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PSYCHOLINGUISTIC IMAGE OF AYESHA (IN THE FILM *GUARDIANS OF THE GALAXY VOL 2* BY JAMES GUNN)

Summary. The research is devoted to the LIWC-22 psycholinguistic analysis of a cinematic female villain speech. Depictions of female characters in entertainment media have been a persistent topic of interest for researchers. The speech is highly defined by the character's archetype and personality. Recently, there have been few research projects examining the correlation between the character's archetype and their speech and no research to establish psycholinguistic characteristics of film archetypes with LIWC software. The present paper examines the superhero film based on Marvel Comics *Guardians of the Galaxy Vol. 2* by J. Gunn. The object of investigation is the speech of Ayesha, a female villain opposing a group of antihero protagonists. According to the typology of fiction archetypes by Schmidt, Ayesha represents the Gorgon archetype. Anger, vindictiveness and ruthlessness define the Gorgon female characters. Usually reserved and unemotional, Ayesha acts with excessive aggression when someone dares cross her. She is unapologetic and shows no remorse. Her outbursts of rage and aggression are swift, merciless, and often aimed at the wrong person. In her fury, she does not think about her own life and survival. She does not concern herself with the opinion of others; she is the only authority with whom the others should reckon. Ayesha's turns in the film were run by LIWC-22 in 116 psycholinguistic categories. Her speech yields high numbers (above standard deviations for films) in the LIWC-22 Analytical thinking, Clout, BigWords, Personal pronouns, We, They, Article, Drives, Affiliation, Power, Anger, Social, Social references, Family, Politic and Risk categories. Additionally, she has low numbers (below standard deviations) in the Authentic, Tone, I, Affect, Tone positive, Emotion, Emotion positive, Emotion anxiety, Communication, Friend, Feeling, Conversation and Assent categories. The categories reveal her high social status, general intolerance and aggressiveness, lack of friendly communication and proneness to unnecessary risk in pursuing revenge.

Key words: film archetype, psycholinguistic image, the Gorgon archetype, LIWC-22, James Gunn, *Guardians of the Galaxy Vol. 2*.

Problem statement. The various contexts provided by cinematic narratives can significantly benefit the research of needs, values, morals and inner drives. Film stories are able to parallel real life experiences and to provide a more profound understanding of people's moral character. Ascribing these characteristics to people, we know or learn about, is a requirement for developing stories that will be relatable. Because of our reliance on narrative to make sense of the moral traits of actual people, examining stories

such as found in film fictions is most fitting in analyzing virtue and vice [1, p. 7].

Analysis of recent research and publications. Depictions of female characters in entertainment media have been a perennial topic of interest for researchers. In proportional terms, male narrative characters outnumber female characters roughly two to one. When featured, female characters are depicted stereotypically, are likely to be featured in secondary or supporting roles, and reinforce negative attitudes toward women through detrimental portrayals [2, p. 547]. With female villains, the numbers are even more disproportional, as female villains are rare and far between. However, a few of them appear in major blockbuster releases [3], making their archetypes and psycholinguistic image a promising source for research.

The *Guardians of the Galaxy* franchise has the lowest percentage of female-speaking characters across Phases One and Two of the MCU [4, p. 176], presenting four female characters whose turns exceed 250 words. In the terminology by Lodi-Smith et al. [5], two of the characters (Gamora and Mantis) possess positive valence personality story, Nebula experiences the story of redemption and Ayesha is the one going through negative valence personality story. According to the typology of fiction archetypes by Schmidt [6], Ayesha from *Guardians of the Galaxy Vol. 2* [7] belongs to the Gorgon archetype.

The Gorgon archetype represents female villains distinguished by such characteristics as anger, brutality, and revenge. The Gorgon feels justified in her actions, as she believes that her lawful rights were violated. Her outbursts of rage and aggression are swift, merciless, and often aimed at the wrong person. All thoughts of democracy, diplomacy, and right and wrong are irrelevant, as vengeance is her primal goal. In her fury, she does not think about her own life and survival. She does not concern herself with the opinion of others; she is the only authority she recognizes. She is unapologetic and shows no remorse for the horrific events she causes. The Gorgon is unpredictable and believes in fighting fire with fire. Usually reserved and unemotional, she acts with excessive aggression any time someone dares cross her [6, p. 54–55].

Inner motives and drives of characters are revealed through their behavior and speech. Psycholinguistic analysis evaluates the interdependence with several methods, including automatic word counting. Presently, there are few research projects examining the correlation between the character's archetype and their speech and no research to establish psycholinguistic characteristics of film archetypes with LIWC software, which makes it a new direction of psycholinguistic investigation.

Objective. The objective of the present research is to establish correlation between the psycholinguistic image of a character belonging to the Gorgon archetype [6] and psycholinguistic categories in her speech revealing the psychological image. The material under research is the speech of a female villain in the Marvel Cinematic Universe film *Guardians of the Galaxy Vol. 2* by James Gunn (2017). LIWC-22 software is used in the paper to establish the correlation between verbal behavior and psychology by the method of word counting. Deviations from the mean figures signal either abnormal attention of the character towards a particular psycholinguistic category or a complete lack thereof. Thus, the said abnormalities are of particular interest in this research. Some categories vary significantly depending upon their media, which is why the obtained results are contrasted with the LIWC-22 descriptive statistics for films by Boyd et al. [8].

Main findings. Ayesha's turns in the film were extracted from subtitles, checked against the film sound to add missing fillers and interjections, and run by LIWC-22 in 116 psycholinguistic categories. Ayesha's speech yields high numbers (above standard deviations) in the LIWC-22 Analytical thinking, Clout, BigWords, Personal pronouns, We, They, Article, Drives, Affiliation, Power, Anger, Social, Social references, Family, Politic and Risk categories. Additionally, she has low numbers (below standard deviations) in the Authentic, Tone, I, Affect, Tone positive, Emotion, Emotion positive, Emotion anxiety, Communication, Friend, Feeling, Conversation and Assent categories.

Analytical thinking captures the degree to which people use words that suggest formal, logical, and hierarchical thinking patterns [9]. People high in Analytical thinking tend to write and think using language that is less intuitive and personal. High number in the Article category supports the idea, as people who use articles at a high rate tend to be more impersonal in their thinking. This way Ayesha equally distances herself from subordinates and enemies. Being the High Priestess of the Sovereign, she adheres to the formal style of communication, demonstrating the social hierarchy of the race: *Ayesha: Our soldiers apprehended her attempting to steal the batteries. Do with her as you please. / What is your heritage, Mr. Quill?* She uses formal words and excessive politeness, which looks like mockery in combination with her general resentful attitude. This way she underlines the high social status of her people comparing to the Guardians.

The Clout category refers to the relative social status, confidence, or leadership [10]. The number in this category (99,0) considerably exceeds the standard deviation (89,19) and is the highest among characters featuring *Guardians of the Galaxy Vol. 1* and *Guardians of the Galaxy Vol. 2*. The high percentage suggests that Ayesha possesses high social standing, as she is the highest authority on the planet and autocratically rules her people. Consequently, high numbers in the Politic and Power categories (composing Drives) show the character's focus on social hierarchy: *Ayesha: Pilots... release envoy units. Our sensors detect the batteries are below the surface of the planet. Dive!* Direct commands (mainly in the form of verb in the imperative mood) and requests, demanding an answer, in Ayesha's speech is a manifestation of the Gorgon archetype dictatorial personality [11], who is certain that her order or wish will be carried out.

Authenticity reflects the degree to which a person is self-monitoring. Lower numbers in the Authentic category suggest a guarded and distanced form of discourse when people tend to self-

regulate or filter what they say [10]. In Ayesha's speech, Authentic is low, meaning that the Gorgon constantly tries to control what she says because of her high social status and general distrust towards other characters. The Affect, Emotion and Feeling categories are consequently below the standard deviation for the character, revealing, in general, a low level of emotional reactions except for anger and irritation.

Exclamatory sentences, frequent in the turns of other characters representing the Gorgon archetype [11], are within standard deviation for Ayesha. As previously mentioned, she severely controls all her outward reactions, including speech. She practically hisses several utterances in seething rage. Nevertheless, she uses exclamations with the same purpose as the other Gorgon characters, namely to express negative emotions of irritation, anger, impatience or resentment: *Ayesha: What is the delay, Admiral? / What? Who? / No! No! No! No!* These examples indicate excessive aggressiveness and irritability of the character.

Similarly, people who use a high rate of Big Words also tend to be less emotional and oftentimes psychologically distant or detached [9]. In some papers, high frequency of the category is associated with male speakers [12; 13], however in the examined material there is no correlation between the category and gender. Out of eight male and four female characters, Ayesha has the highest score, followed by two male characters, with one male character having the number below standard deviation, and the others falling within normal percentage. In general, the BigWords category codes the words consisting of seven letters or more and demonstrates a high frequency of formal, literary words: *Ayesha: We control the DNA of our progeny... germinating them in birthing pods. / Well, perhaps someday, you could give me a history lesson... in the archaic ways of our ancestors. For academic purposes.*

This category sets off Ayesha against the Guardians, thus effectively contrasting the characters. The Guardians (Quill, Rocket and Kraglin) have high numbers in the Netspeak and Filler categories, coding colloquial words. A dialog between Tony Stark and Peter Quill demonstrates the conversational simplicity of the Guardians: *Stark: We gotta coalesce. 'Cause if all we come at him with is a plucky attitude... Quill: Dude, don't call us plucky. We don't know what it means.* There is a pun in the word 'plucky'. First, they literally do not know the word, as the male Guardians are poorly educated bounty-hunters. Thus, the BigWords category is within standard deviation in their speech. Second, they are antiheroes who do not want to be consciously associated with anything outright heroic.

In general, Ayesha sounds formal and condescending while Guardians' dialogs are informal, colloquial and humorous, which makes the public side with the Guardians.

A low number in the Tone category reveals greater anxiety, sadness, or hostility of the speaker [9]. For Ayesha, this index is the third lowest in the range of twelve MCU Guardians characters. This feature is common for the Gorgon archetype characters in general and depicts their usual intolerance and anger: *Ayesha: We thank you, Guardians, for putting your lives on the line. We could not risk the lives of our own Sovereign citizens. Every citizen is born exactly as designed by the community. Impeccable, both physically and mentally.* She tends to openly demonstrate her arrogance and contempt even when she formally expresses gratitude.

Being a villain, Ayesha has low numbers in the Tone positive and Emotion positive categories. The Gorgon uses positive emotion

lexis in rare cases, when she talks about objects causing disgust or fear in the average viewer [11]. While describing a terrifying monster, created by her, Ayesha says to her servant: *That, my child... is the next step in our evolution. More powerful, more beautiful... more capable of destroying the Guardians of the Galaxy. I think I shall call him... Adam.* This helps the public form a negative perception of the character.

Tone negative in her speech (2,36) is higher than the mean number (1,81 for films) and close to above standard deviation (2,39). Being a villain, Ayesha uses negative evaluative lexis and condescending addressing towards the protagonists of the story: *Ayesha: I see it within you. An unorthodox genealogy. A hybrid that seems particularly... reckless.* The feature is characteristic for the Gorgon archetype and indicates her rude and contemptuous attitude towards individuals of lower social status. Accordingly, the Assent category is low in numbers, demonstrating a highly confrontational personality of Ayesha and the Gorgon archetype in general. A high number in the Anger category reflects her proneness to rage and aggression.

Her condescending and intolerant attitude is clearly revealed in the narratives of other characters: *Rocket: You know, they told me you people were conceited douchebags... / Come on! You saw how that High Priestess talked down to us. Quill: Careful what you say around these folks. They're easily offended. The cost of transgression is death. Yondu: This golden gal with quite a high opinion of herself... has offered us a large sum to deliver you and your pals over to her... because she wants to kill y'all.* Through the Guardians eyes and words, the public see the Sovereign as an arrogant, pretentious and vindictive race.

The Pronouns category signifies the speakers' focus of attention [14]. Ayesha has a low number in the I category and high numbers in the We and They categories. Kacewicz et al. [14] state that higher-status interactants use fewer I, more we, and more you / they, relative to their lower-status counterparts. As already mentioned, Ayesha has a high social status, thus she uses first-person pronoun rarely: *Ayesha: They are perturbed I've wasted our resources. When they see what I have created here... their wrath will dissipate.* She speaks about herself as an individual human being in situations when she loses her usual composure and demonstrates personal involvement, or when she is out of her depth, like in this scene with her usually immaculate hair disheveled and a half-mad look in the eyes.

For Ayesha, the pronoun number is also high in the We category, as she uses regal 'we' to demonstrate her high social status [14] as well as shared identity and affiliative motivation [15] with the people she rules. Accordingly, high numbers in the Affiliation (composing Drives), Family and Social references (composing Social) categories indicate Ayesha's social connections due to high hierarchy standing and relation to the group in whose name she fights the Guardians of the Galaxy.

The Gorgon archetype's focus is also external as the character focuses her attention on her enemy. Personal pronouns demonstrate at whom the rage and aggression are directed [11]. The purpose of the archetype in the plot is to be an obstacle in the protagonist's way. For Ayesha, the number is high in the They category as she opposes Guardians of the Galaxy through her army or the Ravagers: *Ayesha: What is the delay, Admiral? Admiral: High Priestess, the batteries, they are exceptionally combustible... and could destroy the entire fleet. Ayesha: Our concern is their slight against*

our people. We hired them and they steal from us. It is heresy of the highest order. Admiral: All command modules... fire with the intent to kill. The dialogue demonstrates her usage of big words, formal language, royal 'we' and frequent usage of 'they'; the prevalent emotions are rage and revengefulness. High numbers in the Risk category and low index in the Emotion anxiety group reflect her readiness to risk everything if it means the destruction of her enemy.

Surely not all words are coded by the software. Virtually all text analysis programs that rely on word counts are unable to consider context, irony, sarcasm, or even the problem of multiple meanings of words [16, p. 1297]. Despite the Swear category being zero in Ayesha's speech, there is an example of vulgar lexis being used: *Ayesha: Guardians... perhaps it will provide you solace... that your deaths are not without purpose. They will serve as a warning... to all of those tempted with betraying us. Don't screw with the Sovereign.* The semantics of her monologue is revenge as the highest need and no remorse over killing people. Ayesha uses here big words, formal language and royal 'we'. The colloquial vulgarity 'screw' is particularly impressive in her speech, as it provides a striking contrast to her usual formal speaking manner, emphasizing her raging emotions behind the words. Thus, LIWC is used as a complimentary instrument to the narrative and contextual analyses to account for the character's psycholinguistic image.

The Friend, Communication and Conversation categories are below standard deviation, demonstrating Ayesha's lack of friends and amicable communication. She seems to have only subordinates to rule or enemies to fight.

In general, in Ayesha's speech there occur many categories traditionally associated with male speakers. Previous research finds that men use more big words [13; 12], more articles [13; 12], fewer first person singular pronouns [13], fewer discrepancy words [13], fewer filler words [13], and fewer references to positive emotions [13]. All these features are found in Ayesha's speech.

Simultaneously, she has two categories pertaining to female speech, namely more pronouns and more social words [12]. Several categories are supposed to be present in female speech as women are found to use more verbs, more negations and home words [12], more references to positive emotions [13; 17]. However, findings of this paper do not support the previously obtained results of this category. Probably it means that the mentioned linguistic elements correlate not as much with gender, as with the social status of the speaker. The hypothesis needs further investigation.

Conclusion and prospects for further research. The obtained results demonstrate that the psycholinguistic image of a villainous female character Ayesha featuring *Guardians of the Galaxy Vol. 2* is determined by the Gorgon archetype and characterized by the following linguistic elements. She does not concern herself with the opinion of others; she is the only authority she recognizes. Ayesha's speech is formal, complicated, analytical, reserved and often unemotional to reflect her high social status and emotional distancing from subordinates and enemies. Ayesha is a vindictive and irritable; therefore, she is high on negative emotion (particularly anger) and low on assent and positive evaluation. The basic drives for her are power and affiliation; consequently, she has high frequency of 'drives', 'power', 'affiliation' and 'social' words, and personal pronouns. Social connections and affiliation with her people are paramount categories, as she often acts in the Sovereigns' name. She has no friends, only subordinates and enemies; hence

low numbers in 'friend' and 'communication' words. In her fury, she does not think about her own life and survival, consequently she has a high number in 'risk' word category and low number in 'anxiety' words. Ayesha's speech has many features traditionally associated with male speakers, which probably means that these categories correlate with social role and hierarchy.

Among the prospects of the research is the composition of a comprehensive typology of the psycholinguistic archetypes, having been featured in the highest-grossing English-language films of the 21st century.

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Бережна М. Психолінгвістичний образ Аїші (у фільмі Джеймса Ганна *Guardians of the Galaxy Vol. 2*)

Анотація. У роботі йдеться про психолінгвістичний

аналіз мовлення кінематографічного негативного жіночого персонажа за допомогою програмного забезпечення LIWC-22. Зображення жіночих персонажів у розважальних медіа викликає стійкий інтерес дослідників. Мовлення персонажа значною мірою визначається архетипом і особистими якостями персонажа. Останнім часом проведено небагато досліджень, які вивчають кореляцію між архетипом персонажа та його мовленням, і немає досліджень щодо встановлення психолінгвістичних характеристик кіноархетипів за допомогою програмного забезпечення LIWC. У статті розглядається фільм Дж. Ганна про супергероїв, створений на основі коміксів Marvel «Вартові галактики 2». Об'єктом дослідження є репліки Аїші, лиходійки, яка протистоїть групі протагоністів-антигероїв. Відповідно до типології художніх архетипів Шмідт, Аїша належить до архетипу «Горгона». Гнів, мстивість і жорстокість характерні якості персонажів цього архетипу. Зазвичай стримана і беземоційна Аїша діє з надмірною агресією, коли хтось наважується виступити проти неї. Вона не просить вибачення і не має докорів сумління. Спалахи люті й агресії у неї швидкі та безжалюї, а їх об'єктом часто виступає безневинна людина. Охоплена жагою помсти, вона не зважає на власне життя та безпеку. Вона не переймається сторонньою думкою, адже вважає себе єдиним джерелом влади, з яким інші повинні рахуватися. Репліки Аїші у фільмі проаналізовані за 116 психолінгвістичними категоріями програмного забезпечення LIWC-22. Її мовлення демонструє високі показники (вище стандартних відхилень для фільмів) у таких категоріях LIWC-22 як Analytical thinking, Clout, BigWords, Personal pronouns, We, They, Article, Drives, Affiliation, Power, Anger, Social, Social references, Family, Politic та Risk. Одночасно вона має низькі показники (нижче стандартних відхилень) у категоріях Authentic, Tone, I, Affect, Tone positive, Emotion, Emotion positive, Emotion anxiety, Communication, Friend, Feeling, Conversation та Assent. Зазначені категорії демонструють її високий соціальний статус, загальну нетерпимість і агресивність, відсутність дружнього спілкування і схильність до надмірного ризику заради помсти.

Ключові слова: кіноархетип, психолінгвістичний образ, архетип «Горгона», LIWC-22, Джеймс Ганн, «Вартові галактики 2», *Guardians of the Galaxy Vol. 2*.