Article

If You Want to Get Away with Murder, Use Your Car: A Discursive Content Analysis of Pedestrian Traffic Fatalities in News Headlines

Heather Magusin*

Abstract

The persistently high rate of pedestrian and cyclist traffic fatalities in Canada is a major public health concern and impediment to encouraging active transport. Despite empirical evidence that cyclists and pedestrians are rarely at fault, popular discourse continues to put the onus on vulnerable road users, often blaming them for their deaths. To examine how public discourse reflects and affects the perception of blame in vulnerable road user deaths, this paper uses content analysis and critical discourse analysis to examine news headlines of pedestrian fatalities in Edmonton in 2016. Results indicate that news media discourse of pedestrian traffic fatalities exists within three frames: factual reports of the incident; criminal reports of the charge resulting from the incident; or humanized narratives emphasizing the tragedy of the incident. Factual reports were the overwhelmingly dominant discourse, wherein pedestrian deaths were reported as isolated incidents with no

human, social or systemic repercussions. In this dominant discourse, the driver was linguistically and rhetorically distanced from blame. Contextual factors, like victim characteristics and newsworthiness, were also found to have a significant effect on the linguistic portrayal of pedestrian traffic fatalities. Implications and avenues for future research are discussed.

Keywords: Victim-blaming, active transportation, critical discourse analysis, content analysis, traffic fatalities, traffic safety, communications, public health and safety, pedestrian, vulnerable road users.

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Traffic collisions are among the top ten leading causes of death worldwide and have been declared a "major but neglected global public health problem" (WHO, 2004, p. 3) with "staggering social and economic cost[s]" (Transport Canada, 2011, p. 36). Among all traffic fatalities, the deaths of pedestrians and cyclists (also known as vulnerable road users or VRUs) are particularly problematic; despite policy interventions and advocacy efforts, pedestrians and cyclists in Canada continue to be killed at the same rate as, and oftentimes higher than, decades prior (Canadian Motor Vehicle Traffic Collision Statistics, 2004-2015).

Despite the fact that the most effective solutions to VRU deaths are infrastructural changes that reduce vehicle speed (WHO, 2004, p. 11; Tingvall & Haworth, 1999, para. 13; Goodyear, 2014, para. 21) both policies and popular discourse in Canada continue to put the onus on VRUs for their own safety (see Transport Canada, 2011, p. 26). In parallel, discursive studies have found the same victim-blaming tendencies in news media and user-generated content of cyclist and pedestrian safety issues (see Rissel, Bonfiglioli, Emilsen, & Smith 2010; English& Salmon, 2016; Tapp, Rundle-Thiele, Anibaldi, Warren, & Beardmore, 2014). By conducting a content and critical discourse analysis of news headlines concerning pedestrian fatalities in Edmonton, this paper seeks to discover how the concept of blame is reflected within and reinforced by public discourse, and how this perception may influence the success of initiatives intended to reduce VRU deaths.

Literature Review

The Physical and Rhetorical Dominance of Cars

Though pedestrians and cyclists are widely acknowledged to be vulnerable road users because of their increased susceptibility to serious injuries and death (WHO, 2004,

p.41), the majority of North American cities continue to be designed to prioritize traffic flow over the safety of road users (Goodyear, 2014, para. 5). Why cars have come to dominate the ideologies of mobility at the cost of public health is largely a history of slow, but unconscious, social dominance (Urry, 1999). Sociologist John Urry argues that the effect of cars on society is as profound as that of television and the computer, forming a barely noticed but dominant culture he terms "automobility" (Urry, 1999, pp. 2-3). Automobility affects all aspects of daily life, including notions of social status, the economic and environmental dominance of oil and gas, the physical shape of cities and how people move—so much so that these effects go largely unnoticed (pp. 2-10).

The current dominance of vehicles and marginal status of pedestrians is also directly linked to a history of shifting language and discourse; a particularly salient case study is the term "jaywalking," invented in the early twentieth century to counter public outcry against traffic deaths (Norton, 2007). Conceptualized and popularized by motorists through print campaigns and popular discourse, this new term shifted the blame for fatalities from cars and drivers and onto pedestrians, insinuating that pedestrians were trespassers on the streets; as Norton notes, "before the city street could be physically reconstructed to accommodate motor vehicles, it had first to be socially reconstructed as a modern thoroughfare" (Norton, p. 333). In Canada, jaywalking bylaws exist in varying degrees across the country and prohibit pedestrians from crossing outside of a marked crosswalk, with fines for those who do. Because of the power differential between vehicles and pedestrians and the normalization of car-centric ideologies, critical discourse analysis is an ideal method to expose the conceptions and misconceptions underlying the discourse around pedestrians killed by drivers.

Agenda-setting, Newsworthiness, Framing, and Victim-blaming

It is widely accepted in the field of communications that the media have a profound influence on public opinion and policies by determining which issues are important and framing how these issues are viewed.

Agenda-setting and gatekeeping theories pertain to which issues the media selects (or ignores), and how this choice sets public and political agendas. According to gatekeeping theory, the media curates which events to report on based on a number of internal factors, including the publication's readership, time constraints, the editor's news values, and factors of the story itself (Serban, 2015, pp. 16-22). Event characteristics also make a story more or less likely to be reported on; these include timeliness, prominence, significance, proximity, human interest, novelty, conflict, extremes, and impact (Walker, 2015, p. 327). The newsworthiness of stories influence

both the amount of coverage given to the incident and the importance of the issue in the eyes of readers; according to McComb's 2011 examination of agenda-setting literature, "[t]he vast majority of comparisons between how issues are ranked on the media agenda and how the public ranks the importance of these same issues yield correlations of +.50 or better" (p. 3). This also holds true for news coverage of traffic incidents; as Connor and Wesolowski (2004) found in their study of newspaper framing of fatal motor vehicle crashes, "editorial decisions about 'newsworthiness' often are based on a story's novelty and dramatic value. A barrage of press coverage can make a miniscule health threat … feel more immediate and more serious to readers and viewers than the health hazards they are far more likely to encounter" (p. 149). The salience of VRU deaths as a public health concern will thus likely be related to its prevalence and emphasis in the news.

Media coverage influences not only what the public think about, but *how* they think about these issues. Framing theory, developed by Goffman (1974), proposes that the media's use of a certain frame—or way of portraying an issue—influences how the public perceives that issue. The influence of frames is so strong that altering the frame can sway beliefs and attitudes for even highly contentious issues; in climate change communication, for example, certain moral frames were found to increase positive environmental attitudes among typical climate change opponents (Wolsko, Ariceaga, & Seiden, 2016, p. 7), while interchanging the terms "climate change" and "global warming" resulted in different levels of engagement and affect, despite referring to the same phenomenon (Schuldt, Roh, & Schwarz, 2015, p. 67). Due to the pressures of newsworthiness, the news media also have a tendency to use frames that increase the drama of an incident but downplay its systemic significance (Iyengar, 1990, pp. 21-22). Connor & Wesolowsky (2004) note that this puts media and public health issues at odds, "since the former focuses on emphasizing the distinctiveness of the event covered and the latter aims to detect trends and similarities and identify risk factors" (p.149).

Combined, this theoretical background suggests that the way VRUs are portrayed in media has a significant influence on public opinion, behaviour, and policies around traffic safety, and therefore has an effect on the success of reducing VRU deaths and encouraging active transportation.

Headlines in Content Analysis and Critical Discourse Analysis

A major challenge to applying critical discourse analysis to the news media is the constraint of undertaking a detailed analysis of a large enough sample to produce valid conclusions. Analysing headlines provides a solution to this methodological issue and also

offers insights distinct from those found in the text of news articles, as Develotte and Rechniewski (2001) discuss in their research note on the discourse analysis of newspaper headlines. The authors note that headlines are particularly rich textual fragments to analyse because of three essential characteristics. First, readers are far more likely to read the headline than the body of the text, a phenomenon that is particularly high for online articles (Gabielkov, Ramachandran, Chaintreau, & Legout, 2016; The Media Insight Project, 2014, "Social media CPF and the effect of selection bias"). Headlines also have a stronger impact because of the visual and linguistic features designed to make them noticeable and memorable, such as a larger font, play on words, alliteration, and suppression of low-information words (Develotte and Rechniewski, 2001, "Typical linguistic features of newspaper headlines"). Second, headlines orient and prime the reader to the facts presented within the article; oftentimes, the framing of facts presented in the headline overrides the content within the body of the article, even if the headline is misleading or contradicts the facts within (Ecker, Lewandowsky, Chang, & Pillai, p. 323). The ramifications of misinformation or misleading frames in headlines is powerful; in a study of the prevalence of rape myths in news headlines, researchers found that male participants exposed to myth-endorsing headlines were less likely to find the perpetrator guilty and were more likely to hold "rape-supportive attitudes" (Franiuk, Seefelt, Vandello, 2008, p. 790). Finally, headlines rely on and evoke a shared cultural context because they are dependent on the reader recognising allusions, references, shorthand, and other cultural references (Develotte & Rechniewski, 2001). As headlines "rely on a stock of cultural knowledge, representations, and models of reality that must be assumed to be widespread in the society,"(para. 11) they may reflect and reinforce the dominant discourse and its covert ideologies more than the body text. In the case of victim-blaming VRUs, persistent exposure to headlines impregnated with victim-blaming rhetoric could easily influence how individuals conceptualize cases where drivers kill pedestrians.

Operationalizing Victim-blaming

In addition to the term jaywalking, there are also various other syntactical, grammatical, and lexical choices that affect perception of blame and responsibility in the context of VRU traffic fatalities.

First, the words used to identify the offender and victim, as well as the use of active or passive voice, conveys subtle messages about blame and responsibility. Studies of victim-blaming language in sexual assault and femicide cases note a correlation between sentencing and the agency assigned to the offender through linguistic choices; specifically, accounts written in the passive voice or using agentless constructions attribute less

responsibility to the offender and result in less severe sentencing, as does obscuring the violence of acts and blaming the victim (Coates & Wade, 2004, p. 499). For example, a recent study by Niemi and Young (2016) presented an account of a rape case to participants and manipulated whether the victim or the perpetrator was the subject of the sentences. When the perpetrator was the subject, participants attributed significantly less blame to the victim, while participants ascribed more responsibility and blame to the victim when the victim was the subject (Niemi & Young, 2016, p. 1235). Traffic safety advocates have noted that reports of traffic incidents often mirror these distancing techniques by downplaying the driver's agency and obscuring the violence of the act (Unland, Cummings, Dubois & Male, 2016, para. 16; Greenfield, 2016). News articles of traffic fatalities regularly employ the passive voice to describe the incident (i.e., "A pedestrian was hit by a car") and identify the offender as a vehicle, rather than the driver of a vehicle (Unland, Cummings, Dubois & Male, 2016, para. 16). Though the majority of traffic collisions are not deliberate acts of violence, removing the agency from drivers implies, much like the term 'accident', that collisions are simply natural, inevitable occurrences with no one at fault (Spurr, 2016). This downplays the violence and tragedy of traffic fatalities and reduces the public impetus for policies that increase traffic safety (Spurr, 2016). The terms chosen to refer to the victim also carry implications about blame and responsibility. Identifying the victim as a pedestrian or cyclist, rather than a person, has the potential to dehumanize victims, particularly in cases where negative sentiment is already prevalent towards the affected group (English & Salmon, 2016, p. 260). In contrast, characterizing the victim outside of the incident through humanizing narratives and the testimonies of family or friends has the potential to remove out-group bias and create empathy by allowing the reader to associate more closely with the victim (Oliver, Dillard, Bae, & Tamul, 2012, p. 205).

Second, the terms used to refer to the incident itself also carry rhetorical weight. Traffic safety advocates throughout North America have campaigned for abandoning the word "accident" to describe traffic collisions, and instead replacing it with the term "crash" (Anikeef, 1997; Spurr, 2016). These advocates note that the word accident "promotes the concept that these events are outside of human influence or control," (Anikeeff, 1997, para. 2) despite the fact that traffic injuries are preventable (WHO, 2004, p. 7). This has serious implications for victim-blaming, where the use of the word "accident" can both excuse irresponsible road behaviour and discriminate against victims, particularly VRUs. In 2016, in response to the Crashes not Accidents campaign, the Associated Press changed its guidelines to advise journalists that "[w]hen negligence is claimed or proven, avoid accident, which can be read as exonerating the person responsible" and to "[i]nstead, use crash, collision or other terms" (Associated Press,

2016). However, this issue is confounded when the incident occurs between a pedestrian and a vehicle, as the terms crash and collision carry connotations that infer equal reciprocity; that is, that the pedestrian and the vehicle and driver are equally responsible and equally vulnerable (Carruthers, 2017). This is a linguistic misrepresentation of the incident, as pedestrians are disproportionately vulnerable (WHO, 2004, p. 41), while drivers are much more dangerous and also extremely unlikely to be injured by hitting a pedestrian (WHO, 2004, p. 121).

The victim-blaming language explored above may seem benign in isolation, but results in serious consequences for public health and safety. Studies of the portrayal of VRUs in news media have acknowledged that media-enforced misperceptions "may represent a barrier to convincing drivers of the need to heed road safety messages or to support more extensive road safety countermeasures" (Fleiter & Watson, 2012, p. 382) and distort policy issues for policymakers (WHO, 2004, p. 8). Researchers have also drawn a link between the media and road user behaviour, both for VRU traffic deaths (Rissel, Bonfigioli, Emilsen, & Smith, 2010, pp. 6-7) and for traffic safety norms like drinking and driving (Perkins, Lickenbach, Lewis & Neighbors, 2010, p. 870). These tangible repercussions—on public perception, behavioural changes, and effective policy—all support the importance of understanding how news media discourse affects the safety of VRUs.

Shifts in VRU Perceptions and Policies

In recent years, Canadian cities have begun to shift the rhetoric around VRU traffic fatalities. Edmonton, the capital of the province of Alberta, was one of the first Canadian cities to develop an active transportation strategy in 2009 and the first Canadian city to adopt Vision Zero in 2015 (Ten Year Active Transportation Strategy, 2009; Office of Traffic Safety, 2015). This marks a noteworthy paradigm shift, particularly because Alberta is the most car-dominant province in Canada (Statistics Canada, 2017), while Edmonton has been deemed one of Canada's least bike-friendly cities (Johnson, 2015, para. 3). This recent paradigm shift is one of the major reasons Edmonton was chosen as the location of study; while cyclists and pedestrians are still a marginal group, the clash between Edmonton's traditional car dominance and its recent commitment to active transportation—though contentious and criticized for victim-blaming policies (Tumilty, 2016)—makes for intriguing grounds for discursive research, and allows for future comparison to examine trends over time.

Method

This paper uses a combination of content analysis and critical discourse analysis (CDA) in order to, first, reveal the textual characteristics of the sample and, second, analyse the social reality and covert ideologies underpinning these textual features, as well as their implications. While content analysis is the empirical study of the text itself (Hardy, Harley, & Phillips, 2004, p. 20), CDA is a means of understanding how these textual elements shape our social reality and reinforce structures of power and oppression (Ruiz, 2009, "Discourse" para. 9). Its primary goal is to "unmask ideologies, to denaturalize common-sense assumptions and, ultimately, to enable and empower readers" (Weber, 1996, as cited in Maestre, 2013, p. 303) by raising awareness of how language and communication shape our conceptualization of important social issues. This study uses Fairclough's three-dimensional model of critical discourse analysis, in which the text is conceptually split into three interdependent units of analysis: the textual sample itself; the production and interpretation of text; and the ideologies and historical context surrounding the society in which the text is produced and consumed (Fairclough, 2010, p. 94). In this way, the tenets of CDA inform and deepen the quantitative results revealed through the content analysis by situating them within their discursive context.

Sample

This sample comprises news headlines of pedestrian and cyclist traffic deaths in Edmonton in 2016 that are available in digital format from major news outlets. First, the number of pedestrian fatalities was determined using the City of Edmonton's annual Motor Vehicle Collisions report (Luo, 2017), and the characteristics of each incident were verified through the Edmonton Police Services media release database and the preliminary sampling test. As the names of the victims were not released for each case, a wide range of terms was used in search engines and the outlets' databases to identify articles for each victim. Only news articles that reported on the incident of a pedestrian traffic fatality were included; editorials and articles referencing but not directly reporting on the traffic fatality were excluded.

Coding and Analytical Framework

A preliminary coding frame was developed based on the literature review and a preliminary overview of the sample text, and was modified, refined, and validated as the text was coded. Following the data collection, the results within each code were quantified, subcategorized, and cross-analyzed to reveal patterns and relationships. The codes chosen include the noun used to identify the victim and the driver; verbs and verb phrases and

their grammatical agents; passive or active construction; mentions of location; victim descriptors; the nouns used to refer to the incident; the direct blame conferred by the headline; and the frame of the headline.

After the above elements were coded and counted, a second and third layer of analysis were conducted on the codes within their media and ideological context, according to Fairclough's (2010) three-dimensional model of CDA (p. 132). As the first layer of analysis was couched within the content analysis phase, the second layer of analysis involved conceptualizing the results of the content analysis according to the particularities of the news article and news media in general, including newsworthiness and the characteristics of the victim. Finally, the third tier of critical discourse analysis involved abductive inferences based on the researcher's own understanding of the societal context within which the news headlines were written, as informed by lived experience within the location of study, the body text of the sample articles, and additional research on the social and physical features of mobility and traffic safety in Edmonton. The validity of the findings was maintained through cross-references with prior research on similar topics.

Results - Findings

The tables below present the findings of each code category: victim and driver identifiers, victim descriptors, incident noun, an analysis of verbs and agents, and finally, the frame of the headline.

As seen in Table 1 below, the number of headlines per victim varied considerably between 5 and 12. The mode of number of headlines per victim was six while the average was seven; however, the number of headlines increased significantly for victims 6 (n=9), 8 (n=10), and 10 (n=12).

TABLE 1
Number Of Headlines Written per Victim in Sampled News Outlets

Victims	1	2	3	4	5	6	7	8	9	10	Totals
Edmonton Journal	1	1	1	1	3	1	1	3	1	1	14
Edmonton Sun	1	1	0	0	1	1	1	2	0	2	9
CTV Edmonton	1	1	1	1	0	2	1	2	2	2	13

Global Edmonton	1	1	1	1	0	2	1	1	2	3	13
Metro Edmonton	0	0	1	1	0	2	1	1	1	2	9
CBC News	1	1	1	1	1	1	1	1	2	2	12
National Post	0	0	0	0	1	0	0	0	0	0	1
Totals	5	5	5	5	6	9	6	10	8	12	71

The characteristics of the incident and of the victim were also recorded (Table 2); though they did not factor into the content analysis, they were used throughout the critical discourse analysis when interpreting the results. The age and sex of the victim, whether or not they were named, and criminal charge of the incident were noted, as these factors are expected to influence the media portrayal of each incident.

TABLE 2
Select Victim Characteristics and Contextual Factors of Incident

	Age	Sex	Name given	Charges laid on driver	Legal context
Victim 1	49	F	No	None.	Killed by driver of cement truck. Crossing legally.
Victim 2	81	F	No	Failure to yield to pedestrian.	Crossing legally.
Victim 3	69	M	No	Failure to yield to pedestrian in cross walk and failure to obey a stop sign entering an intersection.	Crossing legally. Died a week after incident.
Victim 4	67	M	No	None.	Crossing highway. Killed by driver of ambulance.
Victim 5	73	M	Yes	Dangerous driving causing death, impaired operation of a motor vehicle, exceeding legal alcohol levels, and criminal hit and run causing death.	Hit and run. Crossing legally.
Victim 6	50	F	No	Driving carelessly.	Crossing legally. Unusual circumstances.
Victim 7	19	M	No	Failure to yield to a pedestrian.	Crossing legally.
Victim 8	83	W	Yes	Failure to yield to a pedestrian in a marked crosswalk.	Killed by city transit driver. Crossing legally.

| Victim 9 | 20s | M | No | None. | Not in marked crosswalk. |
| Victim 10 | 13 | W | Yes | Failure to yield to a pedestrian in a marked crosswalk. | Killed by city transit driver soon after victim 8. Crossing legally. |

Out of a total of 71 headlines, pedestrian (n=36) was the most common term used to describe the victim of the incident; next was person (n=30), which includes the nouns woman, man, girl, teen or teenager, senior, or person (Table 3). In a further two headlines, the victim was referred to as "one dead", while in three headlines there was no mention of the victim.

TABLE 3

Term Used to Identify the Victim ("Victim Identifier")

	Frequency	Total potential codes	Makeup of total potential (%)	Makeup of total sample (%)
Pedestrian	36	71	50.7	50.7
Woman	11	29	37.9	15.5
Man	6	30	20.0	8.5
Girl	6	10	60.0	8.4
Teen	5	16	31.3	7.0
None	3	71	4.2	4.2
One dead	2	71	2.8	2.8
Person	1	71	1.4	1.4
Senior	1	30	0.3	0.1

As seen in Table 4 below, the most prevalent driver identifier was the term "vehicle" (n=33), used as a metonymy to refer to both the car and the driver. The next most frequent code was an absence of a driver identifier (n=24); that is, either the driver was not mentioned or the noun was suppressed through passive construction. In 10 out of 73

cases, the driver was referred to as a driver, and in a further two headlines as a drunk driver. Finally, in two headlines the driver was referred to as a person, and in one case as "one arrested."

TABLE 4

Term Used to Identify the Driver ("Driver Identifier")

	Frequency	Total potential codes	Makeup of total potential (%)	Makeup of total sample (%)
Vehicle	33	73	45.2	45.2
None	24	73	32.9	32.9
Driver	10	73	13.7	13.7
Drunk driver	2	6[a]	33.3	2.7
Person[b]	2	73	2.7	2.7
One arrested	1	n/a	n/a	1.4

[a]Six headlines referred to incidents where the driver was charged with drunk driving.

[b]"Person" in this instance referred only to the noun "man"

In the majority (n=42) of cases, the victim is not described in any way using adjectives or adverbial phrases to give individuality to the victim (Table 5). This may be because seven out of ten victims (44 headlines from the sample) were not publicly identified (see Table 2). Eighteen headlines referred to the age of the victim, either by number of adjective; pronouns referring to age were not included in the count.

TABLE 5

Adjectives and Adjectival Phrases Used to Describe the Victim ("Victim Descriptors")

	Frequency	Total possible	Makeup of total (%)
None	42	73	57.5
Age	18	73	24.7

Humanizing	8	73	11.0
Other	5	73	6.8

In Table 6, below, a minority of headlines (n=21) referred to the incident using the nouns crash, collision, or hit and run. In the majority of cases (n=50), headlines did not make use of a noun like crash, collision, or accident to refer to the incident.

TABLE 6

Noun Used to Refer to the Incident ("Incident Noun")

	Frequency	Total possible	Makeup of total potential (%)	Makeup of total sample (%)
Collision	6	71	8.5	8.5
Vehicle-pedestrian collision	3	71	4.2	4.2
Pedestrian collision	3	71	4.2	4.2
Crash	6	71	8.5	8.5
Hit and run	3	6	50.0	4.2
None	50	71	70.4	70.4

Table 7, below, presents the qualitative data used for the verb analysis; this data comprises grammatical agents, verbs, and subjects or direct objects, and notes the active or passive voice of the verb phrases. In the 71 headlines, there were 114 verbs or verb phrases, excluding verbs within quotes and including six headlines where verbs were absent (each counted as one verb). In total, there were nine agents for the 114 verbs: none (n=45), vehicle (n=27), pedestrian/person (n=20), driver (n=7), friends/family (n=7), police (n=6), collision (n=2), charges (n=2), and alcohol (n=1). The most prevalent verb overall was "killed" (n=23), including the verb phrase "struck and killed." It was paired most often with the agent "vehicle" (n=15) and with no agent (n=14), and less frequently with the agent "driver" (n=2). In all but two cases, the verb phrase was written in the passive voice. The second most common verb was the verb "dies" (n=20), which was used

uniquely with the agents "pedestrian" and "person." The verbs "hit" or "struck" appeared 19 times (excluding instances when the verb was paired with "… and killed"); all except one (n=1) were written in the passive voice. Finally, the verb "charge" appeared 11 times; all other verbs had a frequency of 4 or less. In all, 42 verbs were constructed in the active voice, making up a minority (36.8%) of the sample.

TABLE 7

Analysis of Verbs Phrases to Identify Agency of Actions Portrayed ("Verb Analysis")

Agent	Verb	Frequency	Subject / direct object	Frequency	Active / passive
None (n=45)	None	6	-	-	-
	Killed	12	Person	8	P
			Pedestrian	4	P
	Struck and killed	2	Pedestrian	2	P
	Charged	9	Driver	7	P
			Person	2	P
	Struck	6	Pedestrian	5	P
			Person	1	P
	Described	1	Pedestrian	1	P
	Handed	2	Drunk driver	2	P
	Identified	1	Pedestrian	1	P
	Injured	1	Pedestrian	1	P
	Laid	2	Charges	2	P
	Remembered	2	Pedestrian	2	P
	Run over	1	Pedestrian	1	P
Driver (n=4)	Hits	1	Person	1	A
	Killed	2	Person	2	A
	Sped	1	-	-	A
Vehicle (n=27)	Hit / struck	12	Person	7	P

			Pedestrian	5	P
	Hit and killed / struck and killed	7	Person	5	P
			Pedestrian	2	P
	Killed	8	Pedestrian	4	P
			Person	4	P
Police (n=6)	Say	3	[Various]	-	A
	Investigating	1	Traffic fatality	1	A
	Charge	2	Driver	2	A
Pedestrian / person (n=20)	Dies	20	-	-	A
Friends / family (n=7)	Remembers	1	Person	1	A
	Mourn/s/ing	4	Person	-	A
	Wants	1	Answers	1	A
	Shares	1	Grief	1	A
Collision (n=2)	Leaves	1	Woman dead	1	A
	Involves	1	Woman (victim)	1	A
Alcohol (n=1)	Involved	1	-	-	A
Charges (n=2)	Pending	2	-	-	A
Totals	-	114	-	-	A = 42/114

Seen in Table 8 below, the most common frame in the 71 headlines was the factual frame (n=39), which is characterized by a focus on the incident or the victim's death using factual language. The criminal frame, which focuses on the act of the driver being charged, was used in 20 headlines. Finally, the human frame, which humanizes the victim by emphasizing the tragedy of the incident, was used in 10 headlines, while the factual frame with humanizing elements was used in 2 headlines.

TABLE 8

Frame of Headlines

	Frequency	Total possible	Makeup of total (%)	Victims
Factual	39	71	54.9	1, 2, 3, 4, 6, 7, 8, 9, and 10
Criminal	20	71	28.2	3, 5, 6, 7, 8, and 10
Human	10	71	14.1	8 and 10
Factual humanized	2	71	2.8	5

Discussion

Distribution of Headlines by Victim and News Outlet

The number of headlines per victim varied between 5 and 12, with the highest number of headlines occurring for victim 6 (n=9), victim 8 (n=10), and victim 10 (n=12). The variation in number of headlines per victim is more than likely due to the characteristics of the incident and the newsworthiness of the story, as the incidents that had higher than average coverage displayed several newsworthy characteristics, explored below.

The higher coverage for victim six is partially because the incident resulted in two waves of coverage: first, reports of the incident and, second, reports of the driver's criminal charge later on. However, as the victim was killed during a drunken hit and run, its heightened coverage is also likely also due to the social sanctions surrounding drunk driving (Perkins, Linkenbach, Lewis, & Neighbours, 2010, p. 866) that increase the newsworthiness of the story due to pathos or shock value. The incident also conforms to the dominant narrative or mental schemas of a "typical" crime, where there is a clear criminal with apparent moral defaults and a clear victim. Incidents that conform to this narrative, particularly in cases of sexual assault, have been shown to garner an increased perception of blame and responsibility for the accused (Franiuk, Seefelt, & Vandello, 2008, p. 798), as in this case, where the discourse of all headlines was associated with direct blame (see the remainder of the discussion section for further analysis).

Victims 8 and 10 are both examples of Christie's concept of the "ideal victim"; unusually old and young respectively, these victims were likely seen as more vulnerable and innocent due to their age and female sex (Christie, 1986). These characteristics also play into the newsworthiness of the articles by increasing their pathos, and thus their ability to attract a readership (Walker, 2015, pp. 327-28). Because the victims' names were released publicly, reporters were able to gather more details and frame the incident as a human interest story. Victims 8 and 10 were both killed by city transit bus drivers within two months of one another, allowing them to be framed within a larger social issue, as well as drawing on the newsworthy characteristics of novelty (Walker, 2015, pp. 327-28). Though not included in the sample, the number of opinion pieces and media commentary surrounding victims 8 and 10 was much higher than the other victims. This spike of coverage prompted a significant, if momentary, shift in public discourse around pedestrian traffic fatalities, where the public began calling for action to prevent these fatalities (see, for example, Simes, 2016; Lakhani, 2016; Stolte, 2016; "Transit union blames bus design flaw for pedestrian deaths," 2016; "Bus drivers' union raises red flag on blind spots after pedestrian death," 2016).

These variations in the number of headlines per victim suggest that the coverage of pedestrian traffic fatalities is affected, like other news stories, by the purported newsworthiness of the incident. The newsworthiness of the incident was affected in this sample by several factors: the criminal nature of the incident, the victim's characteristics and particularly their status as ideal victims, whether or not the victim was named, and similarities between incidents that suggested larger systemic issues. The sudden and dramatic shift in popular discourse following the deaths of victims 8 and 10 also affirms the power of frames to alter the response to an incident and its importance on the public agenda. In particular, the human frame seems to be useful for rallying public attention and calls for action against pedestrian traffic fatalities.

Victim Identifier

Out of a total of 71 headlines, there were 73 instances where the driver was identified; instances of an absence of identification were also coded and included in the count. The most common noun to identify the driver was vehicle (n=33), which includes the terms car, truck, ambulance, and bus. This prevalence can be justified for its descriptive purposes, as the mention of a vehicle hitting or killing a person immediately evokes the nature of the incident, i.e., that of a traffic incident. However, referring to the driver as a vehicle rather than a person misrepresents the incident as it removes the driver from the act. This distances the driver from blame and responsibility (Unland, Cummings, Dubois,

& Male, 2016, para. 16), but more importantly, it implies that the incident was an accident, like the malfunctioning of a machine, rather than the result of avoidable factors like speed, inattention, skill, and other human errors (WHO, 2004, p. 7). This implication perpetuates the dominant discourse that traffic incidents are inevitable accidents and that drivers have no responsibility for the deaths of individuals killed in these incidents (Spurr, 2016).

In 24 cases the driver was not mentioned, despite the fact that in all of these cases the focus of the headline was the act of the victim being hit or killed, or the driver being charged. The absence of the driver omits essential information and misrepresents the incident by removing the agent of the act (Coates & Wade, 2004, p. 499). In some cases, the driver is implied through the use of adjectives (e.g., "Man dead in ambulance, pedestrian collision at Gateway Park"), though in others the absence of the driver places implicit blame on the victim. For example "Fatal Edmonton truck-pedestrian collision involves 81-year-old woman, say police" wrongly places the victim, the 81-year-old woman, in the syntactic position that implies she was the offender rather than the person who was killed.

In 10 cases, the driver was referred to as a driver. This confers more direct responsibility on the driver and is more truthful to the nature of the act, as the driver is ultimately wielding the vehicle. Interestingly, the driver identifier occurred almost uniquely when the driver was charged (n=10), further reinforcing the theory that identifying the driver as a "driver" rather than a vehicle (or failing to mention them altogether) is associated with a higher degree of blame. Conversely, the driver identifier was never directly associated with active verbs of killing or violence, suggesting that, regardless of culpability, there is resistance to associating drivers with the violence of traffic incidents. The lone exception is a Metro Edmonton article, where the driver identifier is used in conjunction with the active verb "hit". In this case, the use of the driver identifier and active voice were deliberate stylistic choices made by the publication; as the publication's editor is quoted as saying, "A knife doesn't stab someone; a person with a knife stabs someone. Same with traffic fatalities." (Querengesser, 2016, as cited in Unland, Cummings, Dubois, & Male, 2016, para. 16). The Metro headline is one out of only three headlines in the sample of 71 to use the active voice to describe the act or hitting or killing the victim, strongly deviating from the discursive norm.

In a further two cases, the driver is identified as a drunk driver, out of a total of six headlines involving a drunk driver; all of these headlines referred to victim five. In these two cases, the driver identifier is directly linked through active voice to the verb "killed", e.g., "Drunk driver who killed man, 73, handed five-year sentence." This active

construction with the verb "killed" and the use of the term "driver" confers direct blame on the driver, both through the headline's syntax and through an appeal to social norms that condemn drunk driving (Perkins, Lickenbach, Lewis & Neighbors, 2010, p. 866). The unusual intensity of direct blame in these two headlines is likely due to the negative social sanctions around drunk driving and hit-and-runs, as well as the criminal charge (and thus direct legal blame) that resulted from the incident.

In one case, the driver is referred to as "one arrested," also in reference to victim five. The term is dehumanizing to the driver and is once again likely due to the social condemnation of drunk driving and its criminal status.

In two cases, the driver is referred to as a person, placing more direct blame on the driver. All cases refer to victim 6, and in all the verbatim identifier was "man," and was associated with the verb "charged" and a criminal frame. This could potentially be a reflection of the peculiar violence of the incident, which resulted in the charge of a traffic violation (driving carelessly) and thus placed legal blame on the driver that is reflected in the headline's syntax and word choice.

Victim Descriptors

In the majority (n=42) of cases, the victim is not described in any way using adjectives or adverbial phrases to give individuality to the victim. This may be because seven out of ten victims, who make up 44 headlines from the sample, were not publicly identified. When victims are not given individuality or identity, readers are unlikely to experience sympathy or empathy, and thus feel compelled to care about these deaths (Eguiagaray, Scholz, & Giorgi, 2016, p. 51). Whether the choice not to include the name of the victim was the decision of the victim's family or the reporter is not clear; regardless, the lack of descriptors conforms to the dominant discourse of reporting pedestrian traffic deaths factually, and both reflects and reinforces the reality that victims of traffic fatalities remain outside of the public agenda (WHO, 2004, p. 3).

Eighteen headlines referred to the age of the victim. The age of the victim was mentioned only when the victim was 69 years or older or unusually young, with the exception of two headlines. The attention given to the age of particularly young and particularly old victims is likely a reflection of the perceived vulnerability of these groups and reinforces the concept of the ideal victim (Christie, 1986).

In eight headlines, the victim was given emotive and humanizing descriptors in the form of adjectival phrases like "beautiful young girl", "always happy", and "full of life".

These descriptors were associated only with victims 8 and 10, both female victims of bus drivers, victim 5 (described as "very gentle man" and "frequent volunteer at Sikh temple"), who was killed by the drunk driver. The nature of these incidents and characteristics of the victims were conducive to increased sympathy towards the victim, as all victims conformed to Christie's concept of the "ideal victim" by virtue of their age or sex, and in the case of victim five, because of the criminal charge laid on the driver (Christie, 1986). Additionally, because these three victim's names were publicly released, reporters were able to include details of their lives or their personality that were not possible for the remaining unnamed victims.

In the remaining four cases, the victim was given the neutral descriptive adjectives "Edmonton" (n=3) (e.g. "Edmonton man") or "injured" (n=1).

Crash/ Collision

A minority of headlines (n=21) referred to the incident using the nouns crash, collision, or hit and run. Although traffic safety advocates favour the term "crash" or "collision" (Anikeeff, 1997), in the case of vulnerable road users, the nouns crash and collision remain inaccurate. The noun "crash" is defined by *Oxford Dictionaries* (n.d.) as "a violent collision, typically of one vehicle with another or with an obstacle". By this definition, the term crash implies two vehicles or hard objects of equal force colliding and breaking, and not a vulnerable human body being struck by a force much larger and faster than itself. Furthermore, in all cases in this sample, the driver was not injured in any way; giving the victim the same material weight as a four metric ton vehicle downplays the vulnerability of pedestrians and the danger of vehicles. Though the term collision (defined by *Oxford Dictionaries* (n.d.) as "an instance of one moving object or person striking violently against another", is more accurate, in half of the cases (n=6 out of a possible 12), the term collision was prefixed with "vehicle-pedestrian" (n=3) or "pedestrian" (n=3) collision. Once again, these terms misrepresent the incident by implying both the vehicle and pedestrian colliding into one another, rather than a driver hitting a person with a vehicle. The noun used to describe the incident is important in order to accurately represent the deadly threat that fast-moving vehicles pose to vulnerable road users and to encourage appropriate preventative measures (Carruthers, 2017). The noun "hit and run," present in 3 headlines, is an exception to the above terms, as it embodies strong negative connotations and criminal culpability under the Criminal Code of Canada. In these cases, the choice to include the term "hit and run" is likely a deliberate choice to express the culpability of the driver and underscore the criminal nature of the act, perhaps for dramatic

effect. Out of six headlines written about the hit and run, three headlines did not use the term "hit and run" and instead focussed on the criminal charge laid on the driver.

In the majority of cases (n=50), headlines did not make use of a noun like crash, collision, or accident to refer to the incident. More often, the incident was constructed through the use of passive verbs, like "Pedestrian hit and killed by cement truck" or "Man charged after pedestrian struck and killed". This construction more accurately reflects the violence and agency of the incident by using verbs to speak of the incident, but is subdued by the near-ubiquitous use of passive voice. Additionally, the incident was not once referred to as an accident.

Verb Analysis

To analyse the agency (and thus blame and responsibility) assigned to drivers through verb choice, verbs were analyzed according to their grammatical agent, i.e., the person or thing acting out the verb. The most frequent agent was the absent agent, coded as "none"(n=45; 40.2%), where passive construction was used to omit the actor from the action. Though sometimes used as a space-saving convention where the agent can easily be inferred (Develotte & Rechniewski, 2001, "Typical linguistic features of newspaper headlines"), the absence of an agent still nevertheless conceals the person or thing responsible for the action. In this sample, 25 cases could be said to be space-saving choices, where the agent is either unnecessary or easily inferred, or no verbs are present (for example, a pedestrian is "described as 'very gentle man'" and a drunk driver is "handed five-year sentence"). However, the most frequent verbs to appear without an agent were verbs of violence committed by the driver: "killed", "struck and killed", and "struck" (n=20). In many of these cases, the absence of the agent creates ambiguity and confusion. For example, "Senior killed in west end crash" could be interpreted as a senior crashing his or her vehicle into an object, rather than a person being struck and killed by the driver of a vehicle. "50-year-old woman killed in north Edmonton parking lot" leaves it unclear how the woman was killed and by whom; that this was a traffic accident at all is not evident in the headline. In these cases, it is more likely that the suppression of the agent is a choice—whether deliberate or unconscious—to remove blame and responsibility from the driver. In a further six cases where the agent was absent, the verb or verbs were also supressed. Though also a convention of headline writing (Develotte & Rechniewski, 2001, "Typical linguistic features of newspaper headlines"), supressing both the agent and the verb further distances the driver from responsibility. For example, "Pedestrian dead after parking lot crash" makes no mention of the other party involved in the crash, which conveys the impression that no other party was responsible or involved. In all, the

frequency (26 of 45 cases) of the absent agent in reference to violent or supressed verbs reflects the dominant discourse that drivers are not responsible for the deaths of pedestrians in traffic incidents; that, in fact, these incidents are agentless accidents (Spurr, 2016, para. 5).

The second most frequent agent was "vehicle" (n=27), and was associated with the verbs "hit/struck" (n=12), "hit and killed/struck and killed" (n=7) and "killed" (n=8). As discussed in the driver identification section, the use of the word "vehicle" rather than "driver" distances the driver from blame. All accounts were also written in the passive voice, further distancing the driver from the act. This is particularly noteworthy, as the agent "vehicle" is uniquely associated with verbs of violence and death, suggesting that the term is used to absolve the driver of responsibility (Coates & Wade, 2004, p. 499). The combinations of a distancing identifier, passive voice, and disassociation with verbs of violence all reinforce the dominance discourse of the driver's blamelessness and the desire to decouple the driver from the violence of the act (Spurr, 2016; Niemi & Young, 2016).

"Person/pedestrian" (n=20) was the next most frequent agent, and includes all nouns used to refer to the victim, including man, woman, teen, senior, and girl. This agent was associated with only one verb, "dies", in active voice. That victims of traffic fatalities are only associated with the verb "die" is not unexpected; but because this is the only action ascribed to them, it results in two inaccurate representations. The first is that, within this discursive world formed by news headlines of pedestrian deaths, the only act pedestrians are capable of is of dying. Second, because "dies" in the active tense and the pedestrian is the actor, it insinuates that the pedestrian's death was of natural or internal causes, rather than the result of the act of another. A more accurate conceptualization of the death of the victim is that the pedestrian was killed by a driver or that a driver killed the pedestrian.

The agent "family/friends" (n=7) was associated with the verbs remember, mourn (in several tenses), wants, and shares. This agent only appears in headlines referring to victim 10, (n=6), and victim 8 (n=1). The inclusion of family and friends as agents in the headline shift the focus from the incident and onto the victim as a person. Evoking mourning loved ones also invokes sympathy for the victim, serving to remind readers of the human impact of deadly traffic incidents. That the family and friends of the victim are almost exclusively referenced for victim 10 is likely because of the perceived tragedy of the victim, a very young girl, and that her publicly-released identity allowed reporters to contact friends and family for quotes. Unlike victims 8 and 6, who were also named, victim 10 conformed more readily to the ideal victim concept by virtue of the tragedy ascribed to

young deaths (Christie, 1986). Of the 10 human frames, 7 employed the agent "family/friends," suggesting that evoking the surviving loved ones of a victim is a major tactic used to humanize traffic fatalities.

Blame

In only three out of 71 headlines, the act of a driver hitting and killing a pedestrian was referred to in the active voice. Two of these cases involved a drunk driver and also mentioned the criminal charge. The third is the same Metro Edmonton article noted under "Driver Identifier", where the use of active voice was a deliberate stylistic choice by the editor. Coupled with the blame conferred upon the drunk driver through the use of the active verb "killed" and mention of criminal sentence, it is possible to infer despite the small sample that more blame, both legal and normative, is assigned to drivers who kill pedestrians due to alcohol impairment rather than, for example, distraction or carelessness. That direct blame was only assigned to drivers in three out of 71 headlines confirms that the dominant discourse around VRU fatalities absolves drivers of blame and responsibility.

Frame

The most common frame was the factual frame (n=39), which is characterized by a focus on the incident or the victim using factual, low-emotion language. These headlines tended to mention a location more often (n=30) than the other frames (n=11), possibly due to the secondary function of these articles as traffic reports. The victim was not given any descriptors beyond their age, and in all but one case the driver was either identified as a vehicle or not identified in the headline. The factual tone of these headlines dehumanizes the victims of traffic incidents and decouples them from their societal and systemic implications by reporting them as isolated incidents (Iyengar, 1990); in these cases, the reader is not prompted to care about reducing these fatalities, as there is no appeal to emotion or to systemic societal issues.

The criminal frame appeared in 20 out of 71 headlines, and focused on the act of the driver being charged. The frame was used at least once for six out of seven cases that resulted in charges under the Traffic Safety Act or under the criminal code, the exception being victim two, whose headlines were not given a criminal frame. As the criminal frame focuses on the driver rather than the victim, it has the potential to elicit more sympathy for the victim and assign greater perceived blame on the driver (Niemi & Young, 2016, p. 1235). Emphasizing the repercussions and criminality of killing pedestrians may be an

effective mechanism to encourage drivers to obey traffic bylaws intended to keep pedestrians safe (Fleiter & Watson, 2012, p. 382).

The human frame emphasizes the tragedy of the incident through positive descriptors of the victim and a focus on the victim's mourning family and friends, and was used for 10 headlines. This frame occurred uniquely for victims 8 and 10, who were both female, particularly young and old respectively, and lawfully crossing when they were killed by the drivers of city busses. Their names were also publicly released, allowing reporters to interview family and friends and construct a narrative and identity around the victims. Seven out of 10 headlines included a direct quote from the victim's family or friend either describing the victim or describing their experience of grief and loss. These direct quotes may emphasize the "humanness" of the incident and create the impression of "greater contact with the subject" (Fontcuberta, 1981, as cited in Pan, 2010, p. 197), and thus greater sympathy. The emphasis on family and friends also serves indirectly to give a voice to the victim and present the victim's story alongside that of the typical factual testimonials from police (see "Verb Analysis" for the agents "police" and "family/friends" for further discussion). The positive adjectives (explored in "Victim Descriptors" above) further humanize the victims and reinforce their status as ideal victims; i.e., as undeserving of their death by virtue of their goodness or innocence (Christie, 1986). In 8 of the 10 headlines, the verb phrase "killed by [vehicle]" was used; though not in the active voice and employing a distancing driver identifier, this construction creates an unusually direct link between the act of killing and the driver compared to the other frames. The increased culpability and emphasized violence of the human frame are likely because greater perpetrator culpability is associated with ideal victims (Christie, 1986; Niemi & Young, 2016, p. 1235). Though victim number five's name was also released and aspects of the incident would suggest a human frame (see Table 2), no human frames were used for headlines written about this incident. This could be because the incident was dominated by the criminal frame as it resulted in unusually serious criminal charges, or because the victim did not conform as readily to the ideal victim script because of his sex and ethno-religious minority. However, humanizing elements were included in two out of the six headlines pertaining to victim six, discussed below.

Finally, two factual humanized frames were used and pertained uniquely to victim six. These frames were coded separately from the factual and the human frames because they contained features of both frames; that is, factual language paired with positive victim descriptors. As opposed to the human frame, the factual humanized frame did not include direct references to the victim's family or friends and used clinical, unemotional language (like "described as" and "identified as") that did not confer a sense of tragedy or

humanness to the victim. This intersection of humanized and factual language may be due to the fact that, though the victim's name was released and reporters could identify and characterize the victim, the incident did not conform as well to scripts of victimhood, tragedy, and newsworthiness compared to victims 8 and 10. It may also be possible that unconscious bias to the victim's religious and ethnic minority detracted from the empathy expressed in the headline, as implicit racial bias has been found in a large portion of news coverage of ethnic minorities (Dasgupta, 2013, as cited in Staats, 2014, p. 16). However, as the sample size is small, it is not possible to draw meaningful conclusions from the limited coverage of one victim.

Conclusion

The media representation of road safety issues plays a key role in influencing the behaviour of road users and, ultimately, the prevention of road trauma. As such, the media has a responsibility to accurately and compassionately portray the news that shapes the public's thoughts and behaviours.

The results of this study revealed that the dominant media discourse around pedestrian traffic fatalities is factual and dehumanizing; pedestrian deaths are reported as isolated incidents with no human repercussions and no link to larger systemic health and safety issues, and drivers are nearly always rhetorically and linguistically absolved from blame. This reflects the social reality of pedestrians, one that prioritizes vehicle traffic over pedestrian safety and enforces both physical and rhetorical car dominance. However, the findings also show the existence of positive alternative and even subversive discourses that counter car dominance; headlines that humanized the victims, quoted the victim's mourning friends and family, and acknowledged the systemic issue of traffic fatalities all prompted greater public attention to VRU deaths. As these alternative news media discourses grow in tandem with other mediums of discourse, including the city's commitment to Vision Zero and active transportation strategy, a discursive shift—much like the shift around the perception of drunk driving—could occur. These small discursive anomalies—like Metro Edmonton's commitment to the active voice and accurate nouns, which represents the only non-newsworthy headline to employ direct blame—indicate that this shift may very well already be underway.

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"Heather Magusin is a recent graduate of MacEwan's Bachelor of Communication Studies, Professional Communication program and an avid year-round cyclist. Her experience bike-commuting in a city designed for cars—and often overtly hostile to cyclists—motivated her to study Edmonton's car-centric culture and find ways to promote the joy and benefits of active transportation. She hopes to pursue a graduate degree and continue studying the ways in which language and discourse affect social justice issues."

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