Clickbaits: Curious Hypertexts for news narratives in the digital medium

Lasya Venneti
International Institute of Information Technology,
Hyderabad (IIIT-H)
lasya.venneti@research.iiit.ac.in

ABSTRACT

News reporting is increasingly becoming an exercise in attention catching headlines1, and raising expectations which trigger sharing on social media. The proposed paper examines how conventional journalism can stay viable despite the transformations brought by rapidly changing media forms. We examine the role of human curiosity as a major contributing factor in online content navigating mechanisms such as clickbaits, listicles, and sharing behaviour on social media.

As news reporting shifts online, the navigation on the internet resembles the exploration of primitive humans beyond their immediate needs. The clickbaity headlines are becoming popular with editors and readers putting pressure on news reports to 'dumbdown'. This paper will explore how evolutionary anthropology, psychology, neuroscience and sociology provide insights into the working of clickbaits: 'how exactly do they attract viewers and why?' It is based on a study of news reports in three mainstream Indian newspapers over one year (2014) during which an important general election was held. It studies the headlines that garner attention and analyse their morphology. We hope to use our learnings on clickbaits to see how journalism which stays true to its mandate of informing citizens and providing news can attract views and readership and thus remain viable.

Reference format:

Lasya Venneti and Aniket Alam. 2017. Clickbaits: Curious Hypertexts for news narratives in the digital medium. In *Proceedings of Workshop on Narrative and Hypertext '17 (NHT17), Prague, Czech Republic, July 2017*, 3 pages, CEUR-WS.org.

1 INTRODUCTION

With the advent of the news shifting to the internet, electronic tablets and mobile phones started becoming first stop for news, giving it remarkable immediacy[24]. Legacy media's print formats, styles; broadcasting media's prime slots started losing relevance and it is in this context of radically changed media characterized by myriad 'information availability and presentation possibilities', this paper looks at the viability of the conventional news journalism, the reporting style and its morphology.

Aniket Alam
International Institute of Information Technology,
Hyderabad (IIIT-H)
aniket.alam@iiit.ac.in

The Indian print media continues to defy the global trends by posting robust growth during the last decade, is projected to grow at a CAGR of 8% and is forecasted to touch INR 400 billion in 2020[1].

However newspapers are aggressively pursuing digital space cautioned by the breath-taking pace of mobile internet growth and penetration, and the demographics of the country. Indian internet users are expected to touch 465 million by June 2017 and the Indian mobile usage is estimated to be more than 750 million mobile users by 2018[15]. The digital age has dawned on the Indian news reporting industry. The digital media recognized the need to optimize the content to mobile phones and started building in features like alerts, daily updates, breaking news. The legacy print and broadcasting media 's success in India is determined by distribution, whereas the digital news is valued based on reader interest and traffic is the key litmus test[7]. The digital journalism with its amazing capability to aggregate and hyperlink information, multi-modal presentation and speed of access and spread will challenge the conventional rules of news reporting business[3, 17]. One of the most well-known methods is the clickbait, it is a global phenomenon, largely used in trivia domains like entertainment, fashion, and health and nutrition etc[11, 20]. Now it is also making an entry in serious journalism[21]. Our research focuses on how clickbait is being used and how it can be used in serious news journalism. Most of the players notably the new digital only platforms recognize that news is unlikely to be read on the portal in its layout position and menu, but is likely to be read in a context, setting and time driven by the ever evolving reader habits of digital navigation[4]. It is in this context we examined the role of human curiosity as a major contributing factor in online content navigating mechanisms such as clickbaits, listicles, and sharing behavior on social media.

2 RELATED WORK

We looked at the existing research available about newspaper reading habit[7] and the impact of changing media forms on the style, structure of the news article[4, 6, 9]. There has been extensive study on detecting clickbaits using linguistic features of text comprising of a certain types of words decribed as 'clickbaity '[5, 10, 11] or non-textual image based cues [6]. We have reviewed the theories of curiosity from various domains to be able to deduce curiosity models for the news headlines and body narratives. We have taken in theories of curiosity starting from Nature of curiosity [2, 16, 26], modelling of stimuli and collative variables and role of curiosity in social interactions[8]. We also looked at the second wave of research on curiosity, which combines the instinctual and cognitive aspects of it and hypothesized that this research explains the reader preference for listicles[13, 19]. We also looked at two other aspects of curiosity not often mentioned viz. empathic curiosity in

narratives[14, 18] and tactile curiosity[22] and could posit these theories for clicking and sharing behavior of news narratives on social media.

3 CURIOSITY MODELS FOR THE HEADLINES AND BODY NARRATIVES

News gathering and reporting by mankind has its origins in human craving to share information and our need to do so in an increasingly interdependent society. The underlying role of 'news reporting', remain unchanged over centuries, is to construct and maintain our shared realities. News is a social glue and binds us in to various virtual communities and it helps us shaping our various identities[27]. Seeking news and thus acquiring knowledge has utilitarian, psychological and hedonistic motives to the humans. The study of news seeking behavior of the readers is closely linked to curiosity as in humans curiosity is linked to cognition, emotion and behavior. We looked at the scientific literature of the curiosity to understand the reader preferences in selection and sharing of the news. The following theories are proposed

3.1 Diversive curiosity

Among the psychological models proposed to understand curiosity, earliest and one of the most influential ones is by Daniel Berlyne. He proposed four dimensions of curiosity in his early work characterized by 2 X 2 matrix of epistemic curiosity (desire for information and knowledge), perceptual curiosity on one axis (one's attention to novel objects in their immediate environment) specific curiosity (desire for a particular piece of knowledge), Diversive curiosity[2] (stimulation seeking to escape boredom) on the other. It becomes clear from Berlyne's experiments that navigating on the net is akin to satisfying diversive curiosity, typically starts with the itch to explore. The internet surfers seek both new sensations of sights and sounds at the same time long for variety of information. When on the internet, human diversive curiosity is stimulated by the barrage of texts, tweets, alerts, breaking news that stimulates hunger for novelty. The headline confirming to satisfying the reader's rest less desire for newness and novelty catches attention. Diversive curiosity is the gateway to further the epistemic interest of the reader.

3.2 Head line as the object of pleasure

Humans are said to be hardwired for curiosity, sometimes called 'informavores'; it is reasoned that from an evolutionary perspective animals seek out information as it can hold key to the survival and reproduction of the species. They hypothesized that it could be due to the fact that evolutionary pressures made information intrinsically rewarding and therefore evolution must have built up reward system driving the behavior[14]. Research by Neuroscientists concluded that dopamine neurons responded to information the same way they respond to hunger. The reader of digital news is like a traveller on a digital highway, a headline is a 'curiosity pit stop affirming reader bias[25] and providing pleasure of information'seeking 'pleasure of information'. In this situation 'headline' by itself becomes the object of pleasure. The mere 'raising' of user anticipation leads to surge in dopamine levels[12, 23] when the anticipation is 50 % the dopamine levels hit the peak. This would

mean even if the headline delivers reader expectation 50 % of the times or to 50 % of the level the reader will keep clicking on the headlines.

3.3 Information gap and epiphany

George Loewenstein's information gap theory[19] is the most influential one and proposed that information fuels curiosity by creating awareness of ignorance. Further he proposed about motivation behind information seeking in his most recent paper. One of the factors contributing to curiosity is epiphany [13], people are motivated to acquire information that has the potential to fill multiple information gaps at once. These two findings by Loewenstein brings us to the design of 'fact reporting headlines' and the importance of listicle style news reporting. A well-framed headline with a listicle instantly brings the reader on to curiosity zone and offers to fill in many gaps through the list. The reader is motivated to click.

3.4 Tactile curiosity

A recent study on motivating people proposed the concept of 'tactile curiosity' [22] which is based on the view that human cognition is inherently embodied. The roots of this are in phenomenological tradition of philosophy in which objects are described as affordances, most emphatically expressed by Heidegger. We can posit this new concept about determining the reader inclination in selecting the news headline and sharing the article after adding by-lines and their own interpretations. Jacob Bronowski famously said that 'The hand is the cutting edge of the mind'.

3.5 Empathic Curiosity

A relatively less researched stream is empathic curiosity which is interest about thoughts and feelings of others (different from gossip and prurience). One practices this when one puts oneself in other's shoes (mind). Ian Leslie leading British journalist in his popular book 'Curious' [18] categorizes that the major index of empathic curiosity is literature, drama and poetry. The literary techniques employed in narratives let the readers experience the feelings of the character portrayed. This holds great relevance to writing of news narratives. The narrative which readers identify themselves with and those with which readers long to fill in the information gap of their friends get shared across the social media.

4 METHODOLOGY & DATA SOURCES

We have attempted to compute the clickbaity-ness of the headline as discussed in the above models by adopting the following methodology.

- Degree of novelty: A knowledge graph is developed comprising of leading Indian political personalities, states, events, ideologies, parties, religions, social formations etc. The diverse curiosity is the degree of novelty of the headline measured by mining path length and depth of entities on the knowledge graph.
- Anticipation score: We have measured the forward referencing techniques employed, special characteristics (!,? etc.), usages in the head lines to establish the anticipation score, a guide was prepared manually with standard English usages which served as a reference scale.

 Epiphany: We attempted to measure this by the length and structure of the head line and mention of listicle in the headline.

The methodology to compute both tactile and empathic curiosity is being worked on.

5 CONCLUSION AND DISCUSSION

The preliminary analysis shows that high curiosity articles as per the score developed indeed agreed with the click through rates & sharing rates obtained from the news site. The study is also bringing in interesting insights about how the same news is being shared by the three newspapers on different platforms.

In addition we are looking at headlines, their life on social media involving sharing, responding and liking on two social media platforms Twitter & Facebook. We would be looking at comparative trends and also compare it with most read on the newspaper portal.

We hope that research will help clarify whether and to what extent clickbait is being used by main stream media in India and give us some initial clues about how effective it is. We hope to Identify some of the broad patterns in which clickbait is used to enhance readership in one small section of India 's print media in its digital interface.

ACKNOWLEDGMENTS

This work is part of the ongoing MS thesis in Computational Humanities under the guidance of Prof. Aniket Alam, formerly Executive Editor of Economic & Political Weekly.

REFERENCES

- 2017. KPMG report on Indian and Media entertainment industry 2017. Federation of Indian chamber of commerce and industry-FICCI (2017).
- [2] D.E Berlyne. 1960. A Theory of Human Curiosity. (1960).
- [3] Lakshmi Chaudhry. 2016. Can the digital revolution save Indian journalism? https://www.cjr.org/special_report/india_digital_revolution_startups_ scoopwhoop wire times.php.
- [4] Blom et al. 2014. Click bait: Forward-reference as lure in online news headlines. *Journal of Pragmatics* (2014).
- [5] Biyani et al. 2016. 8 Amazing Secrets for Getting More Clicks: Detecting Clickbaits in News Streams Using Article Informality. AAAI (2016).
- [6] Chen et al. 2015. Misleading Online Content: Recognizing Clickbait as âĂIJFalse NewsâĂI. WMDD (2015).
- [7] Holmqvist et al. 2003. Reading or Scanning A Study of Newspaper and Net Paper Reading. The Minds Eye: Cognitive and Applied Aspects of Eye Movement Research (2003).
- [8] Kashdan et al. 2013. How Are Curious People Viewed and How Do They Behave in Social Situations? From the Perspectives of Self, Friends, Parents, and Unacquainted Observers.
- [9] Kumpel et al. 2015. News Sharing in Social Media: A Review of Current Research on News Sharing Users, Content, and Networks. Social Media + Society (2015).
- [10] Kim et al. 2016. How to Compete Online for News Audience: Modeling Words that Attract Clicks. KDD (2016).
- [11] Potthast et al. 2016. Clickbait Detection. Advances in Information Retrieval, ECIR (2016).
- [12] Bryan Gardiner. 2015. You'll be outraged at how easy it was to get you to click on this headline. (December 2015). https://www.wired.com/2015/12/ psychology-of-clickbait/.
- [13] Russell Golman and George Loewenstein. 2013. Curiosity, Information Gaps, and the Utility of Knowledge. (2013).
- [14] Vivian Hemmelder and Tommy Blanchard. 2016. Why Humans Are Hard-Wired For Curiosity. Footnote (2016). http://footnote.co/ why-humans-are-hard-wired-for-curiosity/.
- [15] IAMAI. 2016. IAMAI-IMRB Report 2016. (2016). http://www.iamai.in/.
- [16] Izard. 1977. Human emotions. Plenum (1977).
- [17] Vinod K Jose. 2013. Habits Of Mind. http://www.caravanmagazine.in/ perspectives/habits-mind.
- [18] Îan Leslie. 2014. Curious: The Desire to Know and Why Your Future Depends on It.

- [19] George Loewenstein. 1994. The Psychology of Curiosity. (1994).
- [20] Jack Murtha. 2015. What it 's like to get paid for clicks. https://www.cjr.org/analysis/the_mission_sounds_simple_pay.php.
- [21] Tamara Pearson. 2016. Clickbait v Political Impact: Alternative Journalism as Social Media Becomes the New News Source. counterpunch.org (February 2016).
- [22] Jonathan Rowson. 2012. The Power of Curiosity. RSA Social Brain Centre (June 2012).
- [23] Robert Sapolsky. 2016. Maybe is addictive like nothing else out there. http://jnack.com/blog/2016/01/06/maybe-is-addictive-like-nothing-else-out-there/.
- [24] Arjit Sen and Rasmus Nielsen. 2016. Digital Journalism Start-ups in India. Reuters Institute for the study of Journalism (May 2016).
- [25] Jeremy Smith. 2017. The Psychology Triggers Behind Clickbait Titles and Why We Click Them. (2017). https://www.jeremysaid.com/blog/ psychology-behind-clickbait-titles/.
- 26] Tomkins SS. 1962. The positive affects. Springer (1962).
- [27] Karin Wahl-Jorgensen and Thomas Hanitzsch. 2009. The Handbook of Journalism Studies