Linguistic Style on Swedish Immigration Critic Alternative Media

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Abstract

In this work we use text analysis to analyze the communication on a set of Swedish immigration critic alternative media sites. Our analysis focus on identifying differences in emotional tone and the use of personal pronoun in a comparison with traditional media. For our analysis we have used the text analysis tool LIWC (Linguistic Inquiry and Word Count) and the newly translated Swedish dictionaries.

1. Introduction

In Sweden, as well as in several other European countries, there has been a recent surge in activity and formation of extreme right movements. These groups show a high inter-activity on forums and blogs, using the Internet and social media as a means for recruiting and spreading their views. In this work we will focus on how these views are presented in immigration critic alternative media. Generally immigration critic alternative media, present themselves as free and independent news sites, where the truth is expressed unfiltered, without regard for political correctness. Simultaneously, they present the established mainstream news sites and information channels as unreliable due to self-censoring and political correctness, and presumably governed by political forces. Hereafter we will use the term alternative media when we refer to the group of alternative media that is critical towards immigration.

The linguistic style can provide us with information about the author as well as the organization that publish the texts. In this work, we focus on investigating differences between alternative and regular media with respect to emotional tone and the use of pronouns. The reason for focusing on the differences between these two aspects is that an elevated use of negative emotion-words and personal pronouns in the form of third person plural words are features that have been observed in extremist sites, but not in regular media (Pennebaker and Chung, 2008).

2. Linguistic Inquiry and Word Count

To analyzed the linguistic style we have used the word-count program Linguistic Inquiry and Word Count (LIWC) (Pennebaker et al., 2001). LIWC is developed by James W. Pennebaker and it has been evaluated and tested in a number of different studies for example (Tausczik and Pennebaker, 2010) and (Pennebaker and Chung, 2008). LIWC is used to sort words into psychologically meaningful categories. In our analysis, the relative frequency of each word in a category is computed and the results describes the percentage of how much the words from a category is used. The results can be used to examine if there are any significant differences in any of the considering categories.

3. Dataset

The dataset we have collected consist of articles published on online magazines/websites during 2015. The set of alternative media sites that we consider are critical towards immigration and they were identified by domain experts[1]. The alternative media sites we consider are

- Avpixlat (4391 articles)
- Exponerat (6239 articles)
- Fria tider (4856 articles)
- Nordfront (619 articles)
- Nyheter idag (1400 articles)
- Samtiden (2632 articles)

For the alternative media, all articles published during 2015 were collected. The alternative media sites are compared with DN (the largest morning newspaper and quality press in Sweden) and Aftonbladet (Sweden's largest daily evening newspaper popular press newspaper distributed on the internet and on paper). For Aftonbladet and DN we have only collected a sample of articles that were published during 2015 (DN 1747 articles and Aftonbladet 613 articles). The samples from DN (section national politics) and Aftonbladet (section national societal news) are collected with the hope that they discuss similar topics as the alternative media. In our analysis we have divided the data into two groups: one containing all the alternative media sites and one containing DN and Aftonbladet. To verify that there are statistically significant differences between the alternative media sites and the regular media, we use a t-test. The results are presented in Table 1. The differences between the categories negative emotions, positive emotions, 3rd person plural and 1st person plural in alternative media and regular media are significant with with $p < 0.05$.

3.1 Expressions of emotion

Positive emotion words (happy, pretty, good) are used to describe positive events, while negative emotion words (hate, worthless, enemy) are used to describe negative events. Usually, when a person uses a high degree of emotion

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[1]Expo foundation

Table 1: The results for the categories we have used when comparing the two groups of media. All results are presented in percent.

	Regular media	Alternative media
Negative emotions	1.075	1.272
Sadness	0.208	0.1908
Anger	0.471	0.677
Anxiety	0.160	0.176
Positive emotions	1.671	1.502
3rd person plural	1.104	1.217

words in the description of an event, the person is also highly immersed in that event. The emotional tone in extremist material has been studied by Pennebaker and Chung in (Pennebaker and Chung, 2008), who found that communication from al Qaida leaders was relatively high in emotion compared to other texts, and also had a higher ratio of negative emotion words compared to positive emotion ones than what is usually found in natural conversation. While natural conversation contains almost twice as many positive than negative emotion words, the al Qaida-texts had a much higher relative degree of negative emotion words. We found that the alternative and the regular media were equally emotional overall (regular media = 2.74, alternative media = 2.77), but that alternative media had a significantly higher frequency of negative emotion words (1.27, 1.07). Negative emotions can be divided into three sub-categories: anger, sadness and anxiety. The results shows that anger and anxiety are the two categories that have the largest differences between regular media and alternative media. The alternative media had a lower frequency of positive emotion words than regular media (1.67, 1.50).

3.2 Personal pronouns

Pronouns are probably the most researched word class in the interdisciplinary field between psychology and linguistics. The use of personal pronouns can be linked to personality, emotions and attitudes(Pennebaker, 2011). We have chosen to examine the use of third person plural (they, them etc). The alternative media had a significantly higher frequency (with a p value < 0.025) of third person plural than regular media. A frequent use of third person plural within a group indicates a preoccupation with an oppositional group, or an outgroup, according to (Pennebaker and Chung, 2008),. The existence of such an oppositional group serves to strengthen group identity and adherence to the group's cause. According to (Pennebaker and Chung, 2008), the use of third person plural in online groups such as American Nazis and animal rights groups has been proven to be the best single predictor of extremism.

4. Discussion

Our results shows that alternative media uses more negative words than regular media. This result is also supported by (Holt, 2016) in a study where two humans manually coded 787 articles from a group of alternative media (articles were from year 2014). Our results indicates that alternative media are aggressive in their writing style and express more anxiety than regular media does.

When it comes to the use of personal pronouns, our results shows that the alternative media uses third person plural more than the regular media. This can can be a sign of outgroup-focus that strengthens the group identity of the consumer of alternative media. However, it can also be regarded as an artifact of the focus on immigration and immigrants that prevails in all the alternative media considered here. The alternative media does not, as regular media, set out to cover as much of current events as possible, but rather selects certain topics of interest. In (Holt, 2016) it is concluded that alternative media has a clear focus on the topics politics and society issues, crime and war and conflicts. Thus, the coverage in alternative media constitutes a subset of the coverage in regular media, suggesting that the comparison might not be completely fair. To overcome this issued we selected articles from regular media that focus on politics and society issues.

Acknowledgements

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