Researching online abuse: the case of trolling
The ESRC funded Centre for Corpus Approaches to Social Science (CASS) is a research centre based at Lancaster University which aims to bring the methods and benefits of the corpus approach to other disciplines.

The corpus approach harnesses the power of computers to allow analysts to work to produce machine aided analyses of large bodies of language data – so-called corpora. Computers allow us to do this on a scale and with a depth that would typically defy analysis by hand and eye alone.

In doing so, we gain unprecedented insights into the use and manipulation of language in society. The centre’s work is generating such insights into a range of important social issues like climate change, hate crime and education. This series of briefings aims to spread the social impact and benefits of the work being done by the centre and, in so doing, encourage others to use our methods in future.
Arguably, the biggest technological advancement in recent times is the internet. It has revolutionised aspects of society in areas as diverse as commerce, education, medicine and politics, whilst also offering social science researchers unprecedented access to data and online collaboration.

Sadly, however, the internet also presents new opportunities to act maliciously. A minority of individuals view the internet as simply a new means of exploiting, manipulating, and defrauding others, such that now, the online user must be aware of offences such as phishing and online grooming. Increasingly worrying are offensive behaviours such as trolling and cyberbullying that involve individuals, and sometimes whole groups, harassing others, sometimes for no other reason than to entertain themselves. Recent media reports have shown us how some bullying ‘campaigns’ have been so severe that ‘targets’ leave their school, job, or home. Some victims engage in self-harm or even, in some cases, commit suicide.

Yet research into this subject is in short supply in the social sciences, in spite of there being a real need for it.
In order to research trolling - a relatively unknown and under-documented phenomenon - an important first step is to ask, “what does ‘trolling’ even mean? How is trolling defined?” These questions are important because they help to determine what needs to be researched.

The etymology (i.e. the origin and historic development of the meaning of a word) of trolling as a form of abusive behaviour online is not entirely clear.

**Define: trolling**

Today: “A deliberately erroneous or antagonistic message on a newsgroup or similar forum with the intention of eliciting a hostile or corrective response” (OED 2013), or someone who posts such a message.
Dictionaries - which seek to tell us what words in use mean - define troll in several ways. Meanings include those relating to fishing, rolling, walking, searching, singing, and mythical monsters, but it is unclear which of these has led to the modern meaning of ‘being offensive online for fun’.

Consistency of dictionary definitions can also be an issue. With language, users often develop their own definitions of what a word means to them and ways of using that word which leads to variations in the use of it by speakers at any one moment in time (synchronic variation). Such changes may spread and become popular amongst speakers of the language, leading to language change over time (diachronic variation). Dictionaries have to reflect this complex variation.

Unsurprisingly, trolling is, and has been, used in a number of ways. As far back at the 1980s, troll was used in relation to mildly provocative, but otherwise harmless, behaviours like ‘hazing’ new group members (sending a work-experience student to buy stripy paint, for example). Since 2010, trolling has been used to refer to an increasing number of negative behaviours, from bluntly disagreeing with someone, to targeting an individual with extreme threats of violence, rape, and murder.

Given this range of meanings, the question remains,

“how should trolling be defined?”
One way of defining a word is by collecting a lot of language data. To look specifically at how trolling manifests itself online, a corpus of 80 million words of online interaction was used.

By using computers in order to analyse language (an approach called corpus linguistics) we are able to look at such large amounts of language data.

For example, where a novel might contain around 100,000 words, a large corpus might be made up of tens or hundreds of millions of words.

With such a large quantity of data containing thousands of examples of trolling and talk about trolling, it becomes much easier to create a nuanced definition of what it means to troll, through identifying clear patterns and norms of how trolling occurs in the corpus.

These patterns may help address the unbalanced representations of trolling in mainstream media which often cover only the most extreme or shocking cases of trolling.
In the data roughly 1 in 1000 examples of individuals talking about trolling (e.g. discussing whether a certain behaviour counts as trolling, whether someone is being trolled, etc.) was an instance of a troll - accused or actual - “confessing” to trolling. So, by listening to trolls and their victims, the meaning of the word *trolling* as used within the online community was determined to be:

Trolling is the deliberate (perceived) use of impoliteness/aggression, deception and/or manipulation in online communication to create a context conductive to triggering or antagonising conflict, typically for amusement’s sake  

(Hardaker 2013: 79)

Equipped with a useful definition that says what trolling is, we can talk about how individuals troll. Broadly, six major trolling strategies were used in the corpus, though there are probably more:

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<th>Strategy</th>
<th>Example</th>
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<tr>
<td>Digress</td>
<td>On a Darwin group: “You should find Jesus.”! On a Christian group: “You should read Darwin.”!</td>
</tr>
<tr>
<td>(Hypo)criticise</td>
<td>In response to a minor typographic error: “YOUR’E GRAMER SUX.”</td>
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<tr>
<td>Antipathise</td>
<td>On a Justin Beiber group: “Beiber is lame. Get a life.”</td>
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<td>Endanger</td>
<td>“Try this fun [i.e. stupid/cruel/dangerous] thing.”</td>
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<tr>
<td>Shock</td>
<td>On a child’s memorial/tribute page: “Your kid deserved to die.”</td>
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<tr>
<td>Aggress</td>
<td>Usually to a specific target: “I’m coming to abduct/rape/kill you.”</td>
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There appear to be at least three key reasons to explain why people troll:

**Entertainment**
We have long known that humans enjoy “consuming” aggression in many forms, from watching horror films and reading murder novels to playing violent video games and attending combative sports like boxing. The internet offers the potential for people to enter what is in effect a virtual Coliseum in which people can attack others with minimal fear of repercussions.

**Perception of anonymity**
Anonymity can afford the appearance of freedom from consequences both online and offline. Online, the ability to conceal one’s identity allows trolls to attack others with minimal fear of repercussions and where multiple trolls attack a single target, this fear might be reduced by a feeling of ‘safety in numbers’. Offline, trolls are able to conceal their activities from friends, family, employers and avoid the kind of social stigma attached to abuse.

**Empathetic divorce**
As online communication lacks the physical presence of the person being trolled, or usual physical feedback of face-to-face communication such as facial expressions and body language, it is easier for trolls to downplay or negate the affects of their behaviour. They divorce themselves from empathising with their victims.
So how do we deal with this kind of online behaviour? Well, there are at least five ways forward:

1. **Education for children and young adults**
   Teach children to be both safe and kind online

2. **Training for parents, caregivers, teachers**
   Enable parents to be proactive, vigilant, and to know how to react if something does go wrong

3. **Responsibilities for websites**
   Oblige sites to provide users with basic safety standards that demonstrably work

4. **Resources and training for police**
   Introduce the training and resources that the police need to take on the whole range of online misbehaviours

5. **Improved legislation and guidance**
   Introduce legal guidance that would define and explain online behaviours, jurisdiction, and proof. Where appropriate, introduce new legislation that better protects online users

It will likely be many years before the various types of online behaviour that exist are thoroughly understood. However, research such as that presented here is beginning that journey to creating a safer online environment.
Part of our aim at CASS is to make Corpus Linguistics accessible, which is why we have created our free online FutureLearn course. With the course, we aim to demonstrate that corpus approaches can offer researchers from all disciplines unique, valuable insights into the use and manipulation of language in society. We provide all you need to start ‘doing’ Corpus Linguistics yourself.

This briefing should act as an introduction and companion to the course where you will begin to apply the concepts and methods mentioned here in a practical way relevant to your field of interest.

The course is free, can be done from home, and comes with a whole range of content and support from world-leading scholars in the field of Corpus Linguistics. For more, visit:

futurelearn.com/courses/corpus-linguistics

For more about CASS and our freely available resources, please visit: cass.lancs.ac.uk

CASS
@CorpusSocialSci
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