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Ukraine War as Fought on Iran's X*

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Abstract

When the war broke out in Ukraine, this eastern European country started a successful resistance that pinned down the Russian army in many regions and created a stalemate that has sparked a war of attrition not only in Ukraine, but also on social media territories in other political spheres. This study investigates the way in which Ukraine war is represented -or to be more precise, fought- in the Iranian X. Data mining methods were employed to search, find and extract posts including "Ukraine war" -or "جنگ اوکراین" in Persian. Our main question was, how did Iranian X users position themselves with regard to war in Ukraine? Using Python, a popular social media research tools, 2027 relevant posts were extracted to show the way in which Iranian users position themselves with regard to Ukraine war. Results revealed that the two Iranian main political factions -namely Reformists and Fundamentalists- see this war not as a war of other countries, but that of their own. The pro-Western Reformists favor the Ukrainian side of the war and the pro-Eastern Fundamentalists favor the Russian side of the war. They fight on social media as though the Ukrainian war is their own war.

Keywords: Data-Mining, Iran, Russia, Ukraine, Ukraine War, X

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1. Introduction

The Ukrainian conflict, which ignited in 2014 following Russia's annexation of Crimea and became a full-scale war when Russia invaded the Ukrainian main land in February 24, 2022 has evolved into a quagmire that is far more complex than a simple territorial dispute. What initially seemed like a regional issue has transmuted into a multi-faceted conflict with global implications (Nasir et al., 2022), not only in the realm of geopolitics, but more increasingly in form of conflict on social media. This transformation underscores how the paradigms of warfare are shifting in the 21st century, fusing conventional tactics with digital strategies to spawn a new breed of confrontation that will re-structure all the preexisting alignments, particularly in the regions which are geographically or politically close to the warzone.

The war has birthed rivalries that extend beyond the borders of Ukraine and Russia, drawing in Western and other powers into a high-stakes battle for influence. On the surface, it appears to be a struggle between Russian ambitions and Ukrainian sovereignty, but the subtext reveals a complex interplay of regional hegemony, NATO expansionism, and geopolitical chess involving the United States, the European Union, Iran, Turkey, Israel and other global and regional players. Russia's actions in Ukraine have been read as a challenge to the post-Cold War world order and have led to heightened tensions between Moscow and the West (Price, 2022). Sanctions have been employed as a weapon, but they have also backfired by pushing Russia closer to other powers like Iran, thus creating new geopolitical equations.

Perhaps the most unexpected, yet inevitable, evolution in this conflict is its extension into cyberspace and the social media (Hauter, 2023). In the 21st century, information warfare can be as

impactful as military operations (see for example Zohouri et al., 2020; Sabzali et al., 2022), Ukraine has become a testing ground for cyber tactics. Both state and non-state actors have been implicated in a series of cyber-attacks targeting infrastructure, financial systems, and public opinion. However, it is not just Russia and Ukraine who are involved in this war. Other countries, keen on either supporting Ukraine or currying favor with Russia, have also been dragged into this virtual battleground. The United States and its allies have been assisting Ukraine in bolstering its cyber defenses, while the Russian side has reportedly benefited from a rise in "patriotic hacking," encouraged by a domestic environment that blurs the lines between criminal hacking and state-sponsored cyber operations (Smith & Dean, 2023).

Cyberspace offers a platform for information warfare and propaganda. Both sides in the conflict have mobilized social media, news outlets, and other information channels to shape global perceptions. Fake news and manipulated narratives muddy the waters, making it challenging for neutral observers to discern fact from fiction. Given the powerful impact of public opinion on policy-making, especially in democratic countries, these digital strategies are not merely peripheral to the conflict; they are central to it.

The Ukrainian war, therefore, serves as a case study for the future of global conflicts, where the line between the physical and digital worlds is increasingly blurred. The rivalries it has sparked are deeply rooted in history, but they are also emblematic of the complexities of a multipolar world order and the disruptive power of technology. As nations continue to adapt to this new paradigm, it is imperative to address the ethical, legal, and political challenges that arise from this amalgamation of conventional and digital

warfare. People's behavior on social media provides us with valuable information about their motivations and opinions (see for example, Aris et al., 2023; Sabbar & Matheson, 2019; Shahghasemi, 2020). A study on how Iranians have reacted to the war in Ukraine on X could therefore yield interesting results that will reveal the way in which in our connected new world, every simple action or reaction might affect the turn of events in astonishing ways.

For the past two years, we have examined the way in which Iranians have expressed their viewpoints regarding the Ukrainian war, or the way in which they have reacted to this war, since the Persian social media has been fraught with tweets (now posts) about the war in Ukraine. A preliminary study revealed that on social media, Iranians' stance about the Ukrainian war was very divided, in a way that it seemed as though the political inclination of Iranians has deeply influenced their views on this war.

2. Alignment Square

Humans are deeply complicated animals. Much of what we do in our social world cannot be understood by even the smartest animals. Evolutionary, we have learned that there is much benefit in cooperating with others and to create a complex system in which payoff would be delayed, since it is worth it (Tomasello, 2010). Political scientists, such as Elinor Ostrom, Robert Axelrod, and Mancur Olson have contributed seminal works that explore the benefits derived from cooperative behavior within human groups. Elinor Ostrom (1990), for instance, examined "common-pool resources" and debunked the prevalent assumption that individuals, when acting in their self-interest, will inevitably deplete shared

resources. She demonstrated that local communities often develop robust systems for the cooperative management of resources, defying the "tragedy of the commons" and illustrating the capabilities of human groups for self-organization and sustainable governance.

Robert Axelrod's work on the evolution of cooperation, largely analyzed through game theory, brought forth the understanding that cooperation is not only beneficial, but can also be a dominant strategy in many scenarios. Axelrod (1984) used the example of the "Prisoner's Dilemma" to show that even in situations where betrayal seems advantageous, "tit-for-tat" strategies, where entities reciprocate the actions of their partners, can foster an environment of trust and mutual benefit. This idea has vast applications in international politics, where alliances and treaties often operate on the basic premise of reciprocal trust and benefit. Similarly, Mancur Olson (1965) tackled the concept of "collective action" and examined the way in which groups either succeed or fail in achieving common goals, depending on their ability to overcome the 'free-rider problem,' in which individuals enjoy the benefits of collective action without contributing to the cost. Olson's work brings forth the idea that smaller groups often find it easier to organize and act in their mutual interest, while larger groups struggle with coordination, thus requiring structured institutions and rules to foster cooperation.

Political groups might want things that are not humane (gold, wealth, land, water) ,but they should interact or fight with other groups attain these loots. Our ancestors believed that it is better to form coalitions with enemies to join forces and bring down neighboring groups and pillage them. Furthermore, they found, there might be other coalitions that must be taken care of. This

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belief has continued to our time, albeit in a more complicated way, on the basis of what this paper would call the alignment square:

> Fight your enemies; support your friends; fight friends of your enemies; support enemies of your enemies.

As mentioned above, the Iranian social media sphere, particularly on X, carries hard debates over the Ukrainian war; what interested us in this research was the role of users' political alignment in their stance towards this war. In general, there are two main political parties in Iran. Reformists are the progressive people -sometimes with mild Islamic and Shi'ite beliefs- who are more receptive of Western ideals, such as democracy, secularism, and make more friendly relations with the world, (Hunter, 2009; Baktiari, 2005; Kazemi, 2003; Mir-Hosseini, 2017; Takeyh, 2009; Hunter, 2014; Saikal, 2015; Hanafi, 2014), while Fundamentalist are more traditional, pessimistic of the West, more inclined towards other powers, such as China and Russia, and favor more rigorous examination of the so-called Islamic law (Davidson, 2013; Posch, 2013; Choueiri, 2010; Mirsepassi, 2010; Katzman, 2015; Behravesh, 2011). Since the rivalry continues in Iran, and as the situation became even more complicated by other issues like economic decline and international sanction (Shahghasemi, 2021), both of them frequently try to align with foreign powers of their side to outrun the other one. It is not surprising, then, if Fundamentalists see the vanquish of Russia as undermining their interests, while Reformists see Russia's victory as boosting their rival's power. In order to see if this hypothesis is true in reality, a data-mining project was designed and carried out. Our data-mining project was meant to answer our research question:

> RQ1: How do Iranian reformist and fundamentalist users of X see the Ukraine war?

3. Methodology

In this study, the aim was to analyze the political orientation of Iranians on X regarding the war in Ukraine. This study sought to understand the perspectives of Fundamentalists and Reformists in Iran regarding this war and its consequences. Whenever someone speaks and expresses his/her thoughts, feelings, opinions, criticisms, suggestions, or objections, he/she does so through texts, often shared on social media platforms as comments or personal opinions. People's opinions are stored as bits of data or information, and billions of bits of data are exchanged daily on platforms, websites, and any technologies that are connected to the internet. This data is used by many industries and particularly companies that produce consumer goods, who are interested in knowing about people's habits of purchasing, as well as patterns of behavior (Sarfi et al., 2021).

Screenshot 1. Reformist user: I [. . .] will not get into violation of impartiality in war in Ukraine and necessity of its ratification in the assembly to enter this war [. . .].

Source: Shirzad, 2022

In order to design this study, we first conducted an informal survey. Aeini et al. (2023) did a well-designed study on Iranians' considerations in presenting themselves on social media. Iranians'

prudence in expressing their opinions in real conversations and traditional settings, they say, have consequences that may convince them to approach social media for expressing their more honest ideas. Aeinin and his colleagues conclude that Iranians are more honest on social media, to the degree that they might even compromise their privacy. Based on these insights, we believe that studying social media will provide us with more honest and "authentic" viewpoints of the Iranian users. We searched "Ukraine war," or"جنگ اوکراین" in Persian- on X and inspected the tone and political alignment of the account owner. After manually inspecting over 200 posts, we thought this research would be feasible.

Therefore, after a data-mining procedure, comments and opinions were extracted from both political and non-political individuals on X. These comments provided us with the data for analysis and examination. This was achieved through the use of web scraping technology. Taking assistance from a group of professionals, a web-crawling robot was designed and developed using the Python programming language and the Selenium library, which enabled us to extract the data related to the #UkraineWar[1]. These opinions were expressed by individuals who wrote their comments and opinions in the Persian language. Data was gathered from June 24, 2023 until September 15, 2023 and overall, 2027 posts were extracted in our analysis. After filtering the data, 1591 posts remained from 1591 unique users. The remaining tweets had an average of 41 words.

In the next step, the preprocessing of this data was needed to carry out this project more effectively and accurately. Firstly, punctuation marks, symbols, and decorative characters were removed from the data using the HAZM library, which is specific

1. in Persian: جنگ اوکراین

to the Persian language. Additionally, elements of our data were normalized. This was done to make the data more consistent and easier to analyze. In this research, which involves comments and opinions written in Persian language, normalization involved converting text into a more consistent format. For example, replacing different forms of a word with a single, standardized form, converting all text to lower case, or replacing local variants of characters with standard ones.

Screenshot 2. Fundamentalist user: It was the other day that [our] supreme leader said: people of Ukraine should be killed to benefit Western companies that produce and sell arms [. . .].

Source: Naghmeh Khanoom, 2023

After preprocessing the data by removing non-Persian texts, eliminating links within the texts, and cleaning up the data, we could proceed with sentiment analysis of each post. This analysis helped us to determine whether a post expressed a protest, happiness, or had no specific sentiment and in that case, it was considered neutral. To accomplish this, we used the pre-trained models developed by Transformers, specifically BERT.

Screenshot 3. Reformist user: The trap that Iran fell in is about the Russia-Ukraine war [. . .] Russia is willing to find an accomplice to pay for her unsuccessful offensive [. . .].

Source: Mahdian, 2023

BERT (Bidirectional Encoder Representations from Transformers) is a neural network architecture used for natural language processing, particularly text classification. BERT utilizes the Transformer architecture, which is known as one of the most powerful models in natural language processing because of its attention mechanism for modeling relationships between words and sentences. In this research, the upgraded version 2 of ParsBERT (the Persian version of the BERT model), named DeepSentiPers, was used for sentiment analysis. Previously, this model was tested using three datasets of 12,000 user reviews in collaboration with major companies like Digikala, Snapp, and others. The distinction of DeepSentiPers compared to ParsBERT (v2.0) lies in its balanced and enhanced capabilities. It can analyze sentiments in both binary modes (positive and negative emotions) and multiple modes (Furious, Angry, Neutral, Happy, Delighted).

To perform text classification using ParsBERT, we performed the following steps:

1. BERT Training: In this step, BERT is trained using large training datasets (Liu et al., 2021). The training involves two main tasks: language pretraining and masked language

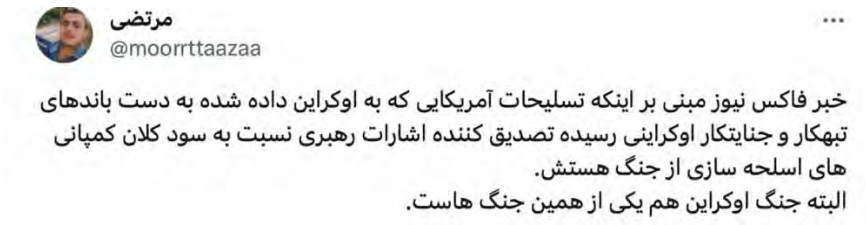
modeling. In language pretraining, BERT learns its initial representation by predicting valid and invalid sentences. In masked language modeling, BERT tries to predict the masked parts of sentences using partially masked input.

2. Fine-tuning: After initial training, BERT undergoes fine-tuning for the specific text classification task. In this step, the last layers of BERT, which contain information learned from the pretraining phase, are replaced with new output layers. The network is then trained using data relevant to the text classification task.

3. Prediction and Classification: After fine-tuning, BERT could be used for prediction and text classification. By inputting new text, BERT extracts unique features from that text. Then, using the newly added classification layers from the fine-tuning step, the text is classified into different categories.

Once these steps were completed with high accuracy and performance metrics, the developed model could be used to detect sentiments in our original data. By inputting the posts (tweets) into the developed model, the sentiments for each text were obtained, where each row of the data corresponded to a specific sentiment.

Screenshot 4. Fundamentalist user: *Fox News*'s claim regarding the fact that American arms delivered to Ukraine are now in the hands of outlaw and criminal gangs confirms the supreme leader's references to [. . .].



Source: Morteza, 2023

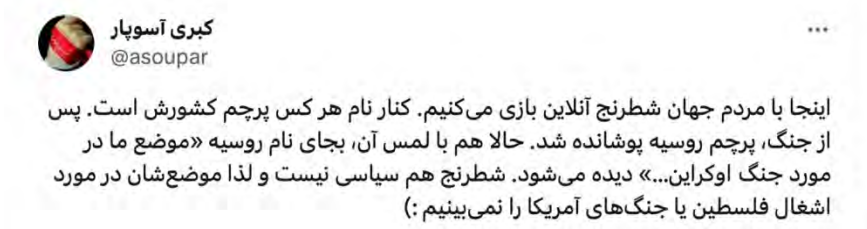
The next step was to remove stop words. In natural language processing, removing stop words can be an important stage. Stop words are commonly used words in languages that don't carry specific meaning and are often unnecessary for text analysis and processing. Examples of stop words include “and,” “or,” “to,” “from,” etc. To remove stop words in Persian texts, we should utilize natural language processing libraries such as NLTK (Natural Language Toolkit).

Screenshot 5. Reformist user: Invading a sovereign country is condemned by any international laws or United Nation’s Charter [. . .].

Source: Tafakori, 2022

Stemming. Stemming is one of the common methods in natural language processing (NLP) that is used to reduce words to their root or stem. The main purpose of stemming in NLP is to reduce words to their basic form or their common root so that similar words in the text become a common form, taking into account a diverse number of words and leaving processors with an easier understanding of the existing text. Stemming often uses linguistic rules and simpler algorithms. In general, stemming deals with finding the basic form or common root of words based on rules and algorithms that are designed based on language and specific needs.

Screenshot 6. Fundamentalist user laments about people who condemned Russia for invading Ukraine but say nothing about Palestine.



Source: Asoupar, 2023

CountVectorizer. CountVectorizer is a common tool in natural language processing (NLP) that can convert text into numeric vectors. This tool is used in part of the text preprocessing steps such as extracting features and converting the text into a processable form. By using CountVectorizer, the input text is automatically converted into numeric vectors. Each vector represents the number of repetitions of words in the text. In order to identify the political orientation of people, we needed to cluster the data; since our data had no labels and was not a supervised issue, we needed to use unsupervised methods to transform the data into several groups. In order to recognize the cluster for the first model, the K-means model was used.

K-means is a clustering algorithm widely used in natural language processing (NLP) for text clustering. The main goal of this algorithm is to divide the data set into different clusters based on their similarities. The working method of K-means is that it first randomly selects a number of cluster centers (centroids). Then, it assigns each sample to the nearest cluster center, respectively. After this step, the cluster centers are updated to the new center as the average of the samples belonging to each cluster. This process

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continues until the cluster centers no longer change or a certain criterion is met to terminate the algorithm.

K-means algorithm works based on the concept of similarity and distance between samples. In text, different similarity measures can be used to calculate distance, such as distance or cosine similarity between vectors corresponding to samples. For example, one can divide articles into separate clusters based on their topics, or group user reviews into different clusters based on similar opinions about a particular product. In general, using K-means in text clustering requires determining the number of clusters before running the algorithm. To select the most optimal number of clusters, methods such as elbow method or silhouette analysis can be used.

In the implementation of K-means in Python, relevant libraries such as scikit-learn can be used. We needed to adjust the K-means parameters and hyperparameters according to the data.

1. First, the K-means class and the GridSearchCV class were imported from the scikit-learn library.

2. In this section, the adjustable parameters were defined for the K-means algorithm. These parameters include 'init', which specifies how the initial centers of the clusters are chosen, 'n_init', which is the number of different attempts to run the algorithm from the start, 'max_iter', which is the maximum number of iterations of the algorithm per attempt, and 'random_state', which is used to generate Repeatable random results.

3. In this section, an object of the K-means class was created without setting any parameters.

4. In this section, we used the GridSearchCV class to perform a linear search on a set of parameters. We set estimator as the K-

means model created in the previous section, param_grid equal to the adjustable parameters defined in the previous section, scoring equal to the evaluation criterion 'neg_mean_squared_error', and cv equal to the number of slices used for validation.

5. In this section, we get the best parameters and the score of the best model from the linear search and print them.

In general, this code uses linear search to find the best parameters for the K-means model and produces the results.

The best parameters obtained for the K-means algorithm were:

{'init': 'k-means++', 'max_iter': 100, 'n_init': 5, 'random_state': 42}

3. 1. Ethics in Research

In the context of social media research, the study and reporting of posts from public accounts can be considered an ethically sound practice. Public accounts on platforms like X willingly share their thoughts, opinions, and information with a global audience. As such, these posts are already in the public domain and can be viewed by anyone with access to the platform. Researchers who analyze and report on these public posts are not infringing upon individuals' privacy or violating ethical boundaries. Instead, they are engaging in a valuable pursuit of understanding and documenting the discourse that occurs in the digital public sphere. Ethical considerations should include responsible data handling, ensuring anonymity where necessary, and obtaining informed consent when dealing with sensitive topics. However, the study of public accounts' posts aligns with the principles of transparency, openness, and the pursuit of knowledge.

4. Findings

Machine learning, which is based on the data we input into the machine and the artificial intelligence that renders them to provide patterns, has create an unprecedented opportunity for researchers to extract trends on social media (Nosrati et al., 2020; Zohouri et al., 2021). Different industries use data mining as an effective way to predict and even produce people's behavior. In this study, we specifically wanted to use machine learning to identify patterns and find the best number of clusters, which we did with special methods. Below is a complete description of clustering quality measures, such as Davies-Bouldin, Calinski-Harabasz, Silhouette, and the Elbow method:

4. 1. Davies-Bouldin Score

This measure is used to evaluate the clustering quality. To calculate this measure, the distances between the centers of the clusters and a measure of the internal dispersion of the clusters are used. The goal of this measure is to minimize the distance between clusters and maximize the internal dispersion of clusters.

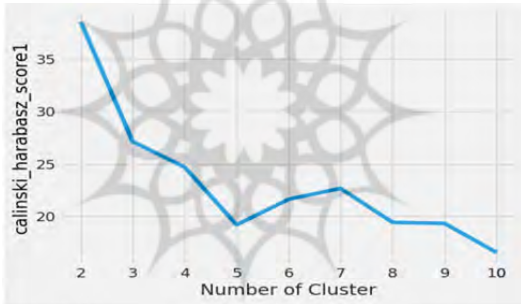
Diagram 1. Choosing the Right Number of Clusters with K-Means: Inertia Analysis

Source: Author

Diagram 2. Optimum Number of Clusters Using the Davies-Bouldin Index

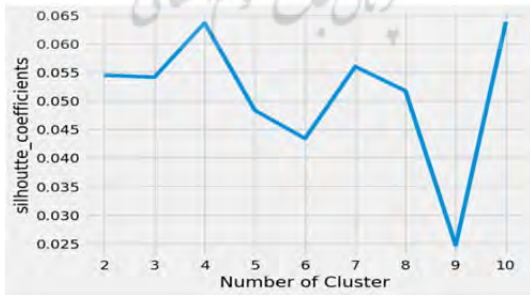
Source: Author

Diagram 3. Calinski-Harabasz Score Corresponding to Different Number of Clusters



Source: Author

Diagram 4. Plot of Average Silhouette Score vs. Number of Clusters



Source: Author

According to these results, it was decided to consider number 4 as the best cluster and with this number of clusters, similar results were obtained. Top terms per cluster are indicated in table 1.

Table 1[1]. Top Terms per Clusters

Cluster 0	Cluster 1	Cluster 2	Cluster 3
اوکراین Ukraine	آمریکا America	روسیه Russia	عقب نشینی Retreat (the act of withdrawing)
جنگ War	ببین See (or Look)	بحران Crisis	تلفات Casualties
روسیه Russia	روسیه Russia	جنگ War	پر Full or Filled
چین China	لحاظ Consideration (or Point of View)	مصیبت Misfortune or Calamity	توافقی Consensual or Agreed
ایران Iran	اوکراین Ukraine	ارائه Presentation or Offer	اثبات Prove (or Proof)
آمریکا America	تقصیر Fault (or Blame)	قدرت Power	رودخونه River جنگ War
پوتین Putin	نتیجه Result (or Outcome)	فرمانروی Ruler (or Sovereign)	سرباز Soldier کار
حمله Attack	دخالت Intervention	نجات Rescue or Salvation	اوکراین Ukraine
اروپا Europe	موشکی Missile	واقع Real or Actual	کشوری National (or Country as an adjective)
جهانی Global	بلایی Calamity (or Disaster)	پهپادا Drones	اسلحه Weapon

Source: Research Data Used by Author

1. For the sake of clarity and helping the international readership make sense of the words and terms, Persian expressions in this table and next tables have been used with their English equivalents.

This model could not help much because data clustering did not provide much information. The solution that had to be used was to employ a method to convert text into numerical vectors. One of these methods is TfidfVectorizer.

TfidfVectorizer is a common tool in natural language processing and feature extraction, which is used to convert text into numeric vectors. Tfidf stands for "inverse document frequency-difference term," used to estimate the importance of each term in a document. The word "term" here means a short word or phrase used in the document. The general method of TfidfVectorizer is that its input is a set of text documents and its output is numerical vectors, each of which represents the importance of terms in the corresponding document. These vectors can be used in machine learning and clustering algorithms. TfidfVectorizer uses a combination of two main concepts:

1. The number of term repetitions in the document (Term Frequency - TF):

This concept indicates how many times a particular term is repeated in a document. The number of repetitions of the term in the document, as a normalized number, shows the importance of the term in the document. Normally, the following formula is used to calculate the number of semester repetitions:

TF(t, d) = (number of repetitions of term t in document d) / (total number of terms in document d)

4.2. Inverse Document Frequency (IDF)

This concept indicates that a certain term is also present in several other documents. The reverse difference of the document is the

reverse of this number of documents that includes the desired semester. Normally, the following formula is used to calculate the reverse difference of the document:

> IDF(t, D) = log((total number of documents in set D) / (number of documents that contain term t in set D))

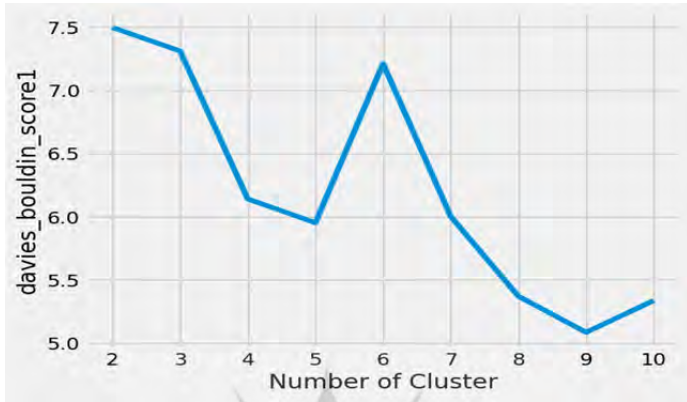
By combining these two concepts, TfidfVectorizer calculates for each term in each document a value that is used as the weight or importance of the term in that document. These values are generated as a numerical vector for each document, so that each document is represented by a multidimensional vector and each dimension of the vector corresponds to a term. The resulting vectors from TfidfVectorizer can be used as input for machine learning algorithms such as clustering, classification, and search.

In programming code, we can use natural language processing libraries such as scikit-learn in Python to implement the TfidfVectorizer. We can then construct the Tfidf vectors by choosing the appropriate parameters and applying them to the text data. Overall, TfidfVectorizer is a powerful tool for converting text into numeric vectors that calculate the impact of words in a document according to their repetition in the document and the inverse difference of the document.

Again, the cycle starts from k-means and the best parameters for this model are obtained: {'init': 'k-means++', 'max_iter': 100, 'n_init': 5, 'random_state': 42}

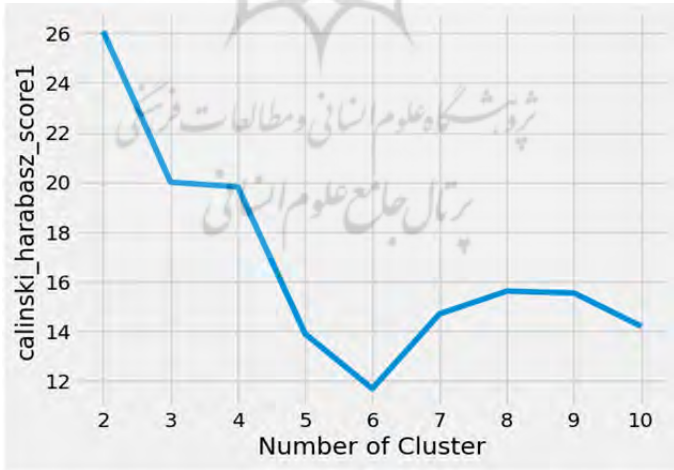
To find the best number of clusters, the evaluation methods on the data were re-implemented. The results are shown in diagrams 5 and 6.

Diagram 5. Optimum Number of Clusters Using the Davies-Bouldin Index in Second Analysis



Source: Author Findings

Diagram 6. Calinski-Harabasz Score Corresponding to Different Number of Clusters in Second Analysis



Source: Author Findings

According to these results, it was decided to consider the number 4 as the best cluster and with this number of clusters, similar results were obtained. Table 2 shows top terms per clusters in second analysis.

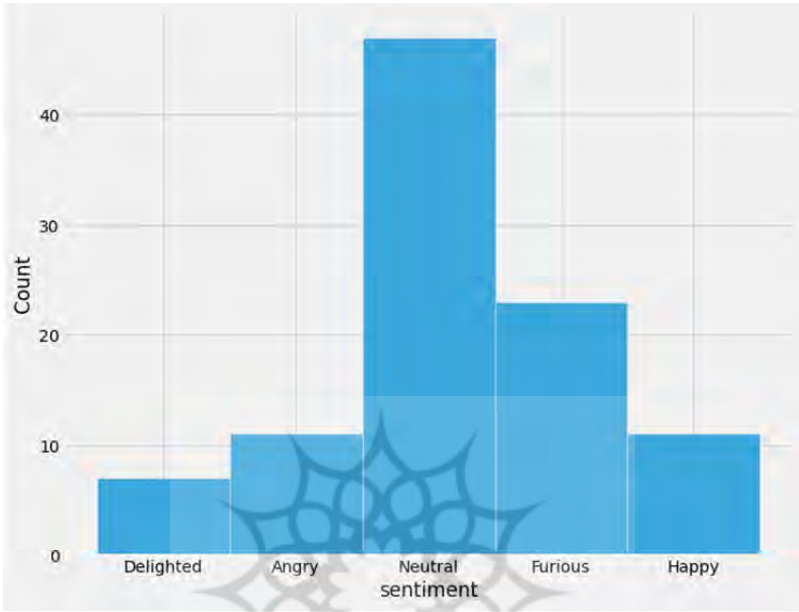
Table 2. Top Terms per Clusters in Second Analysis

Cluster 0	Cluster 1	Cluster 2	Cluster 3
جمهوری اسلامی Islamic Republic	آمریکا America	اوکراین Ukraine	روسیه Russia
روسیه Russia	اوکراین Ukraine	جنگ War	اوکران Ukraine
ایران Iran	روسیه Russia	روسیه Russia	جنگ War
جنگ War	جنگ War	وزیر Minister	امریکا America
درگیر Involved or Engaged	جنگ اوکراین Ukraine War	دفاع Defense	اروپا Europe
اسلحه Weapon	سلاح Weapon	پیروزی Victory	ایران Iran
بازی Game	پوتین Putin	جهانی Global or Worldwide	اتمی Atomic or Nuclear
قصد Intention or Purpose	قرار Plan or Arrangement	پایان End	چین China
جمهوری اسلامی Islamic Republic (repeated)	کمک Help or Assistance	خبر News	همش All of it
پهپادهای Drones	التماس Plea or Begging	اروپا Europe	کشورهای Countries

Cluster 0	**Cluster 1**	**Cluster 2**	**Cluster 3**
دنیای World	چین China	حمله Attack	نظرتان Your opinion
تیم Team	حمایت Support	جنگ اوکراین Ukraine War	شرایط Conditions
اوکراین Ukraine داره Has/Is Doing	عربستان Saudi Arabia	راهی Way or Path	بخاطر Because of
پهپاد Drone	کره شمالی North Korea	واگنر Wagner	به‌نظرت In your opinion (informal form)
تولید Production	ایران Iran	خارجه Foreign	قیمت Price
چین China	کشور Country	اشغال Occupation	باتوجه Considering or With regard to
طالبان Taliban	اوکراین Ukraine	آلمان Germany	چی What
اوکراین Ukraine	جایی Place	سال Year	راجع About or Regarding
قدرت Power	میلیارد Billion	پهپاد Drone	باشه Be
بلاروس Belarus	اعتماد Trust or Confidence	غرب West	نفت Oil

In cluster 0, we see that the words 'Russia,' 'Islamic Republic,' 'China,' 'Taliban drone' are seen; this is a sign or point, on which we can focus; as a result, in this cluster, we first see the explanation as well as the shape of the emotions.

Diagram 7. Cluster 0 Sentiment Analysis Using Python



Source: Author Findings

According to this plan and the results obtained, we have 3 specific and important parameters that should be carefully checked 1- The feelings in this cluster are completely positive because there are many people who had happy and normal feelings 2- The word 'Russia' is more frequently seen in comparison with clusters already seen. 3- In this cluster, words and keywords are included, which are used in conversations and speeches and views of Fundamentalists much more than Reformists, such as 'Islamic Republic,' 'China,' 'Taliban drone,' and 'China.'

This means that those who are in this cluster are Fundamentalists and compared to other clusters, they use the word 'Russia' much more, and given their feelings about this word, they

are pro-Russia. The deep research that has been carried out in the statements of the Fundamentalists and Reformists, reveals that the Fundamentalists talk more about China and the Taliban.

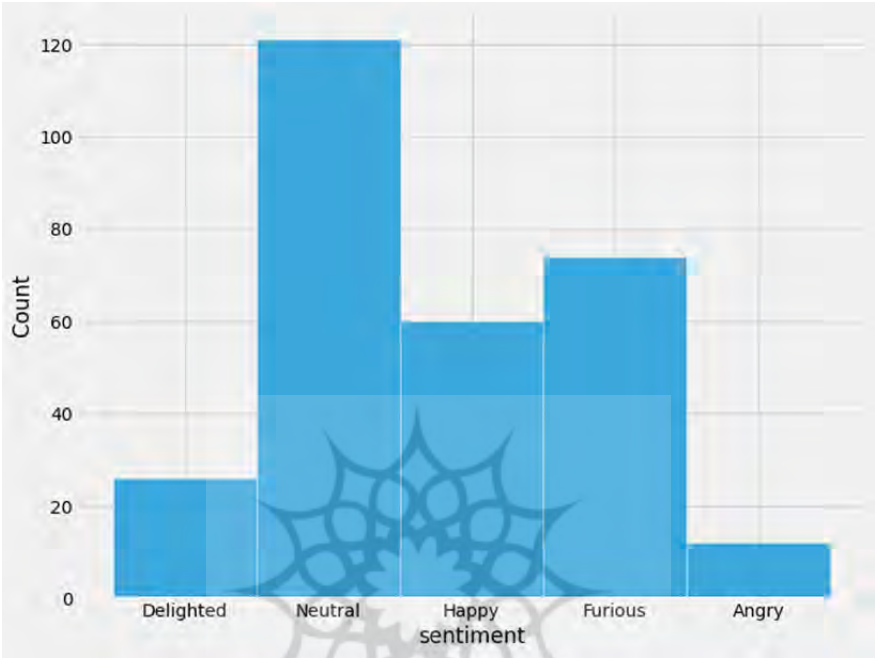
Table 3. Words and Terms Used by Fundamentalists and their Frequency of Appearance in Posts

اسلامی (Islamic) – 49 times	جمهوری اسلامی (Islamic Republic) – 18 times
جمهوری (Republic) – 47 times	پهپادهای (Drones – plural form) – 14 times
روسیه (Russia) – 170 times	دنیای - (the world)- 9 times
ایران (Iran) – 49 times	تیم (Team) – 7 times
جنگ (War) – 99 times	داره(Has/Is Doing – present continuous form of 'to do') – 28 times
درگیر (Involved) – 26 times	پهپاد (Drone) – 24 times
اسلحه (Weapon) – 13 times	تولید (Production) – 10 times
بازی (Game) – 11 times	چین (China) – 11 times
قصد (Intention) – 16 times	طالبان (Taliban) – 8 times

Source: Author Fondings

Diagram 8 is related to cluster 1, where there are mostly positive feelings. In cluster 1, we found that the words 'Putin,' 'help,' 'Saudi Arabia,' and 'weapons' were used more frequently and, this was a sign or a point, on which we could focus; as a result, in this cluster, we first found the explanation and shape of the emotions.

Diagram 8. Cluster 1 Sentiment Analysis Using Python



Source: Author Findings

According to this plan and the obtained results, we had 3 specific and important parameters that had to be carefully checked: 1- The feelings in this cluster are completely positive because there are many people who had happy and normal feelings. 2- The word *Ukrainian* is more frequently used than in the other clusters. It is currently used, and in this cluster, the number of Ukrainian words is 3 times more than the Russian words. 3- In this cluster, words and keywords are used that are employed in conversations, speeches and viewpoints of Reformists much more than Fundamentalists', such as 'Putin,' 'help,' 'Saudi Arabia,' and 'weapons.' In this cluster, the word 'Islamic Republic' is not used

at all, the word 'China' and word 'Taliban' are used more than in cluster 0, which means that those who are in this cluster are Reformists and compared to other clusters, they use the word 'Ukraine' more frequently and at the same time, they use it generally in favor of Ukraine.

Table 4. Words and Terms used by Reformists and their Frequency of Appearance in Posts

اوکراین (Ukraine) - 241 times	عربستان (Saudi Arabia) - 41 times
روسیه (Russia) - 100 times	کره (Korea) - 31 times
جنگ(War) - 275 times	شمالی (Northern) - 33 times
جنگ اوکراین (Ukraine War) - 89 times	ایران (Iran) - 60 times
سلاح (Weapon) - 51 times	کشور (Country) - 46 times
پوتین (Putin) - 61 times	اوکران (Ukraine, alternative or misspelled version of اوکراین)- 73 times
قرار (Plan/Arrangement) - 50 times	جایی (Place) - 21 times
کمک (Help/Assistance) - 55 times	میلیارد (Billion) - 15 times
چین (China) - 4 times	اعتماد (Trust) - 28 times
حمایت (Support) - 40 times	

Source: Author Findings

As the theoretical section of this article predicted, obviously Reformists and Fundamentalists in Iran have a stance towards war in Ukraine. However, it could be argued that their stance is not much about human rights, territorial rights, national sovereignty etc., but about their own struggle over power.

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5. Discussion and Conclusion

Previous studies have explored the way in which people, countries and political entries change side according to their interests. For instance, Sheyholislami (2001) explored how the Iraqi Kurds were portrayed by conducting a critical discourse analysis of news coverage concerning the Iraqi-Kurdish conflict in the *Globe and Mail* and the *New York Times* during two distinct timeframes, specifically in 1988 and 1991. The significance of these timeframes lied in the fact that in 1988, Iraq was not considered an adversary of Western countries, whereas by 1991, it had become one. Nevertheless, during both of these years, Iraq was engaged in conflict with the Kurdish population. By conducting a comparative analysis involving a sample of 35 headlines and seventeen full-text articles, Sheyholislami revealed that both newspapers depicted the Kurds differently. In light of the historical and political contexts explored within the study of Sheyholislami, it was suggested that the variation in Western powers' relationships with Iraq during these two time periods could have been the determining factor behind these contrasting representations.

The war in Ukraine has left many unexpected outcomes not only in East Europe, where the war is still ongoing, but also in the world. In a parallel development, the social media have become a hotbed for another fierce battle over this war and its different narratives. The utility of social media as a tool for information dissemination and opinion molding is unparalleled. Thus, it is no surprise that various groups have invested time and resources into curating a specific image or interpretation of the conflict. On the one hand, Western countries, mainly the United States and its allies, have frequently posted content that underscores Ukraine's struggle for democracy and sovereignty (deLisle, 2023). They

highlight Russian aggression as a breach of international law, aiming to secure moral high ground and rally international opinion in favor of their policy objectives.

Conversely, Russia and its allies have launched their own social media campaigns to frame their actions as a defense of Russian-speaking minorities in Ukraine and a fight against what they label as "neo-fascist" elements in the Ukrainian government (Laryš, 2022). They aim to shift the blame, portraying the conflict as a result of Western meddling in the affairs of sovereign nations, thereby justifying their own actions as a necessary intervention. China and other non-aligned countries, while not directly involved, have also put forth narratives that generally fall in line with their respective geopolitical interests.

From the beginning, Iran declared neutrality in the Ukrainian war. Yet the international pressure on Iran has forced Iran to informally favor Russia. As of February 2022, Russia has become increasingly dependent on Iran in ways that were previously inconceivable. Iran's military assistance has substantially bolstered Russia's capacity to endure the challenging conflict. Once considered a peripheral actor, Iran has ascended to become one of Russia's most crucial allies in the Ukrainian war. The first known impact of an Iranian drone in the Ukraine war came late in August 2022, when Russia used a delta-wing Shahed-136 to destroy an American-supplied M777 howitzer of the Ukrainian troops (Peterson, 2023).

There two main political factions -namely, Reformists and Fundamentalists- are active in Iran today and as of August 3, 2021, there is the Fundamentalist government in power. As each of these two political factions in Iran favor the so-called Western or Eastern

camps, their activities on social media with regards to the war in Ukraine also follow their more general political policies. As illustrated by the data mining analysis in this study, Iranian Reformist users on X favor Ukrainian side, while Iranian Fundamentalist users favor the Russian side. They both seem to adhere to *alignment square*, in a way that one might think they are Ukrainian and Russian soldiers themselves.

References

Aeini, B., Zohouri, M., & Mousavand, M. (2023). Iranians and Privacy Preservation on Social Media: A Systematic Review. *Positif Journal*, *23*(10), 88-100. https://www.researchgate.net/publication/375059546_Iranians_and_Privacy_Preservation_on_Social_Media_A_Systematic_Review

Aris, S., Sarfi, T., Akhavan, M., & Zohouri, M. (2023). Motivations for Consuming Avatar-Specific Virtual Items on the Zepeto Gaming Platform. *Khazar Journal of Humanities and Social Sciences*. Forthcoming.

Asoupar, K. [@asoupar] (2023, July 17). [Image attached] [Post]. X. https://twitter.com/asoupar/status/1680863048062435329

Axelrod, R. (1984). *The Evolution of Cooperation*. Basic Books. https;//doi.org/10.1007/978-1-349-14936-2

Baktiari, B. (2005). Dilemmas of Reform and Democracy in the Islamic Republic of Iran. In R. W. Hefner (Ed.), *Remaking Muslim Politics: Pluralism, Contestation, Democratization* (pp. 112-131). Princeton University Press.

Behravesh, M. (2011). A Crisis of Confidence Revisited: Iran-West Tensions and Mutual Demonization. *Asian Politics & Policy, 3*(3), 327-347. https://onlinelibrary.wiley.com/doi/ epdf/10.1111/j.1943-0787.2011.01274.x

Choueiri, Y. M. (2010). *Islamic Fundamentalism: The Story of Islamist Movements* (3rd ed.). A&C Black.

Davidson, L. (2013). *Islamic Fundamentalism: An Introduction*. Bloomsbury Publishing USA.

deLisle, J. (2023). *Rethinking a Liberal International Order for Asia? The United States and the Impact of the Ukraine War*. Korea Economic Institute. United States of America. https://policycommons.net/artifacts/11273165/rethinking-a-liberal-international-order-for-asia-the-united-states-and-the-impact-of-the-ukraine-war/12158350/ on 06 Feb 2024.

Hanafi, H. (2014). Reformist and Moderate Voices of Islam in the Arab East. In S. T. Hunter, *Reformist Voices of Islam* (pp. 98-131). Routledge.

Hauter, J. (2023). Forensic Conflict Studies: Making Sense of War in the Social Media Age. *Media, War & Conflict, 16*(2), 153-172. https://doi.org/10.1177/17506352211037325

Hunter, S. (Ed.). (2009). *Reformist voices of Islam: Mediating Islam and Modernity*. ME Sharpe.

Hunter, S. T. (2014). *Iran Divided: The Historical Roots of Iranian Debates on Identity, Culture, and Governance in the Twenty-first Century*. Rowman & Littlefield.

Katzman, K. (2015, May). *Iran's Foreign Policy*. Library of Congress, Congressional Research Service.

Kazemi, F. (2003). The Precarious Revolution: Unchanging Institutions and the Fate of Reform in Iran. *Journal of International Affairs*, *57*(1), 81-95. https://www.jstor.org/ stable/24357914

Laryš, M. (2022). Failing to Fight for the "Russian World": Pre-War Social Origins of the Pro-Russian Secessionist Organizations in Ukraine. *Nationalities Papers*, 1-20. https://doi.org/10.1017/nps. 2022.76

Liu, Z., Lin, W., Shi, Y., & Zhao, J. (2021, Aug.). A Robustly Optimized BERT Pre-training Approach with Post-training. In *China National Conference on Chinese Computational Linguistics* (pp. 471-484). Cham: Springer International Publishing.

Mahdian, M. [@MohsenMahdian] (2023, January 26). [Image attached] [Post]. X. https://twitter.com/MohsenMahdian/status/161870088140 2433536

Mir-Hosseini, Z. (2017). Islam, Gender, and Democracy in Iran. In J. Cesari, & J. Casanova (Eds.), *Islam, Gender, and Democracy in Comparative Perspective* (pp. 211-236). Oxford University Press

Mirsepassi, A. (2010). *Political Islam, Iran, and the Enlightenment: Philosophies of Hope and Despair*. Cambridge University Press.

Morteza [@moorrttaazaa] (2023, July 25). [Image attached] [Post]. X. https://twitter.com/moorrttaazaa/status/1683860127512936448

Naghmeh Khanoom [@shahaab60] (2023, July 13). [Image attached] [Post]. X. https://twitter.com/shahaab60/status/16795093264178544 64

Nasir, M. A., Nugroho, A. D., & Lakner, Z. (2022). Impact of the Russian–Ukrainian Conflict on Global Food Crops. *Foods*, *11*(19), 2979. https://doi.org/10.3390/foods11192979

Nosrati, S., Sabzali, M., Heidari, A., & Sarfi, T. (2020). Chatbots, Counselling, and Discontents of the Digital Life. *Journal of Cyberspace Studies*, *4*(2), 153-172. https://doi.org/10.22059/jcss.2020.93910

Olson, M. (1965). *The Logic of Collective Action: Public Goods and the Theory of Groups*. Harvard University Press. https://doi.org/10.4159/harvard.9780674867207

Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press. https://doi.org/10.1017/CBO9780511807763

Peterson, S. (2023, Jul.). Drone War: The Price Iran Pays for Helping Russia Against Ukraine. The Christian Science Monitor. https://www.csmonitor.com/World/Middle-East/ 2023/0720/Drone-war-The-price-Iran-pays-for-helping-Russia-against-Ukraine

Posch, W. (2013). *The Third World, Global Islam and Pragmatism: The Making of Iranian Foreign Policy*. Stiftung Wissenschaft und Politik German Institute for International and Security Affairs. https://www.swp-berlin.org/publications/ products/research_papers/2013_RP03_poc.pdf

Price, S. (2022, Mar. 08). Asian Socialists Condemn Russia's Invasion, NATO Expansionism. *Green Left Weekly*, (1336). https://www.greenleft.org.au/content/asian-socialists-condemn-war-ukraine-nato-expansionism

Sabbar, S., & Matheson, D. (2019). Mass Media vs. the Mass of Media: A Study on the Human Nodes in a Social Network and Their Chosen Messages. *Journal of Cyberspace Studies*, *3*(1), 23-42. https://doi.org/10.22059/jcss.2019.271467.1031

Sabzali, M., Sarfi, M., Zohouri, M., Sarfi, T., & Darvishi, M. (2022). Fake News and Freedom of Expression: An Iranian Perspective. *Journal of Cyberspace Studies*, *6*(2), 205-218. https://doi.org/10.22059/jcss.2023.356295.1087

Saikal, A. (2015). *Iran at the Crossroads*. John Wiley & Sons.

Sarfi, T., Nosrati, S., & Sabzali, M. (2021). The New Celebrity Economy in Cyberspace. *Journal of Cyberspace Studies*, *5*(2), 203-228. https://doi.org/10.22059/jcss.2021.93903

Shahghasemi, E. (2020). Pornography of Networked Feminism: The Case of Iranian "Feminist" Instagramers. In *The 2nd International Conference on Future of Social Sciences and Humanities* (pp. 1-13). Diamond Scientific Publishing. https://www.dpublication.com/wp-content/uploads/2019/09/4400-44.pdf

Shahghasemi, E. (2021). Rich Kids of Tehran: The Consumption of Consumption on the Internet in Iran. *Society*, 58, 398–405. https://doi.org/10.1007/s12115-021-00626-3.

Sheyholislami, J. (2001). *Yesterday's " Separatists" Are Today's " Resistenceresistance Fighters": A Critical Discourse Analysis of the Representations of Iraqi Kurds in the Globe and Mail and The New York Times* (Master's Thesis, Carleton University, Canada). https://repository.library.carleton.ca/ concern/etds/2n49t201v

Shirzad, M. [@shirzad_ma] (2022, October 2022). [Image attached] [Post]. X. https://twitter.com/shirzad_ma/status/1583939282020208640

Smith, M. W., & Dean, T. (2023, May). The Irregulars: Third-Party Cyber Actors and Digital Resistance Movements in the Ukraine Conflict. In *2023 15th International Conference on Cyber Conflict: Meeting Reality (CyCon)* (pp. 103-119). IEEE.

Tafakori, A. [@AliTafakori3] (2022, February 26). [Image attached] [Post]. X. https://twitter.com/AliTafakori3/status/1497523632880472065

Takeyh, R. (2009). *Guardians of the Revolution: Iran and the World in the Age of the Ayatollahs*. Oxford University Press.

Tomasello, M. (2010). *Origins of Human Communication*. MIT press.

Zohouri, M., Darvishi, M., & Sarfi, M. (2020). Slacktivism: A Critical Evaluation. *Journal of Cyberspace Studies*, *4*(2), 173-188. https://Doi.org/10.22059/JCSS.2020.93911

Zohouri, M., Darvishi, M., Sarfi, M., Nosrati, S., & Zamani, M. (2021). Google's University? An Exploration of Academic Influence on the Tech Giant's Propaganda. *Journal of Cyberspace Studies*, *5*(2), 181-202. Https://doi.org/10.22059/JCSS.2021.93901