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Rogue drivers, typical cyclists, and tragic pedestrians: a Critical Discourse Analysis of media reporting of fatal road traffic collisions

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ABSTRACT

In Britain, a third of road traffic fatalities are pedestrians or cyclists. Media reporting may play a key role in shaping how people interpret these events. We conduct in-depth Critical Discourse Analysis of a sample of 17 *London Evening Standard* articles, covering car-bicycle, car-pedestrian, and bicycle-pedestrian fatality collisions. Using Van Leeuwen's Social Actor model we find that drivers involved in collisions are backgrounded, except those who failed to stop, who are portrayed as exceptional. Pedestrian casualties are framed episodically, i.e. as individual incidents not linked to wider contexts. Cyclist fatalities *are* presented thematically, although this common theme was cycling itself, not infrastructure, policy, or driver behaviour. When involved in pedestrian fatality collisions, cyclists are directly described as participants, rather than referred to indirectly through their vehicle as drivers are. Thus, narratives tend to erase driver agency in collisions while highlighting agency for cyclists, and pedestrian deaths appear as isolated incidents rather than part of a wider structural pattern. We identify three key tropes: rogue drivers, typical cyclists, and tragic pedestrians. The analysis shows how these, and the reporting patterns identified here, help to reproduce assumptions about risk posed to others by different modes, and consequent responsibility for crashes.

Introduction

Road collisions and road safety

In Britain, 1,752 people died in 2019 in road traffic collisions. After decades of decline, the figure has remained stable for a decade, with similar trends identified across Europe (European Commission – European Commission 2020). People walking and cycling are over-represented among road victims. In Britain, cyclists make up 6% of fatalities despite a mode share for cycling of 1–2%, while pedestrians make up more than a quarter of fatalities (Department for Transport 2020). Such high risks are several times higher per kilometre walked or cycled than in the safest European countries (Castro, Kahlmeier, and Gotschi 2018). They counteract policy goals towards modal shift and reinforce perceptions that walking and cycling – especially cycling – are in Britain only suitable for the fit and risk-tolerant (Macmillan et al. 2016).

This failure to reduce collisions and to protect the vulnerable better has reinforced challenges to traditional 'road safety' paradigms. For instance, many health, medical and police organisations now avoid the term 'accident' as implying that fatalities 'just happen' (e.g. BMJ 2001). The increasingly influential Vision Zero movement instead argues that no road fatalities are acceptable (Naumann

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et al. 2019). Organisations representing road victims, pedestrians, and cyclists have criticised 'individualisation' of risk, characterised by a focus on the behaviour of victims, such as wearing dark clothing, crossing away from formal crosswalks, or not wearing helmets, rather than the behaviour of those driving motor vehicles, infrastructure, or policies (Davis 1992).

Responding to these critiques, researchers (e.g. Bonham, Johnson, and Haworth 2020; Aldred and Woodcock 2015) have critically analysed how 'road safety' is constructed, in public discourse, policy documents, and news media. Roads are public spaces with an ever-present threat of violence; in the context of traffic violence, this involves power relations that combine transport mode-specific differences and wider social inequalities (Balkmar 2018). Such relations are codified and reinforced through policy and practice. Often the resulting exclusions and inequalities are taken for granted and only become generally visible during external shocks. In the UK, authorities told people to keep 2m apart to avoid Covid-19 infection. This led to debate about the need for more pedestrian space, given that two-thirds of footways were insufficiently large to permit Covid-19 distancing (Palominos and Smith 2019).

Our study fits within an emerging literature analysing the contribution of news media to constructing narratives about road collisions and road danger (e.g. Ralph et al. 2019; Magusin 2017). We use van Leeuwen's Social Actor model of Critical Discourse Analysis to qualitatively analyse discursive themes within a sample of *London Evening Standard* articles reporting on cyclist and pedestrian fatalities in London between 2012 and 2019. Our discussion of contrasting discursive tropes covers differences between the treatment of pedestrian and cyclist fatality collisions, and the differing narration of involved cyclists or drivers in pedestrian fatality collisions. In this way, our study complements existing work that has used more quantitative content analysis approaches to summarise textual patterns across a large corpus.

Framing road safety

One reason road collisions are newsworthy is their status as 'events'; whereas other negative impacts of car use may be greater in scale, they only rarely constitute reportable 'events'. However, the nature of the event framing can differ dramatically. One fundamental difference discussed by Ralph et al. (2019) and others is the extent to which stories are framed as 'episodic' or 'thematic' (Iyengar 1991). Episodic stories frame an event without association to other similar events, while thematic stories locate the event within a wider context of an ongoing issue.

Episodic framing – depicting events without making connections to other similar or related events – is associated with a lack of detail on causation or on ways that future such events might be prevented. Even common events seem less important if each instance is presented in isolation (Iyengar 1996). Hart (2010) found that episodic reporting of climate change stories was associated with lower importance being attributed to policy interventions to address climate change. In such cases, the perceived placement of issues on the public agenda appears to be mediated by the framing effect.

Previous research has identified relationships between the framing of road collisions as themes or episodes, and the complexity or simplicity of the coverage of risk and/or its possible prevention. Connor and Wesolowski (2004) found that the framing of fatal motor vehicle crashes in the Midwestern US subordinated risk factors to a simplifying victim-villain frame, emphasising incidents that deviated from a perceived norm. Smith et al. (2012) found that US press reporting framed road injuries as 'freak accidents', and a lack of information on prevention. Within public health research, Boufous et al. (2016) similarly identified a focus on fatalities amongst Australian news coverage of crashes involving cyclists, which they saw as emphasising the dramatic and exceptional nature of such events, subordinating the need for interventions to prevent further occurrences. These studies all associate the framing of incidents as unusual, exceptional, or atypical – as 'episodic' accidents – typically with simplistic coverage that misrepresented causation and displaced information on prevention.

Research examining episodic framing of pedestrian and cyclist injury collisions has identified a tendency to assign implied blame to the cycling or walking casualty (Ralph et al. 2019). In a study of pedestrian fatalities, Magusin (2017) identified episodic frames as dominant in Canadian news reporting, again associated with victim blaming. Bond et al. (2018) found episodic framing dominated the reporting of cyclist fatalities in Florida, linking the victim-blaming that this engendered to earlier research linking self-reported aggressiveness amongst drivers towards people on bicycles with the belief that the latter deserved to be punished. This latter point suggests that not only does victim-blaming leave the systemic sources of road casualties unexamined, it establishes a narrative in which the attribution of blame to the victim legitimises their endangerment.

Recent experimental evidence also suggests that frames which occlude infrastructural and institutional causes of road casualties may encourage audiences to hold the victim responsible. Goddard et al. (2019) presented participants with different versions of the same news report about a traffic crash involving a pedestrian. They found that differences in framing and other 'editorial patterns' shaped participants' perceptions of responsibility for the crash, what if any punishments were appropriate, and what if any interventions should be pursued to prevent similar crashes. As predicted by frame effects theories (Iyengar 1991, 1996), the use of thematic framing significantly increased the appetite for systemic safety improvements such as improved pedestrian infrastructure, whilst influencing the apportioning of blame away from the pedestrian.

Blaming and agency is another focus of recent research. This has sought to examine whether different road users are differentially held responsible for collisions, explicitly or implicitly. Ralph et al. (2019) found that bicycle riders or pedestrians were depicted as having agency in 78% of collision reports compared to only 11% for drivers (p.667). Even where agency was nominally ascribed to the driver, this was usually done through object-based language; the word 'car' was used instead of 'driver' 81% of the time, despite the victim being described using person-based language such as 'cyclist'. The authors suggest that this framing shifts blame away from the operators of motorised vehicles, and towards those walking or cycling. Similar effects were identified by Magusin (2017), Bond et al. (2018), and te Brömmelstroet (2020).

The 'cyclist' and road safety

Thus, recent research identifies narratives emphasising the responsibility of bicycle riders and pedestrians for road collisions, whilst effacing that of people driving cars. Studies further highlight the problematic nature of 'the cyclist', particularly in low-cycling contexts where people who cycle are frequently stigmatised (Aldred 2013). Rissel et al.'s (2010) Australian study identified dominant images of cyclists in reporting that maintains a figure of the cyclist as 'irresponsible lawbreakers' (p.7). Similarly, in the UK, a focus group study for the Department for Transport (Christmas 2010) found that participants were likely to excuse poor driver behaviour towards cyclists, identifying with the driver rather than with the cyclist. As Bonham, Johnson, and Haworth (2020) show, within road safety discourse, the cyclist is frequently cast as a 'hazard': feeding perceptions of cyclists themselves as potential threats or sources of harm.

Beyond specific negative stereotypes of 'the cyclist', the term itself – which previous research found to convey more negative associations than the word 'cycling' (Koorey 2007) – can be understood in terms of ideology. Ideology in this sense means what Becker (1984) called 'frames of reference through which each of us sees the world and to which all of us adjust our actions' (p. 69). The act of naming or 'hailing' someone as a cyclist is reminiscent of what Butler calls the 'discursive production of the social subject' in Althusser's account of ideology (Butler 1997, p.5). It is the act through which the person who is using a bicycle is produced as a 'cyclist', a social subject about whom a range of assumptions and images exist both for the cyclist herself and for others.

Those assumptions are frequently problematic. Basford et al. (2002) identifies the figure of the cyclist as part of an 'out-group' (see also Aldred 2013) whilst Prati, Puchades, and Pietrantoni (2017) associate this figure with being a 'minority'. Further evidence of the 'othering' of people who cycle –

and its consequences – comes from research examining attitudes and behaviours of car drivers towards cyclists. Piatkowski, Marshall, and Johnson (2017) found that drivers with lower levels of personal cycling were more likely to respond aggressively to perceived infractions by bicycle riders, whether illegal or not. Fruhen, Rossen, and Griffin (2019) found that negative attitudes towards cyclists amongst Australian drivers were associated with positive attitudes towards automobility, and that this negative attitude was linked to aggressive behaviour towards cyclists. This suggests that bicycle mobility is subject to a discourse of othering predicated on the perceived transgression or disruption of a normative automobility. However, whilst such othering can be traced across the studies discussed above, there is limited work specifically on how discourses around cyclists, cycling, and road safety shape and are shaped specifically by media reporting of road collisions.

One recent study that analysed discourse in this way is Scheffels, Bond, and Monteagut (2019), developing Bond et al.'s (2018) earlier work. Scheffels et al. identified a prevalent 'taken-for-granted' discourse surrounding road safety in which responsibility for safety is assumed – and thereby reasserted – as resting equally with the person riding a bicycle and the person driving a car. The authors note that this discourse has the effect of effacing the 'imbalance in [physical] power' (p. 633) otherwise apparent from considering the differing mass, velocity, and relative protection afforded by the two modes (see also Prati, Puchades, and Pietrantoni 2017).

Despite the marginalised nature of walking in many contexts (and the pejorative associations of the term used as an adjective) 'the pedestrian' has not generally been analysed as a stigmatised category analogous to 'the cyclist'. Research focuses more on the act or practice of walking; for instance, the exclusion of pedestrian traffic from city planning (e.g. Lindelöw, Koglin, and Svensson 2016). In the context of road safety discourse, the pedestrian will generally differ from the rider in not using a vehicle[1] although the growing use of micro-mobility devices may complicate such distinctions. Hence, comparing the differing narration of cyclists, drivers, and pedestrians (whether as victims or as involved parties) is of interest in understanding the workings of road safety discourses, and their relation to wider materialities and practices.

The London context

This study focuses on media coverage in London, UK. The UK is a low-cycling country. London has seen large recent growth in cycling in relative terms, but with mode share remaining at 2% (Transport for London 2020). The growth has been both politically salient and spatially unequal, with cyclists in the weekday morning peak now making up 50% of all vehicles on some Central London bridges, but cycling rates remaining at 0.5% or less in some districts. Walking levels in London are high in a UK and even European context, partly because of high public transport use (Fairnie, Wilby, and Saunders 2016).

Considered as casualties per head, Britain appears to have an excellent road safety record (RAC Motoring Services 2020). When unpicking this data by mode and normalising by the amount of travel, however, the country does much less well for walking or cycling safety. In the European context (Castro, Kahlmeier, and Gotschi 2018), walking and cycling are substantially safer in the Netherlands and in Scandinavia, when measured in casualties per-kilometre travelled. Cycling is relatively unsafe for English children, compared to Dutch children (Christie et al. 2007).

In London, cycling injuries acquired significant political salience from around 2012 onwards, with then Mayor Boris Johnson coming under pressure to do more to reduce fatalities (see Aldred 2013b for an account of a 2012 campaign that generated a substantial amount of pressure). Part of this politicisation was driven by increasing media coverage of cyclist fatalities (Macmillan et al. 2016) in the years preceding this. By contrast, campaigners perceive the much more numerous pedestrian fatalities as lacking the high profile of cycling deaths (Baird 2013).

Methodology

This study uses Critical Discourse Analysis, and within that van Leeuwen's Social Actor model, to examine how walking, cycling, and driving are narrated in the context of media reporting of road fatalities in London. It also assesses whether collisions are framed episodically or thematically, and if thematically, analyses the themes used. The article is based on research conducted in 2020 as part of an MSc dissertation in Transport Planning and Management. Ethical approval was obtained from Westminster University's School of Architecture and Cities.

We address the following questions in this paper:

(1) How are different collision types (car driver-pedestrian, car driver-bicycle rider, bicycle rider-pedestrian) framed? Are they episodes or themes? Are there characteristics of the collision that mediate the framing?
(2) How are different victims (bicycle riders or pedestrians) constructed; for instance, as active or passive; as being associated with the mode or with other groupings?
(3) How are different involved road users (car drivers or bicycle riders) constructed; for instance, as agents or as objects; as representative of the group or unusual?

We refer to 'car drivers', 'bicycle riders',[2] and 'pedestrians', though these may not always be the terms used in news articles; a list of common synonyms is provided under 'Analytical Methods'. Our use of a standard terminology ensures consistency in referring to both individuals and – where present – their vehicles, rather than only the individual or vehicle.

Road safety as discourse

We use a Critical Discourse Analysis (CDA) approach to analyse media discourse about road crashes, whereas much existing research uses a more quantitative content analysis approach. Discourse analysis is a fundamentally qualitative approach that draws attention to ways in which sometimes hidden structures of text – including what is *not* said, terms not used, invisible actors – shape our understanding and interpretation of events, and indeed response to them. As Fairclough and Wodak (1997) stress, discourse does not come from nowhere but is dialectically related to institutions, norms, and other types of practice; hence, studying discourse tells us not only about discourse itself but about wider societal structures that make such discourse possible, and are reinforced by it.

By contrast, a necessary characteristic of the more frequently used Content Analysis approaches is that they focus upon what van Dijk (1985) describes as an objective description of texts – albeit to quantify social phenomena – rather than an 'explicit and systematic account of media discourse' (p.3) including the power-relations and ideologies that media reporting might produce and maintain. This might make them less sensitive to – for example – how textual patterns identified at the article level may produce and reproduce a thematic frame at a wider media discourse level that performs ideological work. The value of CDA here lies in its ability to unpick this ideological work and the particular media discourse that repeats and maintains it. It is oriented towards power relations and ideology, rather than the objective quantification of social phenomena within texts.

Within the wider method of CDA we employ the Social Actor model, developed by van Leeuwen (2009). We chose this because its focus on social actors (SAs) seemed appropriate to the subject matter, despite its not having been used to examine road collision reporting previously (to our knowledge). Other studies have, for example: analysed the prominence of collision reporting in the media in relation to socio-economic indices (Torres-Barragan, Cottrill, and Beecroft 2020) or cycling levels (Macmillan et al. 2016); examined user-generated and social media coverage (English and Salmon 2016; Ferster et al. 2021); or identified the prevalence of specific terms (Rissel et al. 2010; Boufous et al. 2016; Ralph et al. 2019; Goddard et al. 2019) to determine how the media depicts collisions. The strengths of the Social Actor model in analysing how specific SAs are represented and

the resulting impacts (how particular road safety discourses are constructed and reinforced) promised new insights into how the media portray road users involved in fatality collisions. This comes both from studying additional aspects of the material, and from a deeper, more in-depth analysis of the representation of SAs. One limitation is that we are unable to analyse the large numbers of articles reviewed in other studies.

Search criteria

We first conducted a pilot exercise to characterise different types of newspaper article reporting on fatal road collisions, to ensure we were able to select a comparable group of articles for analysis. Articles chosen in the pilot varied from initial reporting of single collisions, through different types of follow-up and multi-collision articles, to editorials. Two types of article were chosen for inclusion: the 'initial' (1a) and 'short-term follow-up' (1b) reporting of single incidents. These represent the day-to-day reporting of crash events that are presented as factual and are sufficiently similar for comparisons to be made. The full typology of article types identified can be found in the Table A1.

Within this, three different scenarios were identified for analysis.

(1) Articles about bicycle riders killed as a result of collisions with people driving cars. (Car_Cyc)
(2) Articles about pedestrians killed as a result of collisions with people riding bicycles. (Bike_Ped)
(3) Articles about pedestrians killed as a result of collisions with people driving cars. (Car_Ped)

These allowed comparative analysis of discourses around two different victim modes and two different non-victim[3] modes. This enabled us to examine, for instance, not just whether there was objectification of drivers colliding with pedestrians (e.g. 'a car drove into a pedestrian'); but also whether this also operated when the striking vehicle was a bicycle, and therefore to understand better the discursive structures and power relations operating.

The *Evening Standard* is a free (advertising-funded) London-specific newspaper which had an average daily print circulation of 829,770 during the study period (ABC 2021) and which endorsed the right-wing Conservative Party in its successful 2019 UK General Election campaign (Evening Standard Comment 2019). It was chosen to allow comparisons within a specific transport context (London), and avoid possible confounding due to differences in editorial policy between publications. A consequent limitation is that the *Standard's* editorial policy may differ from other local and national newspapers.

Searches were carried out using keywords based upon those used by Macmillan et al. (2016, p.139): (['cyclist' OR 'bicycle'] AND ['died' OR 'death' OR 'killed']). This root search criterion was modified to address the three mode scenario categories of article being investigated (Table 1). Two further criteria were applied: to include only articles published in either print or online versions of the *London Evening Standard*, and to exclude articles of more than 500 words (the maximum expected length of initial and short-term follow-up articles). Searches were carried out in Factiva with date range 01/01/2012 to 31/12/2019.

Article selection

The method used lends itself to in-depth analysis of relatively few texts. The search terms for the Car_Cyc (682 articles) and Car_Ped (828 articles) scenarios produced many more articles than could be analysed within the scope of the study. To select a more manageable sample of five articles each for final analysis, the total number of articles for each search was divided by five and the resulting figure used to select each article from an even spread of the articles arranged in date order. Where the article was irrelevant despite the search terms (not the scenario in question, not a fatality, etc.) the next one in order was substituted.

While the search terms for the Bike_Ped scenario initially generated 185 articles, almost all were bicycle rider or pedestrian deaths in collision with motor vehicles. After manually removing these and other articles not fitting our criteria, only two remained, reflecting the low number of fatal Bike_Ped events. The article selection method was therefore changed: STATS19 police road safety data was used to identify specific instances of Bike_Ped fatalities, and dates used to identify related articles directly. This yielded five articles, two of which were immediate and follow-up articles reporting on the same collision. To bring the other two scenario categories in line with this repetition, we selected an additional immediate or follow-up article reporting on the same collision for our Car_Cyc and Car_Ped articles. This led to six articles each for the Car_Cyc and Car_Ped scenarios, making 17 articles across all three scenarios. Details of the date and headlines of these articles are summarised in Table A2, with the reference code used to refer to them in the findings.

Analytical methods

The Social Actor model uses 'socio-semantic categories' in the analysis of discursive events such as newspaper articles. These categories conceptualise relationships between 'social actors' (SAs), such as pedestrians, and semantic processes that produce meaning, such as a particular word choice or allusion. This differs from the use of grammatical categories by approaching both language (and other semantic phenomena) and SAs as constituting each other (Basov, Breiger, and Hellsten 2020). In doing so, socio-semantic categories make it possible to identify how different SAs are represented and constructed in the text in ways that are particularly subtle (Bernard 2018). This fits well with the current study, since it allows further examination of differing forms of representation suggested in the existing literature. For example, in a purely grammatical analysis of the following sentence, the cyclist is the subject and the car the object.

'The cyclist collided with the car'

From this we can suggest that the SA 'cyclist' is being ascribed blame, since the cyclist is doing the colliding, whilst the car appears passive. However, socio-semantic analysis also identifies 'partial exclusion'; unless the car was parked, there was a 'driver' SA who has been 'backgrounded' by the use of the word car. Van Leeuwen notes that such backgrounding may mean that the exclusion was 'innocent' – the writer assumes that the reader understands that the car had a driver, and wishes to draw attention to the severity of the collision by emphasizing the involvement of a large vehicle – but cautions that 'systematic exclusions are always of interest' (van Leeuwen 2009, p. 282), even if 'innocent'. By using these and other analytical tools (see below), the approach provides a way of systematically analysing the socio-semantic discursive structures that lead to textual features such as the 'invisible driver' identified within more content-focused approaches (e.g. Ralph et al. 2019; Aldred et al. 2021).

Van Leeuwen's analytical inventory consists of ten categories, several of which overlap or are contingent upon each other. Previous research in other fields has used a subset of these ten inventories (e.g. Amer 2017) as the needs of the research dictate. For the present study, we chose the following six categories:

(A) **Exclusion**. SAs who are in reality part of an action, event, or practice, are excluded from its description. van Leeuwen (2009) says that systematic exclusions are always of interest. In our study, this could involve a failure to refer to a driver (or other road user) in an article.

(B) **Role allocation**. This refers to whether SAs, when not excluded, are active ('agents') or passive ('patients'); which can map onto 'victims' and 'villains'. van Leeuwen (2009) argues that the significance of this may vary by context. Here, we are interested in whether the casualty and/or the other party are described as active or passive, which may imply attributions of power and/or blame.

Table 1. Search terms used per scenario.

Mode scenario category	Search terms
1 – Pedestrian fatalities involving collision with person riding a bicycle (Bike_Ped)	(['cyclist' OR 'bicycle'] AND ['died' OR 'death' OR 'killed'] AND ['pedestrian' OR 'walking' OR 'crossing'] AND [rst = NS OR rst = NSONL] AND [wc<500])[4]
2 – Cyclist fatalities involving collision with person driving a car (Car_Cyc)	(['cyclist' OR 'bicycle'] AND ['died' OR 'death' OR 'killed'] AND ['car' OR 'driver' OR 'motorist'] AND [rst = NS OR rst = NSONL] AND [wc<500])
3 – Pedestrian fatalities involving collision with person driving a car (Car_Ped)	(['pedestrian' OR 'walking' OR 'crossing'] AND ['died' OR 'death' OR 'killed'] AND ['car' OR 'driver' OR 'motorist'] AND [rst = NS OR rst = NSONL] AND [wc<500])

(C) **Generic and specific reference**. Where references are generic, SAs are generalised into classes, often establishing a 'them and us' opposition between the categories. This is usually characterised by the plural without article (e.g. 'cyclists' or 'drivers').

(D) **Assimilation**. Like generic references, assimilation establishes mode-based identities, but assimilation specifically relates to traits associated with groups. For instance, this might involve reference to a particular modal (or other) group habitually behaving incorrectly or illegally.

(E) **Functionalization and identification**. Functionalization involves SAs being referred to in terms of a function, activity, or role: here the nature of modal categories implies some overlap with generic reference and assimilation, although other functionalized categories used might include for instance 'the victim'. Identification relates to the use of nouns and/or adjectives in ways that evoke or reduce empathy; for instance, telling the reader about the age or gender of a victim or other road user, or their relationships (e.g. mother of two) or physical characteristics. We have chosen to separate these two sub-categories in Table 6 as they showed differing patterns in our data.

(F) **Personalization and impersonalization**. While (B)-(E) are forms of personalization (categorising or describing SAs), impersonalization has a counter-effect, linked to (A). The SA's existence is effaced either through objectification (replacing them with an object that represents them, in our case likely to be a vehicle) or abstraction (where they are described without representation; for instance, 'the cycling debate'). van Leeuwen (2009) notes that instrumental objectification is 'widely used to avoid assigning responsibility to human agents'.

In analysing the representation of different users, we included three specific types of SAs directly involved in the events described: pedestrians; bicycle riders; and car drivers. In analysing how they were referred to (e.g. generically versus specifically) within each article, our analysis encompassed synonymatic references to each SA (Table 2). Some of these synonyms were additional to those originally used to search for the articles themselves.

Using these six sets of categories allowed for a systematic process of analysis (Table 3) that took account of overlaps and interactions between categories, so that, for example, the identification of 'Exclusion' in one pass could be further interrogated for evidence of 'Generic reference'. Discourses unfold through multiple and interrelated elements; the approach allowed discrete analytical tasks to be conducted that nevertheless could allow the identification of interconnections between different categories.

Table 2. Synonyms.

Social actor	Synonyms
Pedestrian	'walker(s)'; 'on foot'
Bicycle user	'cyclist(s)'; 'rider(s)'; 'bicyclist'; '(e-)bike'; '(bi/tri/quad)-cycle'
Car driver	'motorist'; 'driver'; 'car/van'

Table 3. Structuring of analysis into passes and discrete tasks.

Pass	Inventory categories identified and analysed
1 – Who is present and who is absent (capacity for agency)?	Exclusion Personalization and impersonalization
2 – Who is to blame, who deserves sympathy?	Role allocation Functionalization and identification
3 – Who is the in-group (assumed audience 'us') and who is the out-group (assumed audience 'them')	Generic and specific reference Assimilation

Table 4. Examples of different categories as represented in our sample of texts.

Category and description	Examples
Exclusion Whether SA is referred to in relation to the collision.	'A cyclist has died after being involved in a crash with a car' (Car_Cyc_001) Cyclist is present (*not excluded*), car driver is backgrounded (*partially excluded*)
Impersonalisation SA is represented by reference to associated object (*Objectification*) or a quality they are supposed to have (*Abstraction*).	' . . . hit by a £250,000 Rolls-Royce Wraith' (Car_Ped_001) Car driver is *impersonalised* through *objectification* as an expensive car. By comparison to objectification, abstraction featured only weakly in our findings.
Role allocation Whether SA performs action in sentence (*Active role*) or receives action in sentence (*Passive role*)	' . . . as a Mazda MX-5 collided with a pedestrian . . . ' (Car_Cyc_005b) Car driver (though also *objectified* as a car) performs the action of colliding (*Active role*). 'a man in his 30s, died in the crash with the Ford Transit van' (Car_Cyc_004) Van driver (though also *objectified* as a van) receives the action of the crash along with the bicycle rider (*Passive roles*).
Functionalization & identification Whether SA is described in terms of their *function* (activity/ role), and/or by what society intrinsically *identifies* them as.	'a cyclist was killed on World Bicycle Day. The victim [. . .]' (Car_Cyc_002) Bicycle rider *functionalised* modally through suffixed noun as 'cyclist', and discursively through role as 'victim'. 'The mother-of-two had started in January as head of human resources . . . ' (Bike_Ped_005) Pedestrian *identified* through relational (being a mother) and socio-economic (working in a profession) markers
Generic and specific reference SA may be generalised *generically* into one or more classes of people, or *specifically* by rendering them as an identifiable individual.	' . . . the cyclist, thought to be a man in his 30s . . . ' (Car_Cyc_004) Bicycle rider generalised into *generic* class of people (males) by use of singular without definite article. 'The 72-year-old man was struck by the cyclist . . . ' (Bike_Ped_003) The pedestrian is rendered as an identifiable individual by *specific reference* (definite article). Note that rendering as 'identifiable' for this purpose often involves multiple such sentences and need not include name.
Assimilation SA may be assimilated into groups through the use of quantifiers (*Aggregation*) or words that express group identities (*Collectivization*). For the purpose of this study, these include modal group identities.	' . . . they just speed between the traffic lights at the junctions and then just slow down again . . . ' (Car_Ped_004b) The car driver has already been associated with this 'they' (local joyriders) earlier in the article – this use of an indefinite quantifier further aggregates them into a group. ' . . . a cyclist was killed on World Bicycle Day' (Car_Cyc_002) The bicycle rider is repeatedly referred to as 'cyclist', and further associated with this modal group identity through juxtaposition with World Bicycle Day.

Table 4 provides examples of the different categories in our set of 17 articles. It illustrates some different possible combinations; for instance, a car driver can be excluded and objectified (described through the car) yet also active.

In addition to socio-semantic category analysis, the study assessed the use of episodic and thematic framing in the articles, which would indicate the extent to which aspects of the collision were being related to other similar collisions or to wider road safety issues. For each article, we separately identified any references to other collisions involving the same type of SA/object as the fatality, the same type of SA/object as the other party, and the same type of location (both in terms of geographic location and common infrastructural elements such as junctions, bike lanes, etc.). Table 5 illustrates this process along with examples.

This method enabled us to identify the extent to which any thematic or episodic frames were common to a particular SA – which might give rise to particular discourses – and whether framing differed depending on which SA was the fatality. We separately assessed the framing of the collision location, both in terms of its geographic location in relation to other collisions and whether there were any references to common infrastructural elements (bicycle lanes, junctions, etc.)

Having detailed the systematic CDA method employed and the approach taken to identifying episodic and thematic framing, we now present the findings of the analysis.

Findings

Table 6 presents an overview of findings. Alongside categorising scenarios in terms of the levels of thematic versus episodic framing, this shows the most prevalent category finding for each SA within each scenario. References to common infrastructural elements were not framed thematically in any scenarios and so are omitted from Table 6.

Thematic versus episodic framing

We examined the extent of thematic versus episodic framing in relation both to SAs and collision location. The casualty mode proved important. Whilst reports about people killed whilst cycling included references to other previous collisions, those about people killed whilst walking did not make such links. Specifically, both the Bike_Ped and Car_Ped scenarios were episodically framed in terms of the collision type and the social SAs involved, with only one article (Car_Ped_005b) framing the location of the collision thematically. This was in the form of an anecdote by an unnamed witness, the veracity of which is not established in the article.

The absence of a road safety theme within the Bike_Ped articles was surprising, given recently observed growth in media coverage of these rare collisions that frame bicycle riders – specifically the figure of the 'cyclist' – as a danger to pedestrians (Caimotto 2020). The absence of this frame may partially be explained by the article type chosen – initial and immediate follow-up reporting – since pilot article searches did find articles of other types that expanded on the theme of bicycle riders endangering pedestrians; including longer-term follow-up articles reporting on court cases and

Table 5. Example of episodic/thematic analysis.

SA or object framed	Episodic or thematic?	Notes
Bicycle rider/ bicycle	Thematic	Reference to 7 other recent bicycle rider casualties (fatal) in preceding timeframe ('that year') in London. Details given of specific fatality a month earlier in Harrow; some time and distance away.
Car driver/car	Episodic	No details given of involvement of cars or drivers in previous collisions.
Location	Episodic (location), Thematic (London)	Details of other bicycle rider casualty were not local to Camberwell, but part of wider 'London cycle casualty' thematic frame.

Table 6. Overview of main findings.

Scenario	Framing of location	Social actor	Framing of social actors	Exclusion	Impersonalization	Role allocation	Functionalization	Identification	Generic or specific reference	Assimilation
Bike-Ped	Always episodic	**Pedestrian**	Episodic	No	No	Passive	No	High	Even mix	Low
		Bicycle rider	Episodic	No	No	Active	High	Low	Highly generic	Low
Car-Cyc	Mostly thematic	**Bicycle rider**	Mostly thematic	No	No	Passive	High	Mixed	Most highly generic, two highly specific	Moderate
		Car driver	Mostly episodic	Partially	Highly	Mostly passive	Moderate	Low	Highly generic	Moderate
Car-Ped	Almost always episodic	**Pedestrian**	Episodic	No	No	Passive	No	Mixed	Highly generic	Low
		Car driver	Episodic	Partially	Highly	Active	Mixed	Low	Inconclusive	Moderate

opinion pieces. The low occurrence of these types of fatality (Aldred et al. 2021) and the relatively recent media interest may also mean that the discourse of the bicycle rider as dangerous to pedestrians was not yet fully established in initial news reporting.

The absence of a road safety thematic frame in the Car_Ped articles was less surprising as this aligns with the results of previous larger-scale Content Analysis research (Ralph et al. 2019). However, this contrasts with the unexpected thematic framing of the Car_Cyc articles, which is at odds with what might be expected from other studies, and apparently at odds with (lower) collision frequency.[5] In our sample, all but one of the Car_Cyc articles framed the bicycle rider fatality in terms of other recent bicycle rider fatalities in London, establishing a thematic frame linking these deaths to a larger issue of road safety in the UK capital.

Social actors

There are several broadly consistent distinctions between the representation of the different SAs across the first three categories. Pedestrians are never excluded. Neither are bicycle riders, whether or not they are the fatality. By contrast, car drivers are always partially excluded (backgrounded) in sentences introducing the collision event, consistent with the findings of previous Content Analysis research such as Ralph et al. (2019). Similarly, neither pedestrians nor bicycle riders are impersonalized, irrespective of whether the latter is the fatality. For instance, Bike_Ped fatalities were hit by 'a cyclist' not by 'a bicycle', whereas Car_Cyc and Car_Ped fatalities were generally hit by 'a car' rather than 'a driver'. Car drivers are highly impersonalized in Car_Ped and Car_Cyc articles, which again aligns with the findings of Ralph et al. (2019).

We found clear distinctions between the role allocated to different SAs under different scenarios. Pedestrians are largely assigned a passive role. Bicycle riders are assigned an active role where they are in collision with pedestrians (Bike_Ped), but a passive role when in collision with car drivers (Car_Cyc). This latter role assignment complicates the findings of recent research (Scheffels, Bond, and Monteagut 2019), which found that bicycle riders were usually assigned the active role in articles describing collisions with car drivers. Car drivers are assigned a largely passive role in collision with bicycle riders – a passivity shared in those articles with the bicycle riders themselves – but an active role in collisions with pedestrians.

The functionalization and identification category (presented separately for clarity in Table 6) indicated that pedestrians were represented through the lowest level of functionalization – that is, they were least often referred to in terms of a function or role. This is unsurprising since the grammatical patterns that attend most of the observed functionalization of the other two SAs were related to those SAs' vehicles. Bicycle riders were more heavily functionalized than car drivers across their respective scenarios, though this may be a consequence of the high degree of backgrounding and objectification amongst representations of car drivers. Pedestrians are represented with the most identification whilst car drivers are represented with the least. In this sample, pedestrians were represented using greater identification when in collision with a bicycle rider, compared to when they had been in collision with a car driver.

The final two categories (generic versus specific, and assimilation) produced more variable results between articles, although most SA and scenario combinations showed similarly generic rather than specific references to the SAs and low-to-moderate assimilation. This may be partly due to the type of articles chosen for analysis: early reporting of the collisions will tend to feature less of the detail associated with higher specificity and assimilation. Nevertheless, the pedestrians were represented with more of a mix of generic and specific reference when they were in collision with bicycle riders than with car drivers. Bicycle riders, meanwhile, were the only SA routinely represented through the aggregation element of assimilation – but only when they were the fatality.

Discussion

Prior research has identified editorial patterns in road collision reporting that may produce and maintain power relations between bicycle riders and/or pedestrians, and car drivers. Our study has found distinct but differentiated discourses in the production of bicycle rider and pedestrian social actors (SAs) as fatalities in collision with car drivers.[6] Car drivers, meanwhile, were frequently back-grounded or invisible, or, conversely, associated with a discourse of exceptionalism. Considering these findings, we propose three interrelated discourses that are produced and reproduced in the articles examined through three tropes: the 'typical cyclist'; the 'rogue driver'; and the 'tragic pedestrian'. We argue that these tropes support discourses that construct bicycle riders as posing disproportionate risk to others, and that efface the substantial differences in risk posed between motorised and non-motorised road users.

Typical cyclists

Thematic references to previous collisions in reports about people killed whilst cycling were focused upon the involvement of a bicycle and rider. Four of these articles also framed the geographic location thematically – though in three cases only in terms of 'London' or parts of London. None of the thematic frames drew attention to particular junctions or other infrastructure contexts at the collision site, although one (Car_Cyc_002) notes a cluster of previous bicycle rider fatalities in a neighbouring borough.

Thus, while the newspaper reports did highlight a wider road safety theme around cycling, this was depicted as about the bicycle and its rider, rather than road dangers imposed by the riding environment. For example, none of the thematic framing references in the Car_Cyc articles indicated what other vehicles were involved in the other bicycle rider fatalities, with only one touching on the theme of a specific location. Consequently, the Car_Cyc thematic frame was almost entirely focused upon bicycle riders dying, rather than other common elements of these fatalities. Whilst these frames therefore drew connections between cyclist fatalities, they lacked connections between the 'broader, institutional factors' identified as important by Ralph et al. (2019., p. 664).

This fixation on the bicycle riders narrows the road safety thematic framing found in the articles so that the bicycle rider dying becomes the only common element. The discourse that emerges is that the 'safety problem' consists of people riding bicycles, not their being hit by car drivers or suffering from the effects of inadequate road infrastructure. Such a conceptualisation of cycling parallels that recently identified by Bonham, Johnson, and Haworth (2020), which identified the construction of bicycle riders as hazards in road safety literature.

By framing bicycle rider fatalities through a theme focused upon the act of cycling as the single common factor, the articles examined repeated a road safety discourse in which the bicycle rider is a hazard and bicycle riding is dangerous in and of itself. In this discourse, people riding bicycles keep being killed, so that the figure of the bicycle rider – largely realised through the term 'cyclist' – is produced and reproduced as always and already an inevitable victim of road death. We suggest that this discourse constructs the 'typical cyclist' as such a victim, and thereby marks bicycle rider fatalities as themselves un-exceptional. Other research has found bicycle riders to be constructed as a risk to themselves and others (for example, Rissel et al. 2010). This was not something specifically examined in the present study, although the construction of the 'typical cyclist' as inevitable victim might gesture towards the former. The analysis of the Bike_Ped scenario did not find a consistent construction of bicycle riders in collision with pedestrians.

Exceptional (rogue) drivers

In contrast to bicycle riders, car drivers were not framed with links to other specific collisions. They were barely framed at all, and mostly referred to only indirectly. This made car drivers appear as passive third parties and further focused questions of safety on the bicycle rider or pedestrian. However, our socio-semantic analysis did identify a recurring trope in two Car_Cyc articles (Car_Cyc_002; Car_Cyc_005) and two Car_Ped articles (Car_Ped_002; Car_Ped_005b) in which the car drivers either failed to stop or were arrested. We called this trope that of the 'rogue driver' since the articles concerned associated the car driver with active participation in a specific negative behaviour through terms such as 'joyrider', 'boy racer', 'hit-and-run driver' and "BMW" hit-and-run'. These terms all label the car drivers concerned as distinct from the typically passive and back-grounded car driver of other articles, although interestingly the 'hit-and-run' drivers were still only referred to directly in relation to their failure to stop as in this example from Car_Ped_002:

> A man has died after being knocked down by a car in a hit-and-run in east London.
>
> [. . .]
>
> The driver of the car, thought to be a silver or grey BMW 1-series, did not stop at the scene.

Significantly, whilst this trope constituted a recurring theme across four of the articles, it was framed episodically: although all four rogue driver articles featured anecdotal eyewitness statements that referenced similar incidents of rogue driving behaviour in those locations, none explicitly linked such behaviour to other specific collisions. These rogue drivers were thereby framed as exceptional rather than as part of an explicit road safety theme applicable to car drivers more generally. Crucially, such exceptionalism was associated in those articles with depictions of bicycle riders and pedestrians that were unusually personalised and sympathetic (through greater identification and specific references) compared to articles in which car drivers were not depicted as exceptional. This suggests that depictions of car drivers as rogue also shaped the depiction of the bicycle riders and pedestrians as victims.

Through these differentiated depictions, we identified the trope of the rogue driver with a discourse in which the presence and negative actions of car drivers were only foregrounded as part of them being deemed exceptional. This discourse serves to construct a distinct figure of an exceptional car driver unrelated to the actions of the non-rogue or normative car driver. Where the discourse of the typical cyclist produces and reproduces all bicycle riders as the same – as always and already part of a road safety problem of riding a bicycle – the discourse of the exceptional driver implicitly absolves most car drivers by isolating the road danger posed by car driving within an exceptional and episodic frame of rogue drivers. Again, this conceptualisation of normative drivers parallels Bonham, Johnson, and Haworth (2020) findings, in which the construction of bicycle riders as hazards in road safety literature was associated with an assumption that 'the normal driver is not a hazard' (p.7). These findings also align with DfT research (Christmas 2010) which found that whilst people attribute examples of bad driving to individuals rather than to car drivers in general – that is, episodically and exceptionally – bad cycling behaviour is perceived as endemic to cyclists. The discourse described above may serve to reproduce and maintain these assumptions by directing attention from the danger posed by car driving towards a small minority of rogue car drivers.

Tragic pedestrians

Whilst the episodic framing of rogue drivers marked these instances as exceptional in comparison to an assumed category of normative driver who was barely present, the episodic framing of pedestrian casualties operated in a different way. The absence of a road safety theme in either Car_Ped or Bike_Ped articles rendered pedestrian fatalities as isolated incidents, but did so consistently across

the articles examined. None of the pedestrian SAs therefore constituted an exceptional road safety trope such as the rogue driver, but neither (as happened for bicycle riders) were they thematically linked to other pedestrian fatalities to reproduce continuously the figure of a road safety problem.

Pedestrians also differed from both bicycle riders and car drivers in being referenced with low functionalisation; that is, they were rarely described in terms of an activity or role. This may be in part an indirect consequence of pedestrians not using a vehicle. Yet it also points to the minimal use of the word 'pedestrian' itself in the articles: whilst most examples of functionalisation used this term, the overall prevalence of such instances was low in Car_Ped articles compared to the prevalence of 'cyclist' in Car_Cyc articles. This observation is interesting in the context of road collision reporting, since it suggests that pedestrian fatalities were less prominently associated with their transport activity or modal choice than bicycle rider fatalities.

Given the attendant absence of a thematic frame linking pedestrian fatalities, the effect of this low functionalisation is to distance pedestrians further from a road safety discourse: they may be victims of a collision with a car driver, but they are not strongly represented as SAs in the transport system. The discourse that instead emerges is of tragic but isolated incidents in which pedestrians are represented as a kind of non-mode, with no functional claim to traffic participation. Unlike the 'typical cyclist', whose involvement in fatal collisions is depicted thematically as part of a wider endemic road safety problem with riding bicycles, this 'tragic pedestrian' is an exceptional victim whose very exceptionality diverts attention from the need for road safety interventions.

(Un)equal mobilities: risk and danger

Having identified these three different but interrelated discourses – the 'typical cyclist', the 'exceptional driver', and the 'tragic pedestrian' – we now turn to a discourse through which the different physical risks and dangers afforded by the three modes are constituted.

The Car_Cyc articles described the fatal collisions as if all parties involved possessed equal physical power. This worked by assigning the car driver and the bicycle rider almost exclusively *passive roles*, often within the same, essentially non-agentive sentences. This was surprising and partially contradicts the findings of the recent research by Ralph et al. (2019), which found that sentences describing collisions did ascribe agency more often than not, most often to the bicycle rider or pedestrian – although that research did not distinguish role assignment between bicycle rider and pedestrian casualties. The present findings do make this distinction, and in finding that bicycle riders are assigned a shared *passivity* with car drivers in Car_Cyc collisions – typified by sentences such as 'Cyclist dies after crash with car' (Car_Cyc_001) – these findings suggest a discourse specific to bicycle rider fatalities in which the possibility of blame attribution is neutralised by rendering the collision as something that has happened equally to both parties.

Such equity denotes an important power relation between bicycle rider and car driver since both are depicted as contributing equally limited causation towards the collision. This effect is magnified by the frequent nominalisation of the verbs such as 'to crash' into nouns such as 'crash'. Van Leeuwen associates nominalisation with the exclusion of SAs, but recent transport safety research has identified how it also effaces physical power imbalances in collisions between bicycle riders and car drivers (Scheffels, Bond, and Monteagut 2019). Whilst ascribing shared *passivity* in non-agentive sentences may indicate an editorial policy to report the collisions in a neutral way – especially given that initial reporting often lacks key facts – the effect of this is to subordinate the material differences between the capacity to cause harm to others (and to be protected from harm by the actions of others) that are afforded by driving a car as opposed to riding a bicycle.

Despite such equivalence in implied physical power between car driver and bicycle rider, we found a distinct inequivalence in depictions of agency. Car drivers were subtly but routinely disassociated from their capacity to direct actions, with sentences describing the collision almost always referred to the car driver indirectly in terms of their vehicle. Van Leeuwen notes that exclusion of this kind can be 'innocent' because the author assumes that the audience knows

about the SA (van Leeuwen 2009, p. 282), and indeed a potential criticism of the argument against describing vehicle drivers in terms of their vehicles is that it is self-evident to the audience that the vehicle had a driver. However, van Leeuwen (2009, p. 282) also notes that 'systematic exclusions are always of interest' so it is significant that this pattern is so consistently followed in the articles examined here. Moreover, the systematic exclusion of car drivers contrasted with the systematic inclusion of bicycle riders, who were not routinely described in terms of the 'bicycle'. This finding is consistent with previous research (Ralph et al. 2019; Scheffels, Bond, and Monteagut 2019).

These findings suggest that even when bicycle riders and car drivers are jointly depicted with equally passive roles – which implies neutrality of blame in who collided with whom and elides substantial differences in mass and speed between a bicycle and a car – differences in the use of exclusion shape unequal depictions of their agency. The systematic inclusion of bicycle riders associates them with a capacity for agency in the collision that is not shared by the objects (cars) through which the car drivers are depicted. This difference potentially steers blame towards the bicycle rider and invites greater scrutiny of their actions.

Notably, the inclusion of bicycle riders was also a feature of articles reporting on the Bike_Ped scenario in which pedestrians had died as a result of a collision with a bicycle rider. In these articles, both bicycle riders and pedestrians were equally present in sentences describing the collision, in contrast to the Car_Ped scenario where car drivers were again represented through high levels of partial exclusion (backgrounding) when they were in collision with pedestrians. Consequently, we found that in articles describing pedestrian fatalities, the agency of the surviving SA was depicted prominently when they were riding a bicycle, yet largely erased when they were driving a car.

Across the articles we examined, the bicycle rider is thus placed in a contradictory position: as the surviving party they are equally present ('included') in descriptions of fatal collisions with pedestrians, yet as the fatality in collisions with car drivers they are often the only fully present SA – the only one depicted as possessing agency. This paradox serves to produce and maintain a power relation between bicycle riders and the other two SAs that disavows material differences in power and protection. Bicycle riders are depicted with equal power yet greater agency than car drivers, despite being more similar to pedestrians in terms of comparative levels of both physical power and protection (see Aldred 2018). We suggest that this disavowal of a material difference in ability to cause harm between car drivers and bicycle riders reinforces a social power relation in which the latter can be more readily subject to scrutiny for particular agency and thus responsibilities towards pedestrians, whilst the former are simultaneously excluded from such scrutiny towards both bicycle riders and pedestrians.

Conclusion

In this paper, we have used Critical Discourse Analysis with a focus on Social Actors to explore representations of people walking, cycling, and driving in collision reporting. The findings build on results from more quantitative textual analysis, highlighting ways in which the discourses differ (or do not differ) depending on the road users involved. Importantly, we find that the treatment of bicycle rider and pedestrian fatalities differs, as does the treatment of car drivers and bicycle riders involved in collisions where others are fatally injured. As our research only covers London, future studies could usefully examine other contexts to understand better the extent to which some of these findings are specific to the distinctive context of London (for instance, the salience of cyclist fatalities).

Like other research, we found that episodic framing was common in reporting of pedestrian fatality collisions, leading to their being understood as isolated incidents. However, unlike some other research (Ralph et al. 2019) we did not find evidence of pedestrian victim-blaming in the articles examined[7]: hence our identification of a 'tragic pedestrian' trope. While car drivers were

generally described as the active party in such collisions, as SAs they tended to be backgrounded and replaced by their vehicles. Exceptions related to hit-and-run incidents, with car drivers being held responsible for failing to stop, although not for the collision itself.

Car-bicycle rider collisions, by contrast, were portrayed quite differently. A thematic framing linked them only through the common victimhood of people on bikes. Alongside this, car drivers and bicycle riders were both portrayed using passive roles, implying that they were equal parties in the collision. As with pedestrian fatalities, car drivers tended to be objectified and represented by their vehicle. This contrasted with the treatment of bicycle riders in bicycle rider-pedestrian collisions, who were active and not backgrounded, thereby framed as both responsible and more physically powerful than the pedestrian fatality.

These findings demonstrate a differentiated picture of discursive practices in road collision news reporting that complements and develops accounts detected in predominantly content analysis-based research. Our results show the potential for change j reporting and for variation in discourses. Yet despite the presence of elements such as the thematic framing of cycling fatalities or the lack of explicit victim-blaming, we identified problematic discourses that continue to reinforce inequalities between road users. Specifically, the high numbers of pedestrian fatalities remain invisible, unlinked to the hundreds of pedestrian deaths in the UK each year or to the specific locations and road user types putting pedestrians at risk in London. While bicycle rider fatalities are portrayed as part of a theme, this theme itself feeds into the portrayal of cycling itself as inherently risky, which misdirects attention from systemic sources of danger such as road environment and infrastructure. Perhaps this is not surprising. Whilst there have been substantial policy changes in London – such as explicitly pursuing 'road danger reduction' in place of 'road safety' – the assumed primacy and normativity of 'motor traffic flow' over other considerations in transport planning remains largely unchanged.

Notes

1. In the UK, wheelchair users are generally counted within the 'pedestrian' category, as are users of some (but not all) powered mobility scooters. In this case, none of the sampled articles including a pedestrian using a wheelchair, mobility scooter, or other mobility device or vehicle (e.g. skateboard).
2. This term is not itself perfect: 'bicycle' implies two wheels, whereas cycles, especially those used to carry cargo or children, or adapted cycles used by disabled people, may have three wheels.
3. There were no collisions in our sample where both road users (e.g. car user and pedestrian) died.
4. RST limits the source to the Evening Standard and WC refer to the article word count.
5. There are more than four times as many pedestrian as cyclist fatalities in London, so on the basis of numbers, one might expect pedestrian fatalities to be described more thematically as being more frequent occurrences.
6. Where bicycle riders were the surviving party in fatal collisions with a pedestrian, the coverage of them as Social Actors was less consistent.
7. In Ralph et al's research, this related to the use of counter-factual statements, e.g. around a pedestrian wearing dark clothing with the implication that they would otherwise be alive. We did not find such statements.

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References

ABC, 2021. Evening Standard [Online]. Audit Bureau of Circulations Data Hub. Accessed 2 March 2021. https://www.abc.org.uk/product/5341.

Aldred, R., and J. Woodcock. 2015. "Reframing Safety: An Analysis of Perceptions of Cycle Safety Clothing." *Transport Policy* 42 (August): 103–112. Accessed 2 March 2021. doi:10.1016/j.tranpol.2015.05.001.

Aldred, R., R. Johnson, C. Jackson, and J. Woodcock. 2021. "How Does Mode of Travel Affect Risks Posed to Other Road Users? An Analysis of English Road Fatality Data, Incorporating Gender and Road Type." *Injury Prevention* 27 (1): 71–76. doi:10.1136/injuryprev-2019-043534.

Aldred, R. 2013b. "Who are Londoners on Bikes and What Do They Want? Negotiating Identity and Issue Definition in a 'Pop-up' Cycle Campaign." *Journal of Transport Geography* 30: 194–201. doi:10.1016/j.jtrangeo.2013.01.005.

Aldred, R. 2013. "Incompetent or Too Competent? Negotiating Everyday Cycling Identities in a Motor Dominated Society." *Mobilities* 8 (2): 252–271. doi:10.1080/17450101.2012.696342.

Aldred, R. 2018. "Inequalities in Self-report Road Injury Risk in Britain: A New Analysis of National Travel Survey Data, Focusing on Pedestrian Injuries." *Journal of Transport & Health* 9: 96–104. doi:10.1016/j.jth.2018.03.006.

Amer, M. 2017. "Critical Discourse Analysis of War Reporting in the International Press: The Case of the Gaza War of 2008-2009." *Palgrave Communications* 3 (1): 1–10. doi:10.1057/s41599-017-0015-2.

Baird, N. 2013. "Caroline Russell: Safer Streets Campaigner." *Islington Faces* 20 (November): 2013. Accessed 2 March 2021. https://www.islingtonfacesblog.com/2013/11/20/caroline-russell-safer-streets-campaigner/.

Balkmar, D. 2018. "Violent Mobilities: Men, Masculinities and Road Conflicts in Sweden." *Mobilities* 13 (5): 717–732. Accessed 2 March 2021. doi:10.1080/17450101.2018.1500096.

Basford, L., S. Reid, T. Lester, J. Thomson, and A. Tolmie. 2002. "Drivers' Perceptions of Cyclists." London. Accessed 2 March 2021. https://trl.co.uk/sites/default/files/TRL549.pdf.

Basov, N., R. Breiger, and I. Hellsten. 2020. "Socio-Semantic and Other Dualities." *Poetics, Discourse, Meaning, and Networks: Advances in Socio-Semantic Analysis* 78 (February): 101433. Accessed 2 March 2021. doi:10.1016/j.poetic.2020.101433.

Becker, S. L. 1984. "Marxist Approaches to Media Studies: The British Experience." *Critical Studies in Mass Communication* 1 (1): 66–80. Accessed 2 March 2021. doi:10.1080/15295038409360014.

Bernard, T. 2018. "The Discursive Representation of Social Actors in the Corporate Social Responsibility (CSR) and Integrated Annual (IA) Reports of Two South African Mining Companies." *Critical Approaches to Discourse Analysis across Disciplines* 10 (1): 81–97.

BMJ. 2001. "BMJ Bans "Accidents": Accidents Are Not Unpredictable." *BMJ* 322 (7298): 1320–1321. doi:10.1136/bmj.322.7298.1320.

Bond, J., E. Scheffels, and L. Monteagut. 2018. *Media Framing of Fatal Bicycle Crashes in Hillsborough County: A Critical Discourse Analysis*. National Center for Transit Research (NCTR) Report No. CUTR-NCTR-RR-2018-01. Tampa, FL: Center for Urban Transportation Research. Accessed 2 March 2021. doi:10.5038/CUTR-NCTR-RR-2018-01.

Bonham, J., M. Johnson, and N. Haworth. 2020. "On Constituting Cyclists as 'Hazards'." *Journal of Transport Geography* 84 (April): 102675. doi:10.1016/j.jtrangeo.2020.102675.

Boufous, S., A. Aboss, and V. Montgomery. 2016. "Reporting on Cyclist Crashes in Australian Newspapers." *Australian and New Zealand Journal of Public Health* 40 (5): 490–492. doi:10.1111/1753-6405.12537.

Brömmelstroet, M., te. 2020. "Framing Systemic Traffic Violence: Media Coverage of Dutch Traffic Crashes." *Transportation Research Interdisciplinary Perspectives* 5 (May): 100109–100109. doi:10.1016/j.trip.2020.100109.

Butler, J. 1997. *The Psychic Life of Power*. Stanford, CA: Stanford University Press.

Caimotto, M. C. 2020. *Discourses of Cycling, Road Users and Sustainability*. Cham: Springer International Publishing. doi:10.1007/978-3-030-44026-8.

Castro, A., S. Kahlmeier, and T. Gotschi. 2018. *Exposure-Adjusted Road Fatality Rates for Cycling and Walking in European Countries*. International Transport Forum Discussion Papers. Vol. 2018/05. Paris: OECD Publishing. Accessed 2 March 2021. doi:10.1787/fd022267-en.

Christie, N., S. Cairns, E. Towner, and H. Ward. 2007. 'How Exposure Information Can Enhance Our Understanding of Child Traffic "Death Leagues" | Injury Prevention'. Accessed 2 March 2021. https://injuryprevention.bmj.com/content/13/2/125.short.

Christmas, S. 2010. 'Cycling, Safety and Sharing the Road: Qualitative Research with Cyclists and Other Road Users'. Accessed 2 March 2021. London: Department for Transport. https://webarchive.nationalarchives.gov.uk/20121104023746/http://www.dft.gov.uk/publications/rsrr-theme1-report-17/.

Connor, S. M., and K. Wesolowski. 2004. "Newspaper Framing of Fatal Motor Vehicle Crashes in Four Midwestern Cities in the United States, 1999-2000." *Injury Prevention* 10 (3): 149–153. Accessed 2 March 2021. doi:10.1136/ip.2003.003376.

Davis, R. 1992. 'Death on the Streets: Cars and the Mythology of Road Safety'. Hawes: Leading Edge Press. Accessed 2 March 2021. https://rdrf.org.uk/death-on-the-streets-cars-and-the-mythology-of-road-safety/

Departmen for Transport. 2020. *Reported Road Casualties in Great Britain: 2019 Annual Report*. Accessed 22 February 2021. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/922717/reported-road-casualties-annual-report-2019.pdf.

English, P., and P. Salmon. 2016. "New Laws, Road Wars, Courtesy and Animosity: Cycling Safety in Queensland Newspapers." *Safety Science* 89: 256–262. Accessed 2 March 2021. doi:10.1016/j.ssci.2016.06.023.

European Commission - European Commission. 2020. '2019 Road Safety Statistics: What Is behind the Figures?'. Accessed 2 March 2021. https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_1004

Evening Standard Comment. 2019. 'Evening Standard Comment: Vote for Boris — Corbyn Is Unfit to Lead Britain'. *Evening Standard*, 11 December 2019. Accessed 2 March 2021. 11 December 2019. 2019: https://www.standard.co.uk/comment/comment/evening-standard-comment-vote-for-boris-corbyn-is-unfit-to-lead-britain-a4310671.html.

Fairclough, N., and R. Wodak. 1997. "Critical Discourse Analysis." In *Discourse as Social Interaction*, edited by T. A. van Dijk, 258–284. London: Sage.

Fairnie, G. A., D. J. R. Wilby, and L. E. Saunders. 2016. "Active Travel in London: The Role of Travel Survey Data in Describing Population Physical Activity." *Journal of Transport & Health* 3 (2): 161–172. doi:10.1016/j.jth.2016.02.003.

Ferster, C., K. Laberee, T. Nelson, C. Thigpen, M. Simeone, and M. Winters. 2021. "From Advocacy to Acceptance: Social Media Discussions of Protected Bike Lane Installations." *Urban Studies* 58 (5): 941–958. doi:10.1177/0042098020938252.

Fruhen, L. S., I. Rossen, and M. A. Griffin. 2019. "The Factors Shaping Car Drivers' Attitudes Towards Cyclist and Their Impact on Behaviour." *Accident Analysis & Prevention* 123: 235–242. November 2018. doi:10.1016/j.aap.2018.11.006.

Goddard, T., K. Ralph, C. G. Thigpen, and E. Iacobucci. 2019. "Does News Coverage of Traffic Crashes Affect Perceived Blame and Preferred Solutions? Evidence from an Experiment." *Transportation Research Interdisciplinary Perspectives* 3 (December): 100073–100073. doi:10.1016/j.trip.2019.100073.

Hart, P. S. 2010. "One or Many? The Influence of Episodic and Thematic Climate Change Frames on Policy Preferences and Individual Behavior Change." *Science Communication* 33 (1): 28–51. doi:10.1177/1075547010366400.

Iyengar, S. 1991. *Is Anyone Responsible? How Television Frames Political Issues*. Chicago: University of Chicago Press.

Iyengar, S. 1996. "Framing Responsibility for Political Issues." *The ANNALS of the American Academy of Political and Social Science* 546 (1): 59–70. doi:10.1177/0002716296546001006.

Koorey, G. 2007. 'Are You a Cyclist or Do You Cycle? The Language of Promoting Cycling'. New Zealand: New Zealand Cycling Conference 2007 1–2:1–10.

Lindelöw, D., T. Koglin, and Å. Svensson. 2016. "Pedestrian Planning and the Challenges of Instrumental Rationality in Transport Planning: Emerging Strategies in Three Swedish Municipalities." *Planning Theory & Practice* 17 (3): 405–420. doi:10.1080/14649357.2016.1199813.

Macmillan, A., A. Roberts, J. Woodcock, R. Aldred, and A. Goodman. 2016. "Trends in Local Newspaper Reporting of London Cyclist Fatalities 1992-2012: The Role of the Media in Shaping the Systems Dynamics of Cycling." *Accident Analysis & Prevention* 86 (January): 137–145. doi:10.1016/j.aap.2015.10.016.

Magusin, H. 2017. "If You Want to Get Away with Murder, Use Your Car." *Earth Common Journal* 7 (1): 65–97. doi:10.31542/j.ecj.1229.

Naumann, R. B., S. Stephen Heiny, K. R. Evenson, S. LaJeunesse, J. F. Cooper, S. W. Doggett, and S. W. Marshall. 2019. "Organizational Networks in Road Safety: Case Studies of U.S. Vision Zero Cities." *Traffic Injury Prevention* 20 (4): 378–385. doi:10.1080/15389588.2019.1587752.

Palominos, N., and D. A. Smith 2019. 'CASA Working Paper 212'. Bartlett Centre for Advanced Spatial Analysis. 19 September 2019. Accessed 2 March 2021. https://www.ucl.ac.uk/bartlett/casa/publications/2019/sep/casa-working-paper-212.

Piatkowski, D. P., W. Marshall, and A. Johnson. 2017. "Identifying Behavioral Norms among Bicyclists in Mixed-Traffic Conditions." *Transportation Research Part F: Traffic Psychology and Behaviour* 46 (December): 137–148. Accessed 2 March 2021. doi:10.1016/j.trf.2017.01.009.

Prati, G., V. M. Puchades, and L. Pietrantoni. 2017. "'Cyclists as a Minority Group?' Transportation Research Part F." *Transportation Research Part F: Traffic Psychology and Behaviour* 47: 34–41. doi:10.1016/j.trf.2017.04.008.

RAC Motoring Services. 2020. UK Roads Revealed to Be Second Safest in Europe | RAC Drive. Accessed 2 March 2021. 2020. https://www.rac.co.uk/drive/news/motoring-news/uk-roads-revealed-to-be-second-safest-in-europe/.

Ralph, K., E. Evan Iacobucci, Thigpen, T. Goddard, and C. G. Thigpen. 2019. "Editorial Patterns in Bicyclist and Pedestrian Crash Reporting." *Transportation Research Record: Journal of the Transportation Research Board* 2673 (2): 663–671. doi:10.1177/0361198119825637.

Rissel, C., C. Bonfiglioli, A. Emilsen, and B. J. Smith. 2010. "Representations of Cycling in Metropolitan Newspapers - Changes over Time and Differences between Sydney and Melbourne, Australia." *BMC Public Health* 10 (1): 371–371. doi:10.1186/1471-2458-10-371.

Scheffels, E., J. Bond, and L. E. Monteagut. 2019. "Framing the Bicyclist: A Qualitative Study of Media Discourse about Fatal Bicycle Crashes." *Transportation Research Record: Journal of the Transportation Research Board* 2673 (6): 628–637. doi:10.1177/0361198119839348.

Smith, K. C., D. C. Girasek, S. P. Baker, J. A. Manganello, S. M. Bowman, A. Samuels, and A. C. Gielen. 2012. "'It Was a Freak Accident': An Analysis of the Labelling of Injury Events in the US Press." *Injury Prevention* 18 (1): 38–43. doi:10.1136/ip.2011.031609.

Torres-Barragan, C. A., C. D. Cottrill, and M. Beecroft. 2020. "Spatial Inequalities and Media Representation of Cycling Safety in Bogotá, Colombia." *Transportation Research Interdisciplinary Perspectives* 7: 100208. doi:10.1016/j.trip.2020.100208.

Transport for London. 2020. *'Travel in London 13'*. London: TfL.

van Leeuwen, T. 2009. "Critical Discourse Analysis." In *Discourse, of course: an overview of research in discourse studies*, edited by J. Renkema, 277–292. Vol. 3. Amsterdam: John Benjamins Publishing Company. doi:10.1075/z.148.

van Dijk, T. A. 1985. "Introduction: Discourse Analysis in (Mass) Communication Research." In *Discourse and Communication*, edited by T. A. van Dijk, 1–10. Berlin: DE GRUYTER. doi:10.1515/9783110852141.1.

Appendix

Table A1. Typology of articles developed from pilot search.

Article type	Characteristics
1a – Single event initial news report – 'pure news'	- Short accounts of single events. - Usually published within 24–48 hours of the event. Fact-orientated – rarely include much overt editorialising – but facts may be incomplete. - Usually less than 500 words. - Follow a standard pattern.
1b – Single event short-term follow-up news report – 'pure news'	- Later stories that follow up on the event, typically within 24–72 hours though sometimes longer. - Contain more factual details of event. - Usually less than 500 words.
2 – Multi-event news report	- Combine one or more event occurring within 24–48 hours of each other. - Usually published within 24–48 hours of the event. - Fact-orientated – rarely include much overt editorialising – but facts may be incomplete. - Association of the different events implies commonality between them. - Usually less than 750 words. - Events may differ from each other in terms of casualty severity and modes involved.
3 – Later follow-up coverage	- Later stories that follow up on the event. - Published weeks, or months after the event. - Contain more factual details of those involved. - Often contain details of subsequent police/court/coroner/family actions or statements. - Variable length and formats, usually more than 750 words.
4 – Hybrid stories	- Mix elements of the other three types. - Often combine one or more specific and very recent incident with some broader contextfor example, a death and a serious injury on the same day as an anticipated Mayoral announcement on HGV safety. - Combine the 'pure news' reporting of the event with more overt editorialising. - Usually more than 750 words.

Table A2. Summary of articles analysed.

Bike_Ped	Car_Cyc	Car_Ped
Bike_Ped_001 (12/11/2018, 307 words) 'Dalston crash: Woman, 56, "first pedestrian to die in UK after being hit by electric bicycle" in east London'	**Car_Cyc_001** (29/09/2018, 190 words) 'Deptford crash: Cyclist dies after crash with car in south east London'	**Car_Ped_001** (22/08/2019, 327 words) 'Hyde Park Corner crash: Pedestrian, 66, dies after being hit by £250,000 Rolls-Royce yards from Buckingham Palace'
Bike_Ped_002 (14/09/2017, 355 words) 'Woman dies after being hit by cyclist on Oxford Street'	**Car_Cyc_002** (04/06/2018, 382 words) 'Driver hunted as cyclist dies after being dragged 200 m along road'	**Car_Ped_002** (26/04/2017, 198 words) 'Man killed in "BMW" hit-and-run in Aldgate'
Bike_Ped_003 (11/02/2017, 266 words) 'Police appeal over pedestrian killed in collision with cyclist in Shepherd's Bush'	**Car_Cyc_003a** (21/06/2015, 192 words) 'Cyclist, 60, dies after midnight crash in Harrow, north west London'	**Car_Ped_003** (19/12/2016, 324 words) 'High-speed "horror" crash at crossing'
Bike_Ped_004 (12/02/2016, 130 words) 'Old Street crash: Air ambulance rushed to scene after accident between cyclist and pedestrian'	**Car_Cyc_003b** (21/06/2015, 250 words) 'Family tributes to "hero and idol" after grandfather is knocked over and killed by car'	**Car_Ped_004** (14/10/2013, 463 words) 'Mother killed by car as she rushed home to see her daughter, 7, coming back from sleepover'
Bike_Ped_005 (09/03/2016, 466 words) '"Wonderful' woman killed after crash with a cyclist at Old Street'	**Car_Cyc_004** (29/08/2017, 445 words) 'Holloway crash: Cyclist killed in crash with van in Camden Road'	**Car_Ped_005a** (18/05/2015, 96 words) 'Brentford crash: Man in 30s dead after being hit by car'
	Car_Cyc_005 (25/11/2014, 288 words) 'Racing joyrider' kills teacher as he cycles home'	**Car_Ped_005b** (18/05/2015, 364 words) 'Pedestrian is killed crossing west London road 'plagued by boy racers"'