

# **NARB-BASED ANALYSIS OF TWEETS RELATED TO UNITED AIRLINES CONTROVERSY: LEARNING BEYOND THE MEDIA**

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## **ABSTRACT**

The use of narrative bits – narbs – has been discussed as an alternative means of looking at opinions of those who are producing narbs, for instance, in the form of tweets. The American carrier, United Airlines, came under media attention in April 2016 when a passenger was forcibly removed from a flight. This resulted in a spike in tweets around the #unitedairlines and the narrative that emerged from a selection of the tweets demonstrate that there were negative opinions not only about the airlines, but also about the aviation industry and passengers. This analysis demonstrates that it is increasingly important to supplement traditional learning of contemporary affairs with a systematic analysis of narbs that offer alternative perspectives of what the traditional learning offers.

## **KEYWORDS**

Narb; discourse; narrative; analysis, politics, United Airlines, opinion

## **1. NARRATIVE ANALYSIS**

The construct of looking at culture, communication and human behavior and beliefs through the lens of a narrative was suggested by the work of Walter Fisher (1984) who in turn based his work on earlier scholars who identified the importance of story-telling and narratives in the process of making meaning of everyday life as people operate within the cultural and social spaces that they occupy (see, e.g., Andrews, 1982; Gadamer, 1982; MacIntyre, 1981; Ricouer, 1977; White, 1984).

It is possible to understand what people learn by systematically analyzing the stories that are being told. In the case of social media systems these stories appear as collection of narbs, or *narrative bits*, that are made up of the different ways people express themselves – from simple status updates to the elaborate process of offering visual information that makes up the elements of the narrative. One of the most popular form of narbs that is currently available are tweets which are considered micro-blogs as different people express themselves through the short narbs that often become immensely popular and become the focus of analysis by many institutions ranging from the institutional media to political institutions.

## **2. THE UNITED INCIDENT**

On April 9, 2017 a passenger was removed from a flight operated by United Airlines. The removal was involuntary, and there was the need to use law enforcers to physically dislodge the person from the aircraft. The event was unusual for two inter-related reasons. First, there has not been any notable similar event related to a legitimate passenger, use of force and the airlines, and secondly, because the matter was copiously video recorded by other passengers and immediately made available to the larger digitally networked space. The matter was rapidly absorbed by institutional media and major television networks began to “cover” the story by talking to specialists and “pundits” who claimed either knowledge about the specific incident or were knowledgeable about policies regarding issues such as “overbooking” and other intricacies of the aviation industry in the USA. The issue continued to remain in view of the popular cultural space and on the following days newspapers carried headlines such as “United case expose lack of right

(USA Today, April 11, 2017) and “United Airlines passenger Dragged From an Overbooked Flight” (New York Times, April 10, 2017), and similar stories appeared in the institutional media around the World. The World learnt of the details of the incident and its implication through these traditional media outlets. However, a simultaneous narrative was also being created and propagated in the realm of the virtual where non-specialists were crafting the narrative from the information that was available in the mainstream media, and other information including personal experience and anecdotes that was available to the “general public” with access to Twitter. I argue that these tweets offer another way of learning about the incident a slightly different learning outcome can be obtained when learning is based on the tweets. To understand what is learnt from the tweets, it is useful to consider each tweet as a narb.

As established in the existing literature, a narb is a *narrative bit* of information that an individual produces every time the advance information in a digital space (see, e.g., Mitra, 2010). Narbs are comprised of updates on social media systems, entries on micro-blogs, and contributions to blogs and additional online platforms that shape the discourse that is occurring in the virtual space. In this case study, the focus is on tweets which serve as the units of analysis.

Corporate use of tweets has been examined to understand how different kinds of companies use Twitter as a communication channel to address internal and external issues, with some researchers looking specifically at the way in which airline companies use tweets (see, e.g., Budd, 2012; Tarhan, et. al., 2013; Wigley and Lewis, 2012; Zhang, et. al. 2016). Most of the studies look at the way in which the corporations actually use the tweet platform for different kinds of communication. However, in the case study presented here the focus shifts away from the airline industry or the passengers on the specific flight where the incident happened. A different kind of information is learnt from tweets produced by people who are presenting their opinion, based on the information gathered primarily from institutional media, and thus crafting a specific narrative. This story emerges from the analysis of the tweets, and offers a different learning about the specific event.

### **3. DATA AND ANALYSIS**

In this case, the narbs were composed of nearly 12,000 tweets that were collected when the hashtag “unitedairlines” was “trending” as a popular topic amongst the people using the micro-blogging system. The specific tweets were collected and the content of the tweets were then analyzed to extract a narrative map which is a visual representation of specific narrative categories, which are represented as the nodes of the map, and the strength of connection between the nodes represented by the relative thickness of the lines connecting the nodes.

As has been pointed out in years of research on text analysis, it is known that texts are often connected with other texts – thus the notions of inter-textuality. Similarly, texts have multiple meanings – thus the notion of polysemy. Texts are also sensitive to the culture within which it is produced. Yet, much of the automated analysis miss these nuances of texts that are fundamental to the way in which texts are able to tell stories and illuminate specific attributes of the author as suggested in the narrative paradigm. In the analysis offered here, the automation is coupled with contextualizing of the dictionary and offering an intermediary step that mimics the traditional coding process of earlier textual analysis allowing for the recognition and incorporation of the context under which the unstructured big data has been produced. This is the process that was used on the narbs extracted for this case study.

### **4. FINDINGS**

The analysis results in the production of narrative maps that offer visualization of the narratives by showing the connection between the key categories in the narrative. In these maps, the size of the circle, or node, representing the narrative category indicates the frequency with which that category appears in the narbs, and the thickness of the line between the nodes indicates the strength of the relationship.

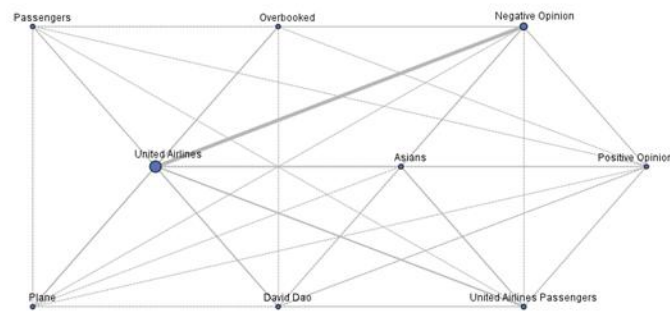


Figure 1. Narrative map of analysis of “unitedairlines”

It is important to note that the narrative is fundamentally ambiguous. The narbs do not attempt to offer a starkly “negative” or “positive” opinion, which is often the tendency in stories offered by institutions. The connection between the narrative categories of “negative” and “positive” opinion represent that the narbs would simultaneously state something bad and good about a specific narrative category. Thus, the narbs show that those who were creating the narbs, in summation of their narbs, were creating a story that attributed positive qualities to the airlines unlike what was demonstrated in a majority of the stories that were available in the media which tends to polarize the narratives.

It is also important to observe how the story is composed of many different narrative categories, which are all inter-connected. The narbs offer a narrative where many different issues are being talked about simultaneously. Thus, most of the narrative categories are connected with each other suggesting that those who are creating the narbs see the inherent connection between all the different elements and the consequent complexity of the narrative. This is another demonstration that the narb-based analysis offer a story where all the elements are important and connected with each other. Although the size of the nodes show that some of the narrative categories are discussed more frequently, it is still the case that different narrative categories emerge from the narbs. In this case, connections exist where expected – narbs are talking about overbooking and passengers, or about being Asian and the specific passenger. However, the lack of connection between being Asian and overbooking suggests that the narrative does not make that connection.

Additionally, the findings represented in the narrative map offers an “open-ended” narrative that is open for interpretation in many different ways. The narrative map offers a visualization of the narrative for the reader of the map. However, unlike other story-telling tools, such as a book or television, the story is not pre-constructed. For instance, in the case of television news, a location shot of an event is invariably accompanied with a reported interpreting and describing what the viewer is seeing. In the case of narrative maps, the viewer can extract multiple stories, with different nuances, from a map that distills the Big Data into a manageable summary. This offers a mode of learning about an event, such as the United Airlines event, which requires a cognitive engagement with the narrative in an active way unlike the passivity of being an audience of a story. With the narrative map, the reader is required to examine the map and learn from the map on a manner which is usually unavailable in other forms of storytelling.

## 5. DISCUSSION

The narrative map demonstrates that there is a strong negative opinion about United Airlines in the story that emerges from the narbs used in this analysis. Indeed, nearly 97% of the tweets that had something negative to say mentioned United Airlines. From another perspective, out of the 10,257 tweets that included the narrative category of “United Airlines,” 4,229 also included the narrative category of “negative opinion.” The story certainly demonstrates a strong negative opinion about the company. At the same time, the story does not attach a large amount of importance to the issue of overbooking. Those who were tweeting about the event appeared less concerned about the issue of overbooking. Even though overbooking of flights could be an inconvenience, it is not something that appears to be a matter of great concern, similar to all the other narrative categories all of which are less important in the narrative.

This finding is important for United Airlines, because the negativity about the company is connected with other narrative categories. The story suggests that there are negative feelings about the company and all the other narrative categories. The company could benefit from this learning and note that the story emerging from these tweets are speaking negatively about the manner in which United deals with its passengers, where customer service is a strong component of the narrative. However, it is useful for the company to note that the story based on the tweets also places some blame on the specific passenger involved in the narrative. There were 337 tweets that included the narrative category “David Dao” and 87 (26%) had a negative opinion about the passenger. This is a finding that was not available through the traditional channels of learning about the event, but this narrative analysis offer that perspective. Notable in the narrative is also the negative connection that emerges about Asians, especially in the fact that a line in the map connects negative opinion with the particular passenger and the narrative category of “Asians” offering a racial overtone to the narrative as well.

## 6. CONCLUSION

The key to narb-based narrative analysis is that it offers an alternative way of learning about issues. In an era where the availability of Big Data is only expected to increase there are different options to learning. As I have argued earlier, there needs to be systematic ways of extracting the information from narbs to offer the student or learner ways in which they can interpret the information. There is an inherent open-ended potential to what *can* be learnt from narbs as opposed to the more closed-ended situation that tells what *must* be learned.

## REFERENCES

- Andrews, J. D. (1982). The structuralist study of narrative: its history, use and limits. In P. Hernadi (Ed.). *The horizon of literature* (pp. 99-124). Lincoln, NE: The University of Nebraska Press.
- Budd, L. (2012). @doesyourairlinetweet? An empirical examination of the use of twitter by 50 international airlines. *Journal of Airline and Airport Management*, [S.l.], v. 2, n. 2, p. 124-135. Available at: <<http://www.jairm.org/index.php/jairm/article/view/10>>.
- Fisher, W. R. (1984). Narration as Human Communication Paradigm: The Case of Public Moral Argument, *Communication Monographs*, 51, 1–22.
- Gadamer, H. G. (1982). *Truth and method*. New York, NY: Crossword Publishing.
- MacIntyre, A. (1981). *After virtue: A study in moral theory* (2nd ed). Notre Dame, IN: The University of Notre Dame Press.
- Mitra, A. (2010). Creating a Presence on Social Networks via Narbs. *Global Media Journal*, 9(16).
- Murthy, D., & Petto, L. R. (2014). Comparing print coverage and tweets in elections: A case study of the 2011–2012 U.S. Republican primaries. *Social Science Computer Review*. Advance online publication. doi:10.1177/0894439314541925
- Propp, V. (1968). *Morphology of the Folktale: Second Edition*. Austin, TX: University of Texas Press.
- Ricouer, P. (1977). The model of the text: Meaningful action considered as text. In F. R. Dallmayr & T. A. McCarthy (Eds.), *Understanding and social inquiry* (pp. 316-334). Notre Dame, IN: The University of Notre Dame Press.
- Tarhan, A., Canoz, K., and Bakan, O. (2013). Airline Companies’ use of Social Media: A Content Analysis of Airlines’ Companies Tweeter Messages. *Proceedings of The Asian Conference on Social Sciences*.
- Todorov, T. (1977). *The Poetics of Prose*. Ithaca, NY: Cornell University Press.
- Wigley, S. and Lewis, B. K. (2012). Rules of engagement: Practice what you tweet. *Public Relations Review*, 38(1), 165-167.
- Zhang B., Kotkov D., Veijalainen J., Semenov A. (2016) Online Stakeholder Interaction of Some Airlines in the Light of Situational Crisis Communication Theory. In: Dwivedi Y. et al. (eds) *Social Media: The Good, the Bad, and the Ugly*. I3E 2016. Lecture Notes in Computer Science, vol 9844. Springer, Cham.