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Algorithmic Visibility and Epistemic Power: How Social Media Algorithms Shape the Representation of Latinx Communities

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Abstract: Algorithms used in social media platforms shape how communities are represented online, but are often portrayed as neutral. This paper analyzes how engagement driven systems influence the perceptions of Latinx communities and argues that incorporating more marginalized perspectives into the design of these algorithms is necessary for equitable online representation.

INTRODUCTION

Social media is the leader in how information is spread in today's world, making it extremely powerful for narrative building and forming a dominant perspective. Some of the most popular platforms, including TikTok, Instagram, and Facebook, are all seen as free spaces where anyone can log on and create or share content freely. This is because these social media platforms are presented that way, but everyone's content is not equally pushed due to the underlying algorithm systems. These systems decide what content gets pushed and to what audience. To reach an audience, you have to get through these algorithms in order to get to an audience, and if the algorithms deem your content as not worthy enough according to their metrics, then its visibility is little to none. Due to this, the algorithms shape how certain communities are represented and perceived by the rest of the online platform's users, whether accurate or not.

Most technology companies, big or small, frame their algorithms as neutral systems that simply organize a lot of information quickly and effectively. However, research has shown that these "neutral" algorithms are not completely neutral. The main reason being that they are embedded within social and economic structures and are built to benefit the company building them as much as possible. Safiya Noble argues that search and recommendation systems are not simple objective tools and that they actually reflect the priorities of advertisers and the social assumptions of the institutions that design them (Noble 2). This is due to these algorithmic systems being designed and built to generate as much engagement and revenue as possible. When the focus is money and clicks, keeping neutrality becomes pretty difficult. Those are the metrics that drive these algorithms, and this results in pushing content that generates the most reactions, shares, and views. This pushes that content to be more visible, while the content that provides more accurate representations gets suppressed.

Marginalized communities suffer greatly because of this, but the focus of this paper will be on the Latinx community. The Latinx community is one of the largest and fastest-growing demographics in the United States. Given this, the way that their identity is represented on online platforms is a result of stereotypes or cultural narratives that, quite frankly, do not have all of the details. These representations begin to dominate because of the algorithms that are designed to push content that strengthens familiar narratives and drives engagement. One representation dominating means another is being suppressed and this representation is typically the one that captures the actual lived experience, which if you ask me is far more important due to it being more detailed and not as simple as the one that dominates.

Looking at this through the idea of epistemic authority makes it easier to analyze how technology and the way people are represented work together. Epistemic authority is seen as the ability to determine what information is actually legit, what perspectives are focused on, or which perspectives are suppressed in public conversation. The ones with the highest authority in this case are the bigger social media platforms like TikTok, Instagram, and Facebook which have algorithms that determine what content/information goes viral and what will remain niche. Tarleton Gillespie brings up the idea that online platforms like these are really powerful middlemen that want to appear as neutral technology systems, but the reality being that they influence how information goes around. They have control over what goes viral and when.

We could also take a look at standpoint theory to see how and why these systems consistently fail when it comes to properly representing marginalized communities. This theory is the idea that knowledge is community-based and that people who come from these marginalized communities have valuable knowledge that comes from their lived experiences. It says that this knowledge is not seen in the dominant perspectives most of the online world sees. If people do not see this perspective, and we do not help the algorithmic systems push it, then the result is an infrastructure that produces or strengthens social inequalities, which is not very neutral.

In this paper, we will critically analyze how the current algorithms, which are attention and money hungry, shape how Latinx communities are represented in popular online platforms. We will be looking at how algorithmic visibility, epistemic authority, and the use of engagement and profit driven algorithms work together. We will argue how these three factors increase and strengthen the inequalities seen in society today by pushing inaccurate narratives while silencing those that actually provide a valid representation. We will finally look into a possible solution, being the incorporation of standpoint theory when designing these technologies, and how it would lead to a more equitable infrastructure online.

METHODS

We will be looking at research that has already been done on algorithmic biases, social media, and the many different ways that technology affects the societies we live in. So instead of focusing on algorithms and what is specifically under their hood, we will try to gain an understanding of the similarities found in previous research. We want to understand how recommendation systems used today influence how viral a piece of information or content gets and how different communities are seen by others on the internet.

As stage one of the research I focused on reviewing studies that have been conducted regarding algorithmic biases in machine learning systems. Machine learning systems are the new era of how content gets pushed to different communities and has completely taken over the algorithmic space. So we definitely want to know how the issues at hand are being seen in them as well. There have been many researchers who have found that these automated systems are all about repeating patterns, and the patterns they repeat are the ones they see in the data they are trained with. The data they are trained with is typically far from neutral as it often displays the inequalities previously mentioned. So the problem is easy to spot, if we train models on data that reflects inequalities, it will recognize these as patterns and repeat them. Baroda and Selbst suggest that these systems that are data driven can and will produce discriminatory outcomes due to the fact that the data they are learning from is historical data containing these structural biases (Barocas and Selbst 673). Train algorithms or machine learning systems with discriminatory data, get discriminatory results.

The next part of the research I focused on looking at studies regarding how content is pushed or recommended to users. I am sure most people know that these recommendation algorithms push content based on engagement metrics. This would be looking at the how. Most social media platforms make money from ads, so they want to have a ton of users active to have more leverage and get more companies to pay to have ads. These engagement metrics include clicks, likes, shares, views, and watch time. Gillespie explains that even though these recommendation systems are automated, they are still influencing what content and information goes viral and what information is pushed more heavily (Gillespie 174). I mentioned previously that when engagement and profit is the main priority of a social media company, neutrality becomes extremely hard to maintain, making it easy for social inequalities to be pushed on social media due to them being common ideas and driving engagement.

The final part of this analysis is done through the lens of standpoint theory. As discussed in ENGR 184, standpoint theory argues that individuals who come from and have experienced what it is like to live in marginalized communities have valuable perspectives on social systems that are not super clear to those from dominant communities. If we look at the creation of algorithms through the standpoint theory framework, it becomes obvious how excluding the perspective these individuals hold when designing these algorithms leads to systems that overlook these already marginalized communities. So having someone who has gone through the struggles understands them and knows what to think of when designing for it.

RESULTS AND INTERPRETATION

The analysis I did truly revealed how social media algorithms have a huge influence in how the Latinx communities are represented online. The reason for their influence is simply because these social media platforms are extremely engagement and profit driven, throwing the care for accurate representation of communities out the window. The technology companies also have a ton of epistemic authority regarding the content that is actually pushed to users on their platforms. With recommendation systems being designed to prioritize engagement heavily, we typically see content that produces a stronger emotional reaction as opposed to content that might have a more accurate representation because that is boring and does not bring in views and money. This makes it super easy for cultural narratives to spread even if they are not accurate or align at all with the experiences Latinx communities face. The effects of this are that Latinx communities start to believe these narratives themselves, keeping them trapped.

These systems that rely on engagement use feedback like likes, comments, shares to determine if a piece of content or information is interesting or not. What is not considered is that interest does not equal accuracy and causes algorithms to push this content more. So users interacting with posts that share simple narratives or reinforce a familiar stereotype leads to the algorithm thinking that this content is valuable and recommending it much more. Noble states that this process has the ability to actually reinforce existing inequalities due to the nature of these algorithms being designed to prioritize money and views instead of fair representation (Nobles 7). This leads to the same narratives being spread over and over because the systems know that this narrative is where the money is at. What these systems also learn is where the money is not at and the more accurate representation remains in the shadows.

We also saw how machine learning algorithms depend on patterns that are found in the data they are trained with when determining what content to distribute. What is not taken into account is how cultural identities are super complex and variable, making it almost impossible to put it in a certain category. So how are these algorithms truly organizing information? They do so by simplifying the categories of people and reducing the identities just to make it easier for the machine to process and use it. This simplification of categories eventually is reflected in the continent that is pushed and therefore becomes a dominant way that users view these individuals and the communities they belong to. So oversimplifying for efficiency leads to this oversimplification being seen by users and creating a false representation.

We looked into epistemic authority and the result shows that is the biggest factor as to why these inequalities and unfair patterns continue to exist. These technology giants are the ones that control these social media platforms and their systems. These companies have absolute control over which narratives get pushed simply because they own them. They claim to be neutral but if certain content does not boost their engagements and profit then they have no reason to push it. It is also very complex when determining if certain narratives are actually helping the company in terms of the metric mentioned. It is not always about making money from ads or views, but also other factors such as partnerships they have. To the outside world, they perceive the platform as neutral which makes it difficult to truly know how much our views are influenced by these platforms.

With standpoint theory we are able to see some of the limitations within this system. When algorithmic systems are designed and built without the incorporation of ideas and perspective from marginalized communities, these communities will not be properly represented and important parts of their identity will be overlooked. Members of the Latinx community see these popular narratives and how it reinforces stereotypes, but their perspectives are almost never included. This is because as marginalized communities, they do not have huge representation in the spaces where these technologies are built. This leads to the infrastructure in these social platforms to organize information that produces unusual patterns of representation, which reinforces the inequalities. All of this does have an effect on how the Latinx community sees function and is looked at in society, which leads to staying marginalized and not having proper representation when these new technologies are built, creating a full circle.

CONCLUSIONS

We were able to see the impact that social media algorithms have on how Latinx communities are represented online. Although we did not dive into super specific Latinx examples, we spoke about the general troubles faced by marginalized communities due to these algorithmic systems. These social media and algorithmic systems are portrayed to be these completely neutral tools but they are built prioritizing engagement and profit. When you prioritize these two, neutrality is almost impossible to keep because the system only cares about what is generating the most likes, comments, and shares. The content that does well in those metrics gets the reward of being pushed to more users which leads to more likes, comments, and shares. This content is not always checked for the narrative that they push and leads to the simplification of marginalized communities identity and reinforces stereotypes of the Latinx community.

We also saw how epistemic authority plays a big role, if not the biggest, when it comes to shaping the results we see. These technology companies have almost absolute control over the content that is pushed on their platforms since they own them. These marginalized communities obviously do not have a ton of representation when it comes to the design and creation of the algorithms used in social media platforms. These systems are typically built by people from dominant positions and therefore the systems are built that way. So without proper inclusion of these marginalized perspectives, these algorithms will keep on pushing out unequal patterns of representation. This is the entire idea behind DEI. If we make it easier for marginalized communities to be accurately represented where these technologies are being built, then we will be able to use their experiential knowledge to minimize the effects of them not having proper representation in the first place. Otherwise it is an infinite loop and we will continue seeing inaccurate representation of Latinx communities.

In order to address the problem with these algorithmic systems we need to look at how they are designed and how they are evaluated. Like I previously said we can look into incorporating experiential knowledge from these marginalized communities when designing and developing technologies. These lived experiences provide different perspectives and ideas that were not seen as problematic will be double checked because now someone has the ability to point it out. We can also understand that technology is influenced by what is valued in society and who holds the power. So designers and researchers can start looking into systems that do support equitable online representation. This possible solution may be a stretch due to confidentiality and ownership but maybe these algorithmic systems can become more transparent. This would allow for proper research and better understanding in how these platforms influence the spread of information and cultural narratives.

We ultimately have to understand the relationship between technology and the inequality we see in society in order to come up with a solution that could provide real equality and accurate representation of the Latinx and other marginalized communities.

Works Cited

Barocas, Solon, and Andrew D. Selbst. "Big Data's Disparate Impact." California Law Review, vol. 104, no. 3, 2016, pp. 671–732. https://www.cs.yale.edu/homes/jf/BarocasSelbst.pdf

Gillespie, Tarleton. Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions That Shape Social Media. Yale University Press, 2018.

Noble, Safiya Umoja. Algorithms of Oppression: How Search Engines Reinforce Racism. New York University Press, 2018 https://safiyaunoble.com/wp-content/uploads/2020/09/Algorithms_Oppression_Introduction_Intro.pdf