Does print media usage of the word ‘accident’ indicate pessimism about prevention?

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From time to time, concern is expressed about use of the word “accident”. One concern is based on the reasoning that the term means or is believed to mean “unpreventable”. This paper summarizes the main components of the word’s definition and reports on a content analysis over 12 days of print media usage (summer 2001 and spring 2002) to examine the actual usage of the term. Implications for research and professional usage and public discourse are considered.

BACKGROUND
Proposals to eliminate the word accident seem based on a belief that the word itself has accounted for persistence of non-zero rates of accidental injury. Misuse otherwise would be a moot concern. Some of the arguments appear to derive from communication across discourses, between the public health discourse and the safety engineering discourse. Concerns are chiefly about what the term actually means, and what people are believed to mean when they use it. The objections to the word accident have emanated from two groups: injury prevention professionals such as public health and emergency medicine specialists, and policy-makers in accident prevention. Certain members of corporate management, including those with safety responsibilities have joined with this argument as well. Papers in the public health/injury epidemiology domain (Langley, 1988; Loimer and Guarnieri, 1996; Baker and Pless, 2001) have criticized the usage of the word accident usually with acknowledgement that ‘safety professionals’ discourage use of the term. This impression may be mistaken; while practitioners specializing in safety tend to agree that accidents should be eliminated, there is no unanimity that eliminating the word accident is necessary or desirable.

Taking the view that “most injuries and their precipitating events are predictable and preventable,” the British Medical Journal decided to ban the word accident. The editors argued that more accurate terms, such as “crash” (for motor vehicles) and “error” (for medical errors) could be used. In a five year analysis of articles published in their journal, they found accident used to refer to road traffic, playground, home, and aviation accidents, overdoses and poisonings, and medical errors, as well as usage in the context of the common British hospital service called “Accident and Emergency”, equivalent to the Emergency Department in North American hospitals. The new policy permits editors to allow the term, and foresaw exceptions made for usage in accordance with the Ninth Revision of the International Classification of Diseases (ICD-9) as well as events related to unforeseeable natural disasters. The BMJ pondered creation of a new term— perhaps “injidents”.

“Accident” has acquired several meanings over the centuries. Excluding completely irrelevant denotations, two definitions are relevant to the concerns above: an undesirable, unexpected or unforeseen event, or an

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unintended, chance event. Use of the word to describe an event such as a workplace accident or playground accident derives from the first meaning. The second meaning is the basis for usage in legal expressions, as in the verdict of accidental death (as opposed to homicide or suicide). A hybrid of the two definitions sometimes appears in safety papers and texts, referring to unplannedness and undesirability (e.g., Heinrich, 1959). Meister (1985, p. 430) called an accident “an unanticipated event which damages the system and/or the individual [person] or affects the accomplishment of the system mission or the individual’s task.” In medicine, an accident (e.g., cardiovascular accident) is “an unexpected complication that is not in the normal course of a disease or treatment, an unexpected complication that is not in the normal course of a disease or treatment” (Online Medical Dictionary, 2002). Cambridge International Dictionary explains that ‘accidents will happen’ is what people say after an accident in order to make it seem less bad. Like many condolences and polite fictions, it may not be sensible to take this as a literal reflection of beliefs about fatalism.

Many of the concerns about the meaning of the word are apparently misunderstandings of elements of the definition. For example, one objection is that ‘accident’ means random, and therefore does not apply because accidents often do involve human acts and there are patterns of similarities among accidents (Doege, 1999). This concern reflects a misunderstanding of the meaning of randomness, which means merely that the time of occurrence cannot be predicted with certainty. Randomness is completely compatible with foreseeability; in fact, the possibility that an outcome must be acknowledged in stating the probability function for the outcome. The fact that some types of people or machines have more accidents than others is also compatible with randomness; these classifications may be the basis for defining risk factors. Even if we know that men have a higher rate of injury than women, within each gender, the occurrence of injury remains random.

Concerns that the word means ‘unforeseen’ seem to confuse unforeseen with unforeseeable. The ability to identify the chance of occurrence entails foreseeability. However the person apparently did not foresee it at that time. The expression ‘accident waiting to happen’ reflects this objective foreseeability. The accident reflects not unpredictability, but a failure to predict.

Concerns that the word means ‘unpreventable’ are not supported by the dictionary meaning of the term. If people really meant ‘unpreventable’ when they used the term, there would likely be less active effort to investigate events already called accidents. Beliefs about the unpreventability of an accident likely refer to the past, not necessarily to future occurrence, and may not reflect the actual beliefs of the user of the term. Claims of unpreventability could very well be instrumental positions taken to avoid the costs of being responsible for an intentional event or one arising from negligence.

Other concerns about the use of the word accident pertain to the scope covered and the exclusion of similar things that should be considered, such as diseases and intentional acts, or of overlooking things not called accidents but which should be considered, such as catastrophes and disasters.

The concerns about what people mean when they use the word are supported by little empirical evidence, as few studies have been done to examine what people actually mean. Furthermore, those studies are inconclusive. Langley and Silva (1982, cited in Langley, 1988) found that a sample of mothers of injured children considered their child’s injury event unpreventable, consequently having taken no remedial action, but Girasek (2001) found the majority of respondents regarded injuries as preventable. These used opinion-polling techniques to ask people their views on accidents through questionnaires and telephone surveys. One danger of these techniques is that respondents may not report views that they are unaware of holding. Another way to gain insight into what people mean by a term is to observe how they use the term using content analysis. This involves tallying references in discourse such as news media and quantifying or qualitatively analysing the amount or nature of references.

METHOD
The present study examined references in Canadian print media to evaluate whether the usages comprised the implication of unpreventability. The print media both reflects and contributes to public discourse (Frost & Maibach, 1997), thus print media content conveys popular thought in the past and near future.
Raw data was collected through a search for use of the word “accident” in Canadian newspaper coverage (through the Virtual News Library database for 16–20 June 2001 and 1–7 March 2002). Excluded from the following analysis were press releases that were not registered as printed articles during this period, and stories for which “accident” was a keyword that did not appear in the article itself. Duplicated stories (such as wire service stories) or duplicate passages in original stories are tabulated only once, but original passages are separately tabulated even if referring to the same event. Three events were covered in four articles each; nine events had three articles, and 16 events had two articles. After these exclusions, there were 240 separate articles (160 from the 2001 set and 80 from the 2002 set) referring to 197 different events or subjects. The coded news items data can be obtained from the author (click this link). Non-duplicate stories were classified with respect to several dimensions, including:

**Reason to mention.** Whether the accident was the primary topic of the article or secondary to the topic of the article and the reason for mentioning (other than when the accident was the article’s subject),

**Reference.** Whether the word accident was the first term used to refer to the event or a subsequent usage. First reference and primary subject usage are the most meaningful variables. Subsequent reference in an article is just journalistic shorthand when something previously described more fully needs to be mentioned more than once and a full description would be verbose. In effect, the meaning of accident is determined by the fuller term used on first reference to the event. A secondary reference to an accident in a media report of something else is similar, in that the writer is not intending to get into discussion of the event, but wishes to present a background.

**Type of usage.** Five types of usage were distinguished. While accident was used most to refer to an event, either recently or further in the past, some usages were figures of speech, references to a category of events, or use of the word only in the legal sense. The different types of usage were analysed separately for first/subsequent reference and reason to mention.

**Category of event.** The word was used in reference to a variety of events from vehicle collisions to the failure of engineered components. The major categories appear in Table 2 in the Results section.

**Synonyms.** When accident is used as a secondary reference, the terms used as a primary reference reflect the thinking about the accident specifically and accidents in general.

**Investigation.** Whether there was reference to investigation or causation. Langley (1988) cited previous writers indicating that accidents were seen as “acts of God” and warned that as such, they would not subjected to more rational investigation and intervention. The concerted efforts to have investigations performed, and to improve investigations, seems at odds with the suggestion that accidents are viewed this way.

### RESULTS

Over half of the articles were not about the accident mentioned but had just mentioned the term in discussing some other subject (see Table 1); an accident was the primary subject of only 47% of the articles.

**Reason to mention.** In 127 articles, the word accident was used to refer to an event that led to something else (e.g., traffic congestion caused by an accident), while in 113 it referred to the accident itself as the effect.

**First or subsequent reference.** Slightly more than half of the articles mentioning the word accident used it as a first or sole reference, with 76 of 160 articles using accident as a subsequent reference.

The reason for using accident in the article (primary subject, secondary to the subject) was strongly related to whether another term was used first ($\chi^2=14.3$, 1 d.f., $p<.0001$). Among articles referring to accidents as the primary subject, 54% used

<table>
<thead>
<tr>
<th>Role of event in the article</th>
<th>Usage in reference to</th>
<th>First</th>
<th>Subsequent</th>
<th>Total</th>
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<tr>
<td>Primary Total</td>
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<td>61</td>
<td>113</td>
</tr>
<tr>
<td>Secondary to topic of article</td>
<td>Category of events</td>
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<td>3</td>
<td>14</td>
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<td>Event (specific)</td>
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<tr>
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<td></td>
<td>141</td>
<td>99</td>
<td>240</td>
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accident only on after another term had been used to identify the event. In contrast, when accident is used in an article primarily about something else, it is the first (or sole) reference 70% of the time.

**Type of usage.** Figure 1 depicts usages of the word (event, past event, figure of speech and category), plotting the proportion of “first references” on the vertical axis, and the bubble sized according to the number of articles. (Use of the word in the legal sense occurred only twice.) A recent event, even when secondary to the article, was called an accident on first reference only 47.2% of the time. Past events, figures of speech and categorical references were called accident first about three quarters of the time. Using these four groups, the first/subsequent reference distinction is even more marked ($\chi^2=20.0$, 3 d.f., $p<.0001$).

**Categories of event.** Table 2 shows the number of articles pertaining to the various categories of accidents. In the majority of the articles (57%), accident was used as a synonym for “road vehicle collision”. Some of these were hypotheticals (“if you have an accident, here is what to do.”) and others were references to collisions as a category. Articles on aviation and rail accidents comprised another 12 references, of which 10 were events or past events; two were figures of speech (e.g., “accident waiting to happen”).

The second most common accident situation (35/240) were a range of sports and recreational activities. Of these, 33 articles referred to events, although only 17 of them were the main subject of the article; in 16 cases “accident” was a secondary usage or reference to a past event. Secondary usages were reports about a person who had been injured in recreational activity. Past event references were often time markers, to divide the past into before-accident and since-accident periods. Other secondary references were in sports reports of events such as a motor racing which mentioned an accident as part of the event. Workplace accidents were mentioned in 15 articles, most of which were about the accidents; one was a category usage (reference to information on workplace accidents) and one was a metaphor. References classified as (opposite to) practice, skill, or planning (14 articles) were typified by statements like “more by accident than design”. These were idiomatic usages classified as figures of speech, except for one that was an event (a convict re-apprehended “by accident”). The remaining 28 articles referred to acts of aggression (all events or counterfactuals, i.e., “it was not an accident”), fall, and miscellaneous events (medical misadventure, equipment failure such as a leak, and natural phenomena such as freezing to death), as well as references where the meaning was unclear.

Only 18 of 240 articles (7.5%) in 12 days’ coverage used the term “accident” in first reference to the primary subject of an article other than road collisions. Ten of these were sports/recreation related, four were workplace injuries, three were other falls, and one referred to a case of suspected arson.

**Synonyms.** Where “accident” was the primary subject but subsequent reference, representative first references were:

- **Sports injury/play:** asphyxia, collided, struck, hit a tree, tragedy, fatalistic reasoning: “things just went wrong”; prior occurrences; legal term: antonym to homicide.
- **Transport other than road:** crash, derail, fireball, go through red light, struck by.
Acts of aggression: fired at, fracture (description of suspected intentional origin), rammed.

Workplace: fall, hit by plow, stuck by blade, pinned, crushed.

Miscellaneous: door falls off, freak lightning, surprise, fall.

**Investigation.** Of 240 articles, investigation into cause or prevention was not relevant to the article in 72 cases. In 35 cases it was unclear whether there was investigation or investigation was not mentioned. In 8 cases, there was no investigation. In the remaining 125 articles (52%, or 74% of those where investigation might be applicable), it was clear that an investigation into cause was ongoing or assigned, or had already been completed.

**DISCUSSION**

In the majority of the articles, “accident” was used as a synonym for road vehicle crash, where there is little apparent implication either way about preventability. Overall, 78% of usages were as shorthand when the actual accident event was in the past and a subsequent event was being discussed, or the accident event is current, but has already been explained more explicitly in an earlier usage in the same article. When the accident is the topic of the article, it is likely to be defined in a first reference with the term accident only used subsequently. Synonyms used on first reference do not tend to reflect fatalistic beliefs about unpreventability, but are rather neutrally descriptive. Most indicative of a belief in unpreventability would be absence of investigation, but in fact investigation was mentioned in the majority of articles. This content analysis does not seem to support extreme concerns that “accident” is equated with “unpreventable” in the general public discourse as reflected by the Canadian print media. As such, substitution of another term could cause confusion with little benefit. There is no evidence (as yet) showing that it is the word that is responsible for persistence of accidents. If too much energy is spent protesting the word, there is less energy left to reduce the risk factors that actually are responsible for accidents. Even in the best case, if campaigns to substitute another word did succeed, one could anticipate eventual campaigns of “incidents do not happen, they are caused.” If the discussion is to address injuries and not the events when they occur, or specific kinds of accidents, such as falls or collisions, then specific words are suitable, and appear in many cases to be used at least in combination with accident if not instead. However, many uses of the term do need accident, particularly discourse at the abstract level about accidents in general.

An observation from this study that might raise concern is the low prevalence of news reports of workplace injury, comprising only 6.25% of the news items about accidents. Similar to the patterns observed for public health risks (Frost and Maibach, 1997) coverage understates workplace injuries relative to the other types of accident events by a large margin. Media coverage of workplace injuries might merit further study.

**REFERENCES**


