ireland at present (Egan and Philbin, 2021), in which cyclists must either subordinate themselves to ‘traffic’ (Egan, 2022) or assert their status as ‘traffic’ (Egan, 2021). The Design Manual of Urban Roads and Streets (Department of Housing, Local Government and Heritage, 2019) provides insight into the potential origins of this discourse. In this manual, the influence of the 1963 ‘Traffic in Towns’ report – also known as the ‘Buchanan Report’ (Buchanan, 1963) – on Irish policy approaches to planning is highlighted. This report advocated for the primacy of enabling efficient (car) ‘traffic’ flow and reducing car traffic congestion, in part through segregating private cars from people walking, while the existence and future of cycling was almost entirely ignored (Buchanan, 1963). The vision for planning embedded in this report was subsequently advanced and integrated into official visions for transport and urban planning in Ireland. Indeed, in the Design Manual (Department of Housing, Local Government and Heritage, 2019), a contrast between ‘conventional’ (p. 3) and ‘sustainable’ approaches to urban street design is presented. The former is illustrated to prioritise the ‘free flow’ of ‘traffic’, and is guided by traffic ‘demand’. With this approach, streets primarily function as facilitators of this traffic flow. The latter is focused on designing for ‘people’ and multi-modal travel as opposed to ‘traffic’. On this basis, traffic-calming and demand management are prominent features to realise a primary function of streets as places.

With this policy legacy in mind, the technical discourse of transport planning can be seen to align with the formerly dominant – but now problematised (Department of Transport, Tourism and Sport, 2019) – regime of planning outlined in the ‘conventional’ approach (Department of Housing, Local Government and Heritage, 2019, p. 3). Within this regime, ‘traffic’ primarily constitutes private car-based mobility, which takes place on roads (which people walking and cycling are preferably segregated from), and transport planning – primarily in the form of road building – is based on both observable and predicted traffic demand, in order to maintain ‘traffic flow’ and prevent ‘congestion’. In this way, one can see prominent parallels with the discursive constructions of i) traffic as car-based (im)mobility, ii) roads as traffic spaces, and iii) traffic demand-led planning.

The beginning of this ‘conventional’ car-centric urban planning for Dublin is illustrated by Hanna (Hanna, 2015), in which cyclists – who made up nearly 30% of journeys in 1961 traffic counts for Dublin city and Dún Laoghaire were effectively planned out of the city in favour of a vision of universal car ownership and use. This vision was characterised by plans for urban sprawl, one-way city centre roads and a motorway surrounding the urban core. In these visions, existing cycling practices were entirely disregarded: cyclists did not count as ‘traffic’. One can also extrapolate from this work how mass car use was a vision for the future planned by the state rather than a necessarily ‘demand-led’ process. Such a vision-led approach to planning for the car is also identified by Oldenziel and Bruhèze (2011) and Parsons and Vigar (2018). Oldenziel and Bruhèze (2011) observe that although cycling was booming across interwar Europe, a coalition of policymakers, engineers and planners viewed private car use as the natural successor to cycling, which was increasingly viewed as dangerous and disruptive. Similarly, Parsons and Vigar (2018) outline how the main cycling advocacy group in the UK attempted to discursively resist the increasing dominance of ‘automobile modernism’, in which cycling was constructed as “outmoded” (p.178) despite its popularity as a form of everyday transport.

Considering its social effects, the technical discourse of transport planning can be seen to reproduce planning practices that favour car-based mobility and marginalise active travel through protecting spaces and mobility regulations relating to speed and access that favour private car use. In this way, this publicly enacted discourse can be seen in the context of wider formal ‘space claims’ that can sustain the lock-in of

automobility, such as car parking minimums (Petzer et al., 2021). Focusing on its effects on cycle planning, this is achieved through disregarding cycle mobilities as forms of traffic and transport, discounting cycling infrastructures as spaces of traffic, incorporating a metaphor for traffic that excludes the possibility of modal shift to cycling, and construing planning as a practice that normatively revolves around efficiently supplying spaces to meet current and forecast ‘traffic’ demand, in which cycling is only set up as ‘traffic’ when there is evidence of ‘low demand’ for cycle spaces. On this basis, we make three suggestions that may act as part of a counter-discourse to these transport planning-related construals that may reproduce car-centric planning practices.

First, through wording cycle mobility as “cycle traffic” (Groot, 2016; Parkin, 2018) in future proposals and public communications, cycling and cyclists could be legitimised as a form of traffic as opposed to something ‘in the way’ of traffic (see (Aldred and Jungnickel, 2013)), as a traffic ‘hazard’ (Bonham et al., 2020), and as a tool primarily for mitigating car-related externalities (Aldred, 2012; Van Der Meulen and Mukhtar-Landgren, 2021). Likewise, through this wording, cycle spaces could be set up as elements of a traffic/transport system rather than spaces that necessarily reduce or disrupt a traffic/transport system, that can facilitate mass cycling (i.e., “cycle traffic”) rather than more individualistic journeys (i.e., “cyclists” or “people cycling”). Second, adopting a metaphor of ‘traffic conversion’ could contest working assumptions within the car-centric technical discourse of transport planning that car-based mobility (‘traffic’) is an immutable substance that must be diverted elsewhere with redistributive active travel measures. By setting up cycling as a form of traffic, a metaphor of traffic as a malleable substance that can be converted into different forms (e.g., from car traffic to cycle traffic) can be advocated, in keeping with national modal shift targets (Department of the Environment, Climate and Communications, 2022). Importantly, this may be seen in contrast with a ‘traffic evaporation’ metaphor, which appears to operate with a meaning of ‘traffic’ as car-based mobility. With this metaphor, it appears that cycle and walking mobility are not set up as forms of traffic that might evaporate since these may not be measured in official average daily traffic calculations from which traffic may ‘evaporate’ following street interventions (Nello-Deakin, 2022). Third and last, in light of the evidence that an underlying principle of demand-led planning may act as a major normative basis for redistributive active travel planning opposition, explicit representations of a more ‘vision-led’ approach that does not necessitate the reproduction of the current mobility regime (Lyons and Davidson, 2016), along with clear explanations of why such an approach is needed as an alternative to ‘predict and provide’ might be beneficial. Importantly, with the increasing prevalence (and success) of liveability and place-making discourses influencing integrated planning practice through challenging the dominance of discourses of traffic-focused transport planning, care needs to be taken in over-applying these recommendations amidst the welcome proliferation of alternative visions for public space and mobility (Nello-Deakin, 2022; Brömmelstroet et al., 2022).

## 6. Conclusion

In this study, we identified several prominent discursive features of a what we call a *technical discourse of transport planning* that is normatively car-centric: ‘traffic’ as car-based (im)mobility, ‘roads’ as ‘traffic’ spaces, ‘traffic’ as an immutable substance, and traffic demand-led planning. These features are drawn upon in redistributive active travel planning opposition and, in this way, play a role in politically sustaining car-based automobility in planning practice. As we have integrated into our findings section, these features can be observed across a wealth of existing studies exploring public opposition to active travel planning, but also within high-level planning documents, policies, and active travel proposals. Our study provides a unique conceptual framework of primary discursive features of a technical discourse of transport

planning that may sustain a dominant car-system that has relevance beyond the context of Ireland. This framework could be adapted and refined for research in different national and regional contexts where redistributive active travel planning opposition – particularly in relation to cycle planning – is widespread, and makes an important empirical and conceptual contribution to a wider consideration of how the dominance of car-based automobility is politically sustained (Böhm et al., 2006; Haas, 2020), and how future transport planning discourses that decentre the car might be advanced (Aldred, 2019). From a practice perspective, our framework could be usefully adopted as a conceptual tool to identify underlying rationales of opposition by planners looking to implement redistributive active travel measures, while our recommendations could be used in framing and advocating for redistributive active travel proposals to meet transport decarbonisation targets, alongside the use of non-traffic-focused, liveability/place-making discourses (Nello-Deakin, 2022; Brömmelstroet et al., 2022).

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## CRediT authorship contribution statement

**Egan Robert:** Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Writing – original draft, Writing – review & editing. **Caulfield Brian:** Conceptualization, Funding acquisition, Methodology, Project administration, Supervision, Validation, Writing – review & editing.

## Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Data availability

The authors do not have permission to share data.

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