# Features and Categories of Hyperbole in Cyberbullying Discourse on Social Media

# Simona Ignat\*, Carl Vogel\*\*

\*\*Trinity Centre for Computing and Language Studies
\*School of Linguistic, Speech and Communication Scienes
\*\*School of Computer Science and Statistics
{signat, vogel}@tcd.ie

#### **Abstract**

Cyberbullying discourse is achieved with multiple linguistic conveyances. Hyperboles witnessed in a corpus of cyberbullying utterances are studied. Linguistic features of hyperbole using the traditional grammatical indications of exaggerations are analyzed. The method relies on data selected from a larger corpus of utterances identified and labelled as "bullying", from Twitter, from October 2020 to March 2022. An outcome is a lexicon of 250 entries. A small number of lexical level features have been isolated, and chi-squared contingency tests applied to evaluating their information value in identifying hyperbole. Words or affixes indicating superlatives or extremes of scales, with positive but not negative valency items, interact with hyperbole classification in this data set. All utterances extracted has been considered exaggerations and the stylistic status of "hyperbole" has been commented within the frame of new meanings in the context of social media.

# Keywords: cyberbullying, hyperbole

## 1. Introduction

Hyperbole has deep roo ts in the poetry of antiquity as a source of emotion. Quintilian defined this poetic device in Institutio Oratoria, as "the elegant straining of the truth, for exaggeration or attenuation" (Book 8, Chapter 6). Use of hyperbole in other contexts has been discussed as a potential threat to truth and objective information for professional groups like journalists (Ireton and Posettie, 2018, p. 56). Broader risks also emerge in the context of defamation, and harassment.

The "rhetorical hyperbole" concept, based on a non-truth, is used in American law system. Although it cannot be used as evidence, the "rhetorical hyperbole" exists as concept, based on the First Amendment to the US Constitution, as conveyance for the "freedom of speech" (Smolla, 2006, p. 715). Hyperbole has become a source of fear, intimidation, threat, bullying for naming just few outcomes on new media. This paper reports reflections on hyperbole as emerges from the linguistic analysis of bullying in online communications.

## 2. Related work

Natural language hyperbole is evidently frequent, but the phenomenon is not extensively studied (Claridge, 2011; Cano Mora, 2009). A semantic taxonomy has been proposed (Cano Mora, 2009), emphasising the disseminations between positive - negative effects on one side and quantity – quality on the other. An exaggeration in quantity or quality has been outlined (Ferré, 2014, p. 33), identifying two types of verballexical hyperboles, "using a word which is very close or equals the maximal degree on the scale", and a second type based on "changing the predicate to another one (...) which is thus highly unexpected in that context". Claridge (2011) distinguishes between

conventional, semi-creative (or semi-conventional) and creative hyperbole. The importance of hyperbole on "presenting objectively reality is a challenge for social media" (Brantly, 2020, p. 90). A procedure for identification of hyperbole based on patterns has been proposed with the HIP method (Burgers et al., 2016) based on eliminating the possibility of being irony or metaphor. The authors identified four characteristics based on literature review of definitions, meaning exaggeration, overstatement, extremity, and/or excess. In 2018, a team of researchers created Hypo, a dataset with "exaggerations" for "automatic hyperbole detection" (Troiano et al., 2018, p.3296). The dataset has been selected on the criteria of "imageability" which is "the degree to which a word can evoke a mental image" and "unexpectedness refers to the fact that hyperboles are less predictable expressions than literal" (Troiano et al., 2018, p.3301). The conclusion was that most "conventional hyperboles" are impossible to detect. The authors use alternatively "exaggerations" and "hyperboles" for nominating the first ones with possible stylistic effect, thus becoming "hyperboles". Compared to other figures of speech like simile, metaphor, metonymy, the hyperbole has been argued to be harder to detect: "hyperbole poses a further difficulty-unlike simile, alliteration or some other figures of speech, it is unmarked, that is, it has no linguistic sign to alert the reader to its presence" (Connor, 2019, p. 15). The research reported here is also corpus driven, based on a novel corpus drawn from online communications.

## 3. Methods

A corpus of 4100 of utterances with bullying effect has been extracted from Twitter following the definitions of bullying used within United States, European Union and Irish legislation, and informed by considerations raised in academic papers.

The linguistic conveyances of bullying have been identified for each utterance. For example, the utterance with bullying effect "this is such a shitty it competes with my shittiest shits" has been identified on the criterion "squalid language". The clause repeats derivatives from the same root "shit", a taboo lexical item and evokes tautology by comparing two superlatives. In the same way, utterances having hyperbole as conveyance for embedding the bullying effect have been identified. The first question is what utterances could be labelled as hyperboles by using the traditional grammatical indications of exaggerations. This aim has been achieved by labelling utterances with a various range of meanings as exaggerated against a reference considered average, under the criteria of a "reasonable person" nominated by United States legislation. The legislative criterion is used because it can be regarded as a settled convention. The 2013 Code of Alabama Title 13A -Criminal Code, 2010 Nevada Code, and Georgia Code Title 20 use "the reasonable person" thinking as the reference for labelling "hyperbole" in the dataset. 123

The exaggerations have been identified by using a behavioural frame convention defined as "a standard that, though it does not demand perfection, does insist upon a certain level of prudence and attentiveness to the interests of others" (Moran, 2003, p. 18). An extended discussion argues about "commonness of hyperbole in everyday spontaneous spoken language" (Claridge, 2011, p. 2) and arises the question about the stylistic effect in cyberbullying discourse. Conversely, what utterances are exaggerations without being necessarily hyperbole, and this is the second question of the document. For answering to it, the whole spectrum of linguistic conveyances has been considered for discovering the triggers of bullying effect by exaggeration. A lexical - semantic analysis has been applied in the first instance and wide topics like "Exaggerations of physical features", "Murder", or "Religion" have been identified.

The 4100 items analysed here are available for others to analyze.<sup>4</sup> Each item is classified by the first author using a fixed range of labels, with each item potentially supporting multiple labels. Lexical items were isolated independently of the classification of items in the dataset as appropriately categorized as hyperbole or not. Spaces were used as indicated (e.g "est") in order to assure a word initial or word final observation for prefixes and suffixes, where this interacts with interpretation (e.g., "estimate" does not indicate a superlative). The counting method entails that where prefixes are shared ("no", "no one", "noone"), the counts are not independent. We constructed a contingency table that assures independence of row counts (i.e. only " no" counts are used of the three items mentioned in the preceding parenthetical).

Issues in identifying the hyperboles have been found in structures like metaphor, irony, simile, epithet. In disseminating hyperboles over other linguistic conveyances, the predominant feature of exaggeration and both figurative and literal meanings have been considered. The method here is largely observational. The goal is to provide an indication of the linguistic devices that achieve hyperbole particularly in the context of online bullying.

#### 4. Results

The total count of items for each label is as in Table 1, below. We identify a small number of lexical forms, affixes and strings that may also appear as or within words, that indicate superlatives or scalar extremes.

Item	Type	Obs. = 1	Obs. = 2	Compl.
"est"	suffix	43		4057
"most"	word	24		4076
"least"	word	2		4098
"only"	word	18	1	4081
"all"	word	217	13	3870
" any"	prefix	39		4061
"every"	word	67		4033
"never"	word	33	1	4066
" no"	prefix	285	5	3810
"noone"	word	1		4099
"no one"	word	39		4061
" die"	word	56		4044
"death"	word	6		4094

Table 1: Marks of exaggeration: The count of messages with 1 or 2 observations (obs.) of types paired with the count of the complement – tokens in the message that are not the instances of the type at the relevant row.

The chi-squared statistic (df = 11) is 58.84, p = 1.521e-08. Thus, one may accept the hypothesis that there is an interaction between the classification of tokens

<sup>&</sup>lt;sup>1</sup>2013 Code of Alabama Title 13A - CRIMINAL CODE. Chapter 11 - OFFENSES AGAINST PUBLIC ORDER AND SAFETY. Article 1 - Offenses Against Public Order and Decency." n.d. Justia Law. https://law.justia.com/codes/alabama/2016/title-13a/chapter-11/article-1/section-13a-11-8> - last verified May 2022.

 $<sup>^22010</sup>$  Nevada Code Title 15 CRIMES AND PUNISHMENTS Chapter 200 Crimes Against the Person NRS 200.575. Stalking: Definitions; penalties." n.d. JUSTITIA US Law 2010. https://law.justia.com/codes/nevada/2010/title15/chapter200/nrs200-575.html - last verified May 2022.

<sup>&</sup>lt;sup>3</sup>Georgia Code Title 20. Education § 20-2-751.4. n.d. FindLaw For Legal Professionals. https://codes.findlaw.com/ga/title-20-education/ga-code-sect-20-2-751-4.html - last verified May 2022.

<sup>&</sup>lt;sup>4</sup>Please send email to the first author to request a copy.

Item	Hyperbole +	Hyperbole -
"est"	16	225
"most"	8	16
"least"	0	2
"only"	3	17
"all"	16	227
" any"	6	48
"every"	14	53
"never"	4	31
" no"	37	468
"noone"	0	1
"no one"	2	37
" die"	4	61
"death"	1	5
Complement	1523	19903

Table 2: Marks of exaggeration: The count of relevant items (or all other items as the "Complement" in the final row") in messages marked as containing hyperbole compared with the counts of the same lexical types in messages not marked as containing hyperbole.

in the dataset as containing hyperbole and the counts of items indicated in Table 2. To note the role of each item, inspection of residuals is revealing (see Table reft:residuals). Recall that the sign of residuals indicates the direction of divergence between observed counts and the counts that would be expected if there were no interaction between the classification of an item as hyperbole and the counts of indicated items (positive values indicate observations in excess of expectations; negative values indicate fewer than expected observations), and the magnitude indicates significance (for magnitudes between 2 and 4, p < 0.05; greater than 4, p < 0.001).

	Residuals		
Item	Hyperbole +	Hyperbole -	
"est"	2.79159150	-0.776979672	
"most"	4.776562572	-1.329453833	
"least"	-0.379202193	0.105542804	
"only"	1.302644859	-0.362563281	
"all"	-0.351929761	0.097952107	
" any"	1.311433836	-0.365009505	
"every"	4.183947046	-1.164512000	
"never"	0.935248183	-0.260306290	
" no"	0.823021834	-0.229070491	
" die"	0.003639818	-0.013077415	
"death"	0.865741911	-0.240960709	
complement	-0.44319369	0.12335028	

Table 3: Residuals

It can be seen that the significant effects are for items that indicate positive extremes ("est", "most", "every", as opposed to "least", "no, "never"). That is, the data revealed a higher number of "maximise" utterances,

utterances that emphasize the extreme large end of a scale, than "minimise" utterances that focus on the extreme small end of a scale. However, on a scale of arguments, within the lexical units in the dataset, both labels are variables depending on the perspective of measurement.

# 4.1. Exaggerations of physical features

The topics of exaggerations cover a complex spectrum of subjects, focused on person or group. Both literal and figurative meanings have been considered, if simultaneously present, for labelling the hyperboles. The next sections provide examples of dimensions of focus in abusive hyperbole witnessed in the corpus. Linguistic features of the constructions are highlighted.

## 4.1.1. Overweight

The individual is bullied by oversizing the physical body-parts as a compound noun "belly-to-the-ground". Labelling a person "the fat pig" is an allusion to somebody who eats large quantities of food in a non-discretionary way. The ironical allusion "you need wheels on flaps" suggests the requirement of an extra device for carrying own body due to excess weight. The bullying allusions to overweight are based on the presumption of banning the fat people from society.

## 4.1.2. Ugliness

The causal connection between the aesthetics of physical features and behavioural choices is in most cases tenuous. Thus, stating "if u ignored this ur ugly" is exaggerated and intimidating. Extending the ugliness of an individual over the place of living and indirectly over habitants of the space, as the synecdoche 'ugly ass hometown' implies, is unfair and exaggerated.

## 4.1.3. Non-visual Senses

Exaggerations based on the sensory perception of an individual frequently attend to smell and taste. It could be the olfactive sense as "you smell like shit", an exaggeration unless the person accidentally fell in that matter. The utterance "you tasteless piece of shit" could be a disgusting perspective if the words have a literal interpretation or a taboo way of offending somebody by outlining the worthiness of person if the figurative meaning is considered.

## 4.1.4. Mutilations

Data revealed utterances embedding physical mutilations possible in real life but belonging to a wild and long-gone dark Medieval Age if commented on literal meaning, like "have his limbs ripped off", "you were rosted" or "I was fucking the shit out of this guy". These were torture methods. Some of them became metaphors by a figurative interpretation, like "you were roasted" for emphasising a difficult situation for a person. The threat "you're gonna eat your words" embeds an abstract element in a concrete activity.

# 4.1.5. Overpowering actions

Physical actions, either literally or figuratively interpreted, over a person's body, as in the utterance "fuck yourself. Forever, ideally" are impossible to do continuously. Overpowering actions commanded over the body of victim, like "fuck yourself in the humblest way" is a hyperbole as the adjective "humble" does not have a reference scalar in real life, and it is purely subjective. An overpowering statement "you should tie your tubes now", a suggestion of requiring permanent birth control is an overstatement of what one person may reasonably impose unwillingly on another.

Emphasis on the resources consumed by an target, like "you are a waste of New York air" or "you're no good for the planet" has a double possible interpretation as physical and psychological destruction can be used to in an exaggerated form to achieve bullying.

## **4.1.6.** Stalking

Intimidation based on permanent stalking, action impossible to be done in real life, unless a physical symbiosis is accomplished, is exemplified by utterances like "I'll always be listening for your voice", "I'll never leave your side", or "no matter how far you run I'll find you".

#### **4.1.7.** Murder

A whole spectrum of various imaginary forms of killing somebody has been revealed by the data. The suicidal imperatives like "go kill urself" or "dump chemicals into the mouth" posted on social media suggest an infringement of each individual right over own life. The utterance "pull out your intestines" is an indirect urge to suicide in an aggressive way. The utterance "everyone should die" does not even specify the reason of mass extinction and includes the author too in human race's destruction, thus this is an indirect wish of suicide.

Urges to mass extinctions of a nation like the imperatives "kill jews", "kill faggots" are impossible to be achieved by a single person. Hyperboles embedding the message of mass extinction are achieved by anchoring extremes in abstract triggers like categories of humans or attitudes towards humans (e.g., respect). An example of the former is "\*Race\* stinks therefore should die", and of the later, "try to disrespect my son I will beat the living out of you". Bullying exaggerations based on nationalities put an unfair stigma over all people having the citizenship of a country. Sometimes, murderous imperatives are suggested with no explicit reason at all like "kill all men".

An utterance embedding medical jargon, "these vaccines are killing millions", is not based on scientific evidence as people could die from many other reasons. Reasons of selecting the people who should die are sometimes humorous: "people with nice noses should die".

# 4.2. Exaggerations of moral features

Bullying exaggerations can be achieved via comparison of person against hypothetical worst persons in the world and labelled her or him as a "winner" of such a competition. Examples are: "you are the worst candidate in history", "your one of the worst human beings I've ever heard", "you are one of the worst human beings on earth". The adjective "horrid" in the sentence "ur the most horrid person" has similar effect, involving adjectival modification rather than a nominal. These comparisons are impossible to achieve in a literal and truthful sense, given the subjectivity of the underlying categorization.

Self-esteem is targeted by sentences starting by personal pronoun "you", embedding an imperative message, focused on superlative structures, with two subcategories. The first subcategory implies a comparison and encompasses utterances like "you are a despicable human being", "you're childish asf", "you're a sociopath and a disgrace to the human race", "you are one of the the biggest fool", "you're a sociopath and a disgrace to the human race", "you are one of the worst human beings on this planet", or "you are one of the worst human beings walking the earth". The aggressor declares a superlative level which cannot be proved in a literal sense because there is no accepted scale of measurement. The second category implies a reference to an abstraction or no reference at all. For the first subcategory of these, an example is "everything you say is slutty or dumb" and for the second, an example is "you should think of yourself a failure". The utterances "you never were good" and "you don't deserve anything" are overpowering and suggest a self-comparison in which the target fares poorly. The same idea of superlative is conveyed by utterance "your hypocrisy is gigantic" with abstract - noun references qualified by an adjective of quantity.

The utterance "all you think about is yourself" implies that the target is an egocentric person. These posts about victim's interactions with other people is bullying as they are based upon speculation, for example "u feel like everyone hates you" or "your desperate for views". Within this set, the utterances "everyone": "every1 abandons you", "every1 who hates u is weird", "everyone hates you", "everyone step on you", reveal a double presupposition, the first on other people's thoughts and the second about victim's feelings. These utterances covering speculative actions, thoughts or emotions of a person, posted on social media, could have a bullying effect. An exaggeration of person's actions by using a metaphor, "look like your typical back-stabbing" to describe a deviously vengeful personality.

#### 4.3. Religion

Religion is invoked through reference to deities. For example, "X was a satanic psychopathic" broadly describes a bad character with mental disorder without specific features but labelled as a human being requir-

ing medical attention. The exclusion of individual on the criterion of sin in a dramatic way is hyperbolic, as in utterance "the worse sinners is shamed of u". This utterance outlines ironically the failure of reaching the lowest level of sin which is an abstract notion already banned. Sin itself is an abstract notion, variable to religion, thus the label "the worse sinners" is undetermined in any literal sense.

Presupposing the existence of "approved altars" in the utterance "you don't worship at approved altars" implies a restriction of the fundamental right of choice in beliefs assumed in contemporary society.

The utterance "you're a wretched sinner" implies the impossible redemption, but the reference, the sin, itself has no objective framework and therefore redemption does not have a literal reference either.

An aggressor's claim to extraordinary powers over life and death is conveyed by sentences "those who are truthful will survive my wrath". This statement evokes apocalyptic prophecy.

The derogatory imperative against a deity from the utterance "fuck your God" is exaggerated against the respectful attitude civil society expects to be shown to each person's spiritual values.

All these exaggerations meant to intimidate and to emotionally damage the individual targeted.

## 4.4. Exaggerations based on gender

Derogatory gender-oriented labels are evident in the data with application either to women, as "she's plain and simply a homophobic horror" and to men labelled as "useless". In social media, people are labelled in a derogatory way based on gender orientation as in "queer person is an abomination" or "straights are awful". Criticising a person for having something as naturally occurring in human beings as gender appears to be exaggeration.

## 4.4.1. Statements against men

Data revealed two categories of hyperboles against men if the criterion of referentiality is applied. These are statements with indeterminate referent and clear reference respectively. Statements with indeterminate referent are sometimes offered as generics, addressing the whole group of individuals designated as "male" in exaggeration because not all individuals have the same characteristics. For example, "big dick men know when to shut the fuck up" has the form of a natural language generic but invokes two exaggerated categories. Examples like "trash men are exactly why sexual abuse is a problem", or "the shitty men are always offended" include a term ("trash" or "shitty") that lack literal reference. As adjectives, the labels applied to people are hyperbolic as they do not have a scale of reference. Pointing against one gender or other and making accusations without proof is an exaggeration (e.g. "men are the root of all problems").

The utterance "men are useless" is an exaggeration because "utility" is an abstraction defined subjectively ac-

cording to own needs and not all men are completely "useless." A subjective reference is involved in the statement "men are so worthless" as "worthy" is a subjective scale of appreciating a person. The exaggeration becomes a hyperbole if posted on social media as it appears intended to offend all men who read the message. These claims about all men on planet are sometimes evidently intended to extend the impact of a judgement of a specific individual. A statement like "boys are mostly assholes" could be interpreted as most of boys are assholes or each boy is mostly asshole and less non-asshole. Neither statements can be objectively proven, thus they are speculations aiming to intimidate. Stating equivalence between two distinct referents is frequently hyperbolic. For example, "somebody wants world peace it's freaking gay" or "this school doesnt give schlrshps its freakin gay". This series continue in the same manner with utterances "steamed hams it's freaking gay", "contact lenses. It's freaking gay on you", "ending every sentence with an smiley face. It's Freaking gay". An irrelevant and exaggerated connection between random elements or activities and gay people is bullying.

#### 4.4.2. Statements against women

A group of texts mentioned a "woman's card" required for validating something already assigned from birth, for example "women (...) have revoked your woman's card", "you need to have your woman card cut up". The rhetorical question "how much of a slut" conveys the superlative focussing on degrees of membership in the named nominal category, but with an implicit suggestion that "partial" membership in the derogatory category results in "total" membership. Similarly, in "she is a completely massive irredeemable cunt", the taboo "cunt" is a metonymy without natural graduations. Labelling a person "bitch" because she "calls and leaves no message" is unfair and unrealistic as there are many people who calls and leave no messages because different reasons.

In conclusion, gender seems to be a controversial locus of hyperbole since the authors on social media post statements accusing the different genders, ultimately, of being themselves. They criticised all men and women, briefly, "straights are awful", or all people labelled on criterion of sexual orientation, "you are biphobic" as a total rejection of everybody.

# 4.5. Statement with indeterminate reference

## 4.5.1. Exaggerated consequences of actions

The intimidating effect is triggered by exaggerations of consequences like "if you say anything else on the topic I murder you" or "murder you be of that emoji". A metaphoric utterance, "your voice bring disease" is an exaggeration in terms of literal interpretation, but a truth based on facts if the virus is spread via speaking. Threatening a person with physical harm for minor reasons is an overreaction, like "i beat the living shit out of this girl for not giving me my food frm door dash", "I

will beat the living shit out of who breaks the rules" or "I will beat someone who touches my food". An unjustified death punishment suggested by utterance "people who don't like indian food should die". Gastronomical preferences generally should not be a criterion for punishment, much less death. Food is the topic of an exaggerated threat in this clause: "if someone spiking someone else's drink beat the living shit out of them". Exaggerations based on relative age – behaviour with a difference between what is it expected and what person shows "am Scottish alot maturer than you are!", "How immature for not minding your own business". There are no widely known statistics about Scottish people being more or less mature than other people, and minding somebody else business is a widely practice among all age - groups. Thus, it is unfair to connect a late childhood to the exaggerated interest shown by a victim towards other people's activities. An unfair sign of immaturity is labelled also the discussion about somebody's mother in utterance "how immature to talk about somebody's mom". People often talk about members of other families, this is not necessarily a sign of immaturity. An exaggeration is also the accusation of making the social media toxic as in exclamation "You're the reason social media is so toxic". Social media is made of opinions coming from various people. Claiming that one person is responsible for the totality of online offensiveness is a false exaggeration.

#### 4.5.2. Exaggerations by a group

The bully states a presupposition about the thoughts of a group as in "no one wants you" or "no one in America wants to hear from you". These statements, based on overpowering attitude on behalf of all group without having precise information about the opinion of each member, are exaggerations with bullying effect. The presupposition about an action made by a group of deceased people, like "our founders would puke at our cowardliness" is derogatory and exaggerated. Within the same area of tagging unfairly a state or symbols of it are "US existence is a crime" and "US flag is a nazi flag". Bullying is also labelling somebody for the group to which belong the person, a sin utterance "your democratic assholes". Telling somebody about a mass rejection is false and intimidating but not true. This message is conveyed in the dataset by indefinite pronoun "every1" spelled as an internet slang word or regular spelling in utterances "every1 abandons you", "everyone hates you" or "everyone step on you". The same group - rejection is also suggested by negative pronoun in the utterance "no one wants you". An exaggeration stating the ownership of a state conveyed by the metonymic "my state" from utterance "don't come to my state", cannot be true administratively in a republic form of government. On social media, the concept of "group" could have the meaning of followers of a person. A possible blackmail method is used by stating an information as known by whole group, but being a false, for example "the entire timeline knows". Inducing the fear of making public a personal information from victim's life without applying this threat in real world is an intimidating exaggeration.

#### 5. Discussion and Conclusions

The speech act of exaggeration within the bullying has aggressor and victim "assuming" necessarily a specific role. If X is aggressor and Y is victim, then exaggeration happens if Y takes the message as such, whereas the intention of X was. Therefore, exaggeration relies exclusively on a subjective perception of bullied – victim.

Hyperbole is a figure of speech with deep roots into poetical emotion. The question is whether any lyricism has been left into hyperbole used on social media. The dataset for hyperbole has been selected from bullying discourse utterances from social media, thus the chances to connect lyricism to bullying are very small. Hyperbole in social media is connected to satiric poetry reaching sometimes the invective to an extreme squalid language.

Hyperboles, as exaggerations, typically imply scales, and maximum or minimum points on such scales. Examples have been provided of maximising and minimising utterances although the last ones could cross the understatement, another figure of speech. However, the understatement is an "undersize" in the way of presentation, but not in the meaning transmitted by message. Therefore, all undersize and oversize meanings have been considered exaggerations or hyperboles.

Exaggeration is a source of bullying on social media. Making the individual to feel weak, big, excessive in consumption, ugly, mentally disordered and in any other way unwanted and very close to wishing one's own death, by posting such false statements on social media is bullying.

Hyperbole conveys a "strong emotion from reader" whereas "reader" is an aggressor or a victim. This is a topic open for discussions on the criteria of multiple variables crossing centuries and human perception. This document is aiming to enrich the data on hyperboles on new media in an attempt to an automatic foreseen detection of harmful content.

# 6. Bibliographical References

Brantly, A. (2020). Beyond hyperbole: The evolving subdiscipline of cyber conflict studies. *The Cyber Defense Review*, 5(3):99–119.

Burgers, C., Brugman, B. C., de Lavale tte, K. Y. R., and Steen, G. J. (2016). Hip: A method for linguistic hyperbole identification in discourse. *Metaphor and Symbol*, 31(3):163–178.

Cano Mora, L. (2009). All or nothing: A semantic analysis of hyperbole. *Revista de Lingüística y Lenguas Aplicadas*, 4(1).

Claridge, C. (2011). *Hyperbole in English: A Corpusbased Study of Exaggeration*. Cambridge, UK: Cambridge University Press.

- Connor, W. R. (2019). When hyperbole enters politics: What can be learned from antiquity and our hyperbolist-in-chief. *Arion: A Journal of the Humanities and the Classics*, 26(3):15–32.
- Ferré, G. (2014). Multimodal hyperbole. *Multimodal Communication*, 3(1):25–50.
- Ireton, C. and Posettie, J. (2018). Journalism 'fake news' & disinformation: Handbook for journalism education and training. Pris: United Nations Educational, Scientific and Cultural Organization.
- Moran, M. (2003). *Rethinking the Reasonable Person:* An Egalitarian Reconstruction of the Objective Standard. Oxford: Oxford University Press.
- Smolla, R. A. (2006). Group libel. In Paul Finkelman, editor, *Encyclopedia of American Civil Liberties*, page 715. New York: Routledge.
- Troiano, E., Strapparava, C., Özbal, G. S., and Tekirogl, S. (2018). A computational exploration of exaggeration. In *Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing*, pages 3296–3304.