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A Textual Analysis of John Dramani Mahama's Speech on Small-Scale Mining, Sunyani, Ghana

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Abstract

The growing problem of small-scale mining that operates illegally in Ghana, known as galamsey, has emerged as one of the major environmental, socio-economic, and governance issues in Ghana. It has sparked debates regarding sustainable mining practices in Ghana. This study analyzes a speech made by John Dramani Mahama at the 3rd Annual Transformational Dialogue on Small-Scale Mining held in Sunyani, Ghana. The main objective of this study is to conduct a textual analysis of the speech for the purposes of investigating the use of language to construct an argument, persuade audiences, and find solutions to problems associated with illegal mining activities. A qualitative analysis technique was adopted based on the tenets of Critical Discourse Analysis, Aristotelian Rhetoric, and Systemic Functional Linguistics. Ethos, pathos, and logos, together with linguistic features of repetition, metaphor, imagery, tone, and speech organization form the bases of the analysis. The findings indicate that the speaker establishes his credibility through his identity as a leader and

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uses representations to evoke emotion in the audience and employs logical appeal through his reforms to institutions and policies. The research revealed that political speeches not only act as channels of communication but also as tools for framing public discourse and bringing about policy transformation in the mining industry in Ghana.

Introduction

In Ghana, illegal mining, sometimes referred to as *galamsey*, has grown to be a serious and widespread problem that affects the nation's economy, environment, and social unity (Obeng et al., 2019; Hilson, 2002;).

According to the Ghana Chamber of Mines (2020), "*galamsey*" describes small-scale mining operations that are frequently carried out without the required permissions and in contravention of environmental and mining regulations. Small-scale mining is common in Ghana, but most of these practices are illegal, and this poses a danger to the environment. It has led to the pollution of water bodies, the destruction of agricultural land, and biodiversity loss in regions far away from the cities (Hilson, 2016; Adu-Baffour et al., 2021). This has raised questions about how the industry can be made sustainable. Studies have revealed that artisanal gold mining poses a major threat to surface water quality due to the discharge of heavy metals (Armah et al., 2021). The government has reactively tried to control illegal mining by deploying the military, enacting laws, standardizing franchise systems, and promoting community projects. Unfortunately, these strategies have been implemented time and again without effect, and the situation remains the same. Adu-Baffour et al. (2021) mention that poor institutional coordination and regulation of artisanal and small-scale mining (ASM) activities are governance problems that have been blamed for illegal mining in Ghana. Crawford & Botchwey (2017) also affirm that illegal mining is not only motivated by environmental issues but also by political and economic dynamics existing between the state and mining entities. Even though small-scale mining is essential to many Ghanaians' lives and adds to the nation's mineral richness, its unregulated and illegal nature has had many negative effects.. The Ghana Chamber of Mines and other studies claim that some factors, such as poverty, unemployment, insufficient enforcement of mining regulations, and the high profitability of gold and other mineral resources, are responsible for the increase in illegal mining activities (Ghana Chamber of Mines, 2019).

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Small-scale mining has a long history in Ghana. Acknowledging the industry's potential for generating income and jobs, the Small-Scale Gold Mining Law, PNDCL 218, was passed by the Ghanaian government in 1989, formalising and legalising small-scale mining in order to control environmental sustainability. However, illegal mining has proliferated throughout the nation's mining towns due to Ghanaians' perceived inability to obtain a mining licence and the influx of foreigners into the industry. Adda (2014) mentions that the only thing that differentiates licensed small-scale mining from galamsay is legality. However, because illegal small-scale mining is so prevalent in Ghana, it is challenging to distinguish legal from illegal mining operations.

The 3rd Annual Transformational Dialogue on Small-Scale Mining that took place in Sunyani, Ghana, made it possible for speakers to tackle several issues and opportunities constraining and promoting the small-scale mining of the country. This forum attracted important factors such as policymakers and industry players to discuss current issues affecting the sector. Central to these deliberations was the need to confront the menace of illegal mining, which has been one of the key threats to Ghana's environmental and socio-economic order.

The study aims to critically analyse the language and rhetoric used by John Dramani Mahama in his speech on small-scale mining in Sunyani, Ghana. This study explored how strategies such as ethos, pathos, logos, repetition, metaphor, imagery and tone have been used to build meaning and make an audience aware of the issues about galamsey, environmental protection and mining reforms. It has also demonstrated how political discourse can be used to influence public debate on sustainable mining in Ghana. The current study answered the following questions:

1. How does Mahama employ ethos, pathos, and logos rhetorical appeals to persuade his audience?
2. What language and stylistic features are used to describe the problems of illegal mining?
3. How is meaning made in relation to environmentalism, governance and sustainable mining?

Literature Review

Political discourse is the communication through which political actors convey their messages, wield their power, and shape people's beliefs.

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Modern theorists of political discourse argue that political speech is a persuasive text aimed at legitimization, creating trust and inspiring collective action. Political leaders create representations of social reality through strategic use of language in order to realize their ideological goals. In South Africa, Cyril Ramaphosa spoke at the 2021 Mining Indaba, highlighting the need for reforms in the mining sector, especially the small-scale and artisanal mining industry. Ramaphosa stressed the sustainability of mining practices and community involvement. An expert from his speech "To ensure that we increase the contribution of both mining and energy to meeting our developmental aspirations, we have taken significant steps to resolve policy and regulatory issues that investors have identified previously and raised with us as constraints to greater investment." Depicts a strong use of logos because it presents practical solutions to the challenges the country is facing.

Recent literature shows that persuasion is still one of the core traits of political communication. From a study done by Hariati and Purwarno (2025) on the use of critical discourse analysis on a speech conducted by the president of Indonesia on his inauguration, rhetoric is used in political speeches to convey political ideologies, create credibility for the speaker, and create national unity. It has been shown that many political speeches include arguments drawn from logos, pathos, and ethos. This result is in line with other pieces of research on political discourse conducted in various cultural environments.

Al-Pares (2025), looks at how political rhetoric has changed in the digital age, focusing on how ethos, pathos, and logos—three traditional Aristotelian rhetorical devices—are modified and used in social media political campaigns. The study concludes that new frameworks for understanding political communication in the post-truth era are needed because digital political rhetoric produces new forms of persuasion that contradict traditional democratic discourse.

In a recent study of discourse analysis, persuasion within political speeches remains highly significant. As stated by Contesa and Surwandono (2024), presidential speeches in Joko Widodo's State of the Nation Address are highly significant for constructing leadership legitimacy and the execution of the political agenda. Applying Van Dijk's sociocognitive approach, the research examined the process of constructing political discourses for persuasion and legitimacy. In addition, political discourse during South African elections also shows that the use of linguistic constructions such as conditional clauses can act as a means of persuasion, which allows forming certain views among voters and gaining support for the election.

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Currently, contemporary literary studies are interested in analyzing political discourses in Ghana from the point of view of critical discourse analysis and rhetorical analysis. Research by scholars like Addae et al. (2023) is dedicated to the analysis of speeches of John Dramani Mahama, and it has been found that linguistic strategies are applied intentionally to produce ideologies and solidarity.

Furthermore, the research conducted by Abdullai (2024) aims to examine the strategies of manipulation that are used in the political speech of Mahamudu Bawumia. According to the findings of the research, the mentioned strategies of manipulation are used by Ghanaian politicians in order to legitimize their positions and manipulate people: persuasion, ideological construction, and strategic interpretation of reality.

In addition to Ghana, Adebomi (2026) carried out a study on the role of ideology in political speeches by two politicians, namely Nana Konadu Agyemang Rawlings and Oby Ezekwesili. Lexical choice was determined as a means for carrying ideology in political speeches, where political actors choose specific language expressions in order to construct identities and pursue their political agenda. This research indicates that lexical choice is still a crucial method in studying political persuasion in African political discourse.

Metaphor is another field of interest within political discourse since it allows audiences to understand social and political problems better. According to Kyeremeh et al. (2023), the use of metaphors helps to communicate purposefully by simplifying and clarifying abstract ideas to make them understandable and more appealing to the listeners. It can make the politician's message extremely effective and influential due to its simple form of presentation. Prabhakaran et al. (2021) also emphasise the importance of metaphors in political rhetoric because they help create an understanding of political messages and the audience's social environment.

Recent research about the environment has shown how serious the problem of environmental degradation by galamsey is in Ghana. Bedu-Addo et al. (2024) note that galamsey has negatively affected water resources and bodies through pollution, ecosystem destruction, and ecosystem service loss in mining communities. The study clearly shows how galamsey has become a serious environmental problem from a local problem.

The political dimension of galamsey makes this practice one of the popular issues within political speeches and campaign periods. The negative impacts on the environment, like river pollution, destruction of farmlands and threats to the future generation, have been invoked by political leaders whenever discussing illegal mining operations. Therefore, speeches on galamsey provide a suitable setting in which to examine rhetorical devices.

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On 21st February 2017, President Nana Addo Dankwa Akufo-Addo gave a speech during his first State of the Nation's Address (SONA) where he expressed grave concerns about the destruction of the environment and water bodies. In 2021, during the National Consultative Dialogue on Small-Scale Mining, he condemned how mining destroys the very environment that produces the wealth people enjoy. This was also reiterated in the 2021 Africa Mining Forum delivered by President Yoweri Museveni, where he emphasized the environmental consequences and effects on the residents, which he termed as a very big threat to human life. Museveni called for strict regulations and more effective enforcement of rules against illegal mining as the way forward. The three essential components of persuasive rhetoric identified by Aristotle are ethos, pathos, and logos. Ethos refers to the speaker's credibility and moral character, establishing trust with the audience. Pathos involves appealing to emotions, evoking feelings like compassion to enhance the message's impact. Logos relies on logical reasoning, facts, and data to support claims, making arguments robust for rational listeners. When used together, these elements form a powerful persuasive strategy applicable in various contexts, including politics, advertising, and academia, maintaining their relevance in contemporary discourse. Even though there is a growing body of research on illegal mining, a thorough analysis of political speeches on the topic is lacking. Current literature primarily addresses environmental, economic, and social impacts but does not deeply explore how political rhetoric advocates for policy reforms. While some research works have focused on ideological construction and environmental governance in Ghana, few have examined the use of rhetorical appeals in political discourse regarding illegal mining, highlighting a significant gap in understanding the interplay of persuasive rhetoric in driving environmental policy and mining reform. There is a need for detailed studies on the rhetorical elements of ethos, pathos, and logos used to frame the illegal mining issue and persuade stakeholders.

Theoretical underpinning of the study

The research is informed by Critical Discourse Analysis (CDA), in which language is seen as a social practice through which social realities, power, and ideologies are created (Fairclough, 1995). CDA is relevant to this research because it provides a platform for analysing how John Dramani Mahama frames illegal mining (galamsey) as an environmental, economic, and governance issue. Aristotle's theory of rhetoric has been used in this study to explore the use of ethos, pathos and logos in the speech by the speaker in order to establish how he uses rhetorical appeals in persuading his audience (Aristotle, 2007).

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Also, through Systemic Functional Linguistics (SFL), the way in which linguistic choices construct meaning and structure the discourse can be analyzed (Halliday & Matthiessen, 2014). CDA, rhetorical theories, and SFL provide a thorough tool that can be applied to investigate the way language influences public perception of mining sustainability in Ghana.

Research Methods

Research Design

This study employs a qualitative research design with textual analysis to analyse the speech of John Dramani Mahama on small-scale mining delivered at the 3rd Annual Transformational Dialogue in Sunyani, Ghana.

A qualitative design was appropriate because it allowed the researchers to explore and interpret the meanings embedded in texts and social phenomena from a naturalistic perspective (Creswell & Poth, 2018). This design allows for a systematic interpretation of the ways in which language is used to frame illegal mining and to advocate for sustainable mining reforms.

Data Analysis

To get the data ready for analysis, a coding technique was used. To select the pertinent section (fragment) that aligns with the study's objective, the data were first carefully read to become familiar with their content. The piece was then divided into different sections according to Aristotle's rhetorical theory, and the discursive techniques employed in each section were noted. Each excerpt was tagged with the initials of its discursive method to make identification simple. The classification of the excerpts came next.

Attention was paid to rhetorical devices used, repetitions, metaphors, imagery, tone, vocabulary selection, and the way ideas were organized. The paper analysed the role of recurring statements about sustainability, responsibility, and environmental protection in conveying the speech's main idea. Also, the use of metaphors and imagery to portray the negative consequences of illegal mining activities, along with the establishment of an emotional connection between the audience and the speaker, was analyzed. Moreover, from the concept of Halliday & Matthiessen (2014), the organizational structure of the speech was analyzed in order to show the way Mahama develops his line of thought from addressing the problem of galamsey to discussing possible policy solutions.

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The interpretation of the results is done taking into account the specific socio-political and environmental conditions of Ghana, specifically, the problems of regulating small-scale mining and protecting natural resources.

Ethical Consideration

This study used a publicly available speech by John Dramani Mahama as its main data source. No ethical approval or informed consent was required as the speech was delivered in a public forum.

The speech was accurately represented without changing its meaning and was analysed objectively. During the study, all the secondary sources were duly acknowledged and cited to maintain academic integrity.

Results

Rhetorical strategies involve stylistic methods for persuasion, clarity, and memorability, operating at sentence, structure, and foundational appeal levels. Mahama's political experience informs his perspective on small-scale mining, providing him with credible insights into national issues and innovative solutions to illegal mining concerns. He also stresses his determination to promote sustainable mining practices, which is the core message of the entire speech. For example, he asserts: *"As leader of the National Democratic Congress (NDC) and incoming President of the Republic, I am deeply committed to working with all stakeholders to chart a new vision for our country's mining industry."* This open claim of loyalty endorses him as a trustworthy individual who not only knows the issues but also acts on them due to his prior presidential experience. In this manner, he places himself as a strong future leader with an agenda for governance and therefore connects the proposals to a wider political strategy that targets the audience.

Underpinning his authority is an understanding of the past and present situation of small-scale mining, which he is very much aware of. He insists that the current regime has not spared the miners even for a minute, as they face challenges such as equipment confiscation and death. His statement *"small-scale miners in this country have had enough government mismanagement of the sector, such as equipment confiscation, and sometimes innocent Ghanaians lose their lives"* places him in the position of a person who sympathizes with miners' ordeal and understands flaws in its policies. This understanding strengthens his ability to suggest reforms meant to solve these problems.

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His speech is full of pathos, especially his portrayal of the effects of illicit mining on the environment. He uses pathos to provoke the audience by emphasizing the suffering of communities and the environmentally damaging activities that they are subjected to, as well as the resources that are destroyed in the process. In support of that, he shows the scope of the challenge posed by illegal mining both to residents' well-being and the environment in such astounding detail to justify the need for changes in the law.

Mahama visually depicts the degree of environmental degradation experienced, addressing the high levels of river pollution in Ghana as well as the depletion of forest cover. *"Our rivers and lands have been polluted, our forests destroyed, and our people left without clean water or fertile land,"*

states. By this utterance, he seeks to inspire in the readers/listeners a feeling of loss and urgency as he links natural resource depletion to community well-being. Mentioning rivers, forests, and land, which are vital elements for life and survival. It evokes strong emotions among individuals who may not only think about them from an economic perspective but also view them as culturally important.

The suffering of local communities is another fundamental emotional appeal that Mahama uses. He talks about how illegal mining comes with a heavy human cost; for instance, among other things, such people have been left without access to clean water and fertile land, thus making them unable to survive or live well. For example, regions like Ankobra and Pra rivers or Atewa forest reserve help in personalizing the issue, hence making it attractive to the audience. Moreover, Mahama relates environmental degradation to the larger concept of intergenerational responsibility in that he argues that illegal mining is not only a current crisis but also a crisis for future generations. He states, *"We should put a premium on safeguarding our environment and conserving our natural resources for the future."* This future-oriented plea incites guilt and anxiety, motivating people to think about their worthiness and what their behaviour leaves behind for posterity. Such appeals are designed to provoke some action on the part of the audience, as it is commonplace for people to be stirred into action, particularly when such apathy is seen as harmful to one's immediate descendants or even great-grandchildren.

Mahama effectively uses emotional appeals to resonate with his audience's concerns, garnering support for his initiatives aimed at transforming the small-scale mining industry. He highlights the potential dangers of inaction, fostering a sense of responsibility towards environmental preservation among those at risk.

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The Role of Rhetorical Strategies in Mahama's Speech

The speech employs several rhetorical strategies to convey a message and influence the audience. Thus, by coherently using these components, he makes it known that his campaign against illegal mining cannot be simply confined to reasoning, tweet honing, and appeals to pity and remorse. Ethos is utilized in this address through showing the speaker's authority as the president of Ghana and the leader of the National Democratic Congress (NDC). In other words, having occupied a certain office in government, he believes it enhances his proposal for reforming the small-scale mining industry. He states, *"As the leader of the National Democratic Congress (NDC) and incoming President of the Republic, I am deeply committed to working with all stakeholders to chart a new vision for our country's mining industry."* The sentence creates an impression of leadership and accountability by placing him in a position where he has the power to provide

solutions to the galamsey problem. Secondly, Mahama enhances his credibility by indicating knowledge of the difficulties associated with small-scale mining. Unlike labeling the miners as offenders, he recognizes the economic role played by the miners by saying that, *"the small-scale mining sector plays a significant role in our economy—providing livelihoods for thousands of our people and contributing to the development of our nation."* By appreciating both the strengths and weaknesses of the sector, he is positioning himself as an impartial leader who understands the various sides of the issue.

The audience is likely to believe in Mahama's admonitions on enabling tax legislation and conserving the environment due to his previous experience in a national leadership position. Further stating that he will not just pay lip service but especially have a working relationship with all parties involved in the issues, while at the same time being knowledgeable on these issues, applies the argument. He mentions that *"I am deeply committed to working with all stakeholders to chart a new vision for our country's mining industry. We must ensure that Ghana's natural resources are managed to benefit all our people, not just a few."* It is in this instance that Mahama establishes ethos once again by talking of himself as not only a concerned leader but a knowledgeable one, and this makes it easy for the people to accept his views and support his recommendation of reforms.

He further claimed that *"I stand firm in this commitment and will work with you all to build the Ghana we want."*

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Emotional appeal or pathos is an essential aspect when it comes to engaging the audience in Mahama's speech. He talks of polluted rivers, uprooted trees, and suffering people, all in the name of illegal mining activities that ruin the environment. For example, *"Our rivers and lands have been polluted, our forests destroyed, and our people left without clean water and fertile land."* Again, he stated, *"We cannot afford to watch as our natural resources are plundered, and our communities suffer the consequences."* It is expected that these histrionic images are meant to arouse strong feelings such as pity, wrath, or even a sense of immediacy. It has transformed from a mere issue of formulating a policy in this instance, through illegal mining, to one of appealing to people's sense of values. In this respect, where he draws attention to resource depletion and the suffering of ordinary citizens of Ghana, he raises an appeal to the *humanity of the audience to compel them to undertake some actions*. He remarked that, *"We cannot afford to lose these precious natural resources to the greed of a few individuals."* The use of the phrase "precious natural resources" is a way of instilling a feeling in one's mind that the resources found in the rivers, forests, and land are invaluable and should be conserved for everybody.

The word "lose" triggers a feeling of alarm, implying that if the illegal mining continues, it will end up doing an irreparable harm. In addition, the use of the phrase "the greed of a few individuals" is a way of establishing a contrast between what the few greedy people are doing and what is good for the country as a whole.

He again added, *"We must also prioritise preserving our environment and protecting our natural resources for future generations."*

In addition, the phrase "We should also ensure that we safeguard our environment and our natural resources for future generations" appeals to the target audience's emotions by making them feel responsible for their children or future citizens. When one refers to "future generations," the implications of illegal mining get stretched into the future, allowing the listeners to think about the future implications of harming the environment. It is emotional because environmental conservation takes on a higher moral meaning when it becomes a matter of responsibility to future citizens who will inherit the country's resources.

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"We must ensure that Ghana's natural resources are managed in a way that benefits all our people, not just a few" also shows pathos since it creates a connection between the issue and fairness, equality, and ownership by all. Mentioning "all our people" against "not just a few" brings out an emotional appeal regarding social justice, showing that the benefits of Ghana's natural resources should be distributed equally. In this case, Mahama tries to make the illegal mining and the poor management of the resources a national issue affecting national cohesion and equality. The use of inclusiveness brings an emotional appeal to the nation since the people desire a Ghana where its natural resources help the whole nation and not a few individuals.

In conclusion, the above examples show that Mahama uses pathos to turn the illegal mining issue in Ghana from a mining issue to an emotional issue in the country. He uses loss, responsibility, fairness, and future generation protection to influence the audience through emotion, as Aristotle (2007) explains.

The statement *"I am dedicated to supporting the transformation of small-scale mining, and my vision in this regard is clear"* is an example of the use of pathos in the appeal to commitment, hope, and development together. Mahama employs emotional words in order to make stakeholders of the mining industry feel trusting and optimistic.

In saying *"I am dedicated"*, the person speaking is showing clearly that he has genuine dedication, and hence, he is emotionally committed to coming up with solutions to the problems facing small-scale mining. This phrase appeals to people's wish to see leaders who can be relied on in solving national problems because reform is seen as a personal rather than political responsibility.

Moreover, the phrase "supporting the transformation of small-scale mining" carries in itself the idea of hope and improvement because the word "transformation" means that the sector will not be destroyed but transformed for the better, making it emotional for the miners and communities dependent on mining. Similarly, the phrase *"my vision in this regard is clear"* adds to the effectiveness of pathos by conveying certainty and confidence. It implies that the speaker has an established vision and plan in dealing with the problems associated with small scale mining. This is likely to create a sense of assurance in the minds of the audience, particularly in a situation where the activities of illegal miners have created a sense of insecurity concerning environmental safety, economic prospects, and governmental actions.

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To add, the use of this phrase helps Mahama utilize pathos to create a sense of optimism and trust in the eyes of his audience because he is a leader dedicated to making improvements in the mining industry. It is important to note that Aristotle (2007) supports the idea that persuasion should engage people's emotions and values.

To speak of logos, Mahama makes use of them through facts, evidence, and policy proposals meant to address the problem of illegal mining. He uses logic to justify the importance of the mining sector by saying that *"As a nation, we cannot fail to recognize the significant contributions of small-scale mining to our economy. It is estimated to provide employment for over a million Ghanaians and serve as a crucial source of income in many of our rural areas."* The use of logic justifies the point that the solution is not about stopping small-scale mining altogether, but about regulating it.

His appeal to logic is clear in the reforms he advocates for. This is seen, for instance, when he calls for the formation of district mining offices, stating that it is through this move that *"the application process for mining licenses [will] be streamlined."* He further calls for the reorganization of the sector into Small-scale Mining (SSM), Medium-scale Mining (MSM), and Large-scale Mining (LSM). This shows that he applies the cause-and-effect method.

Logical arguments can be found in Mahama's discussion of the role of technology and monitoring. He suggests using artificial intelligence when he said, *"This will include using AI to locate all small-scale mining and galamsey operations, track excavators, and geo-fence all concessions to ensure mining operations are not conducted in unapproved areas, including water bodies. A special revolving fund will be established with the private sector to provide capital and a mining equipment pool in each district where gold mining is prevalent. This will facilitate easy and affordable access to relevant mining equipment."*

He further mentioned that, *"We must, therefore, strengthen regulatory institutions like the Minerals Commission, the EPA, the Geological Survey Authority, and the Natural Resources Universities to further this. This will involve law, policies, regulatory enforcement, and education"* is an example of logos since Mahama has used a logical way of dealing with the issues relating to the challenges that are posed by galamsey. He has not limited himself to the effects, but he has gone ahead to identify the weaknesses that exist and how to strengthen them.

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The use of the phrase "*strengthen regulatory institutions*" is an example of a cause-and-effect argument. In his opinion, one of the reasons why there is galamsey in Ghana is that there are some areas which need to be strengthened. By giving institutions like the Minerals Commission, Environmental Protection Agency (EPA), Geological Survey Authority, and Natural Resources Universities, Mahama identifies actors who should provide solutions.

Moreover, the phrase "*This will involve laws, policies, regulatory enforcement, and education*" is an example of structured logic to solve the problem of illegal mining in Ghana. In his speech, he does not consider illegal mining as a challenge that can be solved in one step, but rather requires the implementation of several measures, such as legal reform, policy-making, regulatory enforcement, and education.

The mention of education is also important for enhancing the logical appeal since regulation is not always enough. Therefore, the speaker considers that people should know about the laws and rules concerning the proper process of mining. This statement exemplifies logos since Mahama uses reasoning and institutional evidence to prove how the country can deal with the problem of galamsey. The process is structured and goes as follows: there is a serious problem that needs solutions since it is connected with the failure of institutions. Therefore, one needs to strengthen the institutions through laws, enforcement, and education.

Language and Diction

The speech uses a formal tone that indicates the seriousness of the illegal mining crisis in Ghana and underlines its urgency. The tone, therefore, needs to portray galamsey as a national disaster that needs urgent action. Mahama's utterances always demonstrate how serious the issue is. For example, he states that these operations pose "*a severe and immediate threat*" and have "devastating effects of illegal mining" in terms of the environment as well as socio-economic effects.

The word "immediate" means there is no time for ignorance or delay; "devastating" implies irreversible injury both to nature and to affected communities. By talking about natural resources which are being plundered by illegal miners, it paints a picture of indiscriminate exploitation, hence making it clear that illegal mining goes beyond being a problem – it is catastrophic for the future of the country. In this sense phrases such as "we cannot afford to watch" and "*we must urgently acknowledge*" add to the formality in tone and highlight the need for promptness and decisiveness.

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They convey distinct messages that complacency cannot be tolerated. Mahama strengthens this message by saying, "We cannot allow illegal mining to continue unchecked," suggesting that if this continues, Ghana's environment will be destroyed and its people will suffer. The repeated use of "we must" throughout the speech suggests a collective obligation where everyone involved should respond to issues and become solution providers.

Also, the formal and precise words employed by Mahama, such as "*sustainable development*", "responsible mining practices", and "comprehensive re-categorization", are indicative of a strategic, policy-driven approach to the issue. This shows that he has a thought-out plan on how to reform the mining sector, which makes him sound realistic. His suggestion to set up "district mining offices" and amend the "*Minerals and Mining Act*" indicates a formal legislative route towards achieving reform, thereby increasing the credibility of his claims. Through such formal language, he highlights that this problem is more complicated than it looks and calls for institutional changes instead of just individual solutions. How he speaks is so formal that it makes you realize how much he has understood the illegal mining crisis. It makes him seem very serious and, at times, serves as a warning to people in the audience who might have been thinking that they can afford to remain idle about this matter. He not only articulates the time-based nature of the problem but also appeals for quick, concerted action towards solving it.

The Use of Repetition

Sustainability is one of the key concepts emphasized in this speech. In his speech, he mentions the term sustainable development on several occasions, as well as sustainable mining practices. The words point out the necessity for mining to harmonize profits with the conservation of nature, which underlies his perspective towards the future.

When he repeats the word sustainable, he means that all changes proposed for small-scale mining should be permanent and useful not only to the present but also to future generations. The study supports Fahnestock (2011), emphasizing that the repeated use of specific words and ideas enhances the audience's understanding and retention of important issues addressed in the speech.

A few words that Mahama always talks about are '*we must*'. It is his call for common action for everyone. He says, for instance, that "*we must urgently acknowledge*"; "*we should instead focus on and work together to combat illegal mining crises*." This frequent repetition of "we must" adds to the fact that this issue affects us all by pushing the government as well as the nationals to act

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with firmness. The frequency of the phrase in his presentation shows how gravely serious the challenge is and delivers a message of moral duty while making it more evident that doing nothing is no alternative at all. In doing so, he increases his request for collective effort and explicitness among all parties involved in this problem.

Also, he repeats the idea of '*responsibility*' to underscore that we need to manage our natural resources ethically. He states that "*Ghana's resources now must be managed in such a way as to benefit all Ghanaians, not only a few.*" Responsible resource management is thus an issue of environmental morality for generations. Besides, he associates this responsibility with governance and leadership because he believes mining activities by leaders and policymakers must be accountable to the country's development agenda. His continuous use of "responsibility" suggests that illegal mining should not just be seen as a technical problem, but something more concerning national ethics.

The current study aligns with Charteris-Black (2005)'s use of repetition to depict urgency.

The literature on persuasive communication shows that repetition is an effective rhetorical tactic, helping audiences recall and assimilate key points crucial for influencing attitudes or behaviour. The use of metaphors and Imagery in the Speech

Research indicates that metaphors connect unfamiliar concepts with familiar ones, bridging the gap between the speaker's message and the audience's comprehension (Forceville, 2009). Furthermore, it has been noted that the employment of images and metaphorical language captures several cognitive processes, making the message powerful and lasting. This supports the empirical data on multimodal metaphors and shows that when metaphors incorporate several sensory modalities, such as the way language and images cooperate, the message's overall comprehension and retention are improved (Zhong et al., 2023), and it also supports the findings of the current study.

The significance of metaphors in political rhetoric revealed by the findings supports what some social scientists have argued, including their ability to influence decision-making (Thibodeau and Boroditsky 2011), their function as a framing technique (Entman 2003; Lakoff 1991; Tannen 1993), and their propensity to evoke stronger emotions than their literal counterparts (Citron and Goldberg 2014). Metaphors, for example, aid in the framing of a problem by highlighting aspects of it that support a specific viewpoint (Lakoff and Wehling 2012; Musolff 2000). Mahama's address effectively utilized figurative language and vivid imagery to emphasize the serious consequences of illegal mining in Ghana.

This narrative technique aims to evoke emotions, enhance his argument, and inspire the audience to recognize the severity of the issue and take action.

An example of how he uses imagery in his speech is when he talks about how illegal mining destroys the environment. He says, *"Our rivers and lands are polluted; our forests have been destroyed; our people have been left without clean water and fertile land."* This intense language establishes a sense of large-scale destruction, which shows us the wreckage of nature. The polluted rivers and forested areas that are ruined draw an image of a forbidding situation that reminds us of what we have lost, not just economically but also in terms of the beauty that nature provided for humanity and resources vital for sustenance. In mentioning "people left without clean water and fertile land", he personalizes these concerns for local communities, thereby making them real to them through his speech.

To highlight the recklessness and the desire associated with illegal mining, he also utilizes metaphors. He portrays illegal mining as *'plunder'* and argues, 'We cannot look on and pretend all is well when our resources are being plundered and our people being made to suffer.' The term *'plunder'* gives way to an image of a brutal attack designed to take out resources indiscriminately, with no empathy for the havoc caused. This metaphor gives a vivid picture of illegal miners as callous marauders who have come to the country to rend the land selfishly for their gain. Also, it makes it clear that these doings are not merely damaging; rather, it compares them to the sorts of robbery where a country's resources and wealth are stolen from it, thus explaining how bad the situation is concerning illegal mining.

Similarly, he uses imagery to depict the far-reaching effects of illegal mining on the natural resources of Ghana. He speaks about *"destruction of cocoa farms"* and *"destroyed forests"*, reminding us of the places that were rich in resources with agricultural and civilized populations before being wiped clean by mining activities. This paints a picture of a landscape with isolated patches that bear gruesome scars from signs of irretrievable damage to nature. In addition to that, mentioning the *"destruction of cocoa farms"*, which represent the agricultural heritage of the country, while at the same time being a key revenue earner. He suggests that illegal mining is crumbling the ideals upon which our society was built through economic structures and cultural heritage.

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Analyzing the Structure of the Speech

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In his opening, he presents a straightforward introduction to this issue, showing how serious illegal mining is, and what harmful consequences it brings. While starting by saying that mining greatly contributes to Ghana's economy, he quickly changes gears by pointing out the negative aspects associated with illegal mining. He declares: *"Mining has been and will continue to be a significant contributor to our nation's economy, but we must urgently acknowledge that illegal mining, including galamsey, has posed a severe and immediate threat to our environment, health, and economy."*

With such a serious tone at the beginning, this issue appears as one of the most urgent matters that needs a response on a national level. In this kind of direct setting, he gets everyone's full attention and prepares them for future discussions of a more detailed nature.

He starts his discussion by identifying the problem, and then he presents various national and international examples of how illegal mining affects the environment to support his argument. He mentions in particular *"our rivers and lands have been polluted, our forests destroyed, and our people left without clean water and fertile land,"* thereby highlighting the deteriorating situation in Ghana's resource base.

In this way, he establishes a strong case against illegal mining as an existing issue in Ghana. He further enlarges its parameters through instances like the collapse of a dam at an illegal mining site in Brazil, which indicates that it is not only a national but also a global challenge. In addition to demonstrating the vastness of the subject, this combination of local and foreign case studies constructs a framework that calls for Ghana's immediate action against the potential occurrence of similar incidents. It is not only the problem that he defines, but also proposals such as separating licensing layers using regional or county mining offices and capturing local chiefs in the process. The call to action is the last note that ends the speech.

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This calls for action after developing his arguments and vision for reform. Mahama appeals directly to the audience, as he states, *"It is time for us to come together and take decisive action to end illegal mining and chart a sustainable future for our mining sector."* However, in addition to calling for understanding and action, it is this conclusion, and the concern for unity and timeliness, that gives rise to the belief that they should also feel a part of the solution.

In this regard, Mahama commits towards the latter end of the speech to improving the efficacy of the speech in aiding changes amongst the audience. The effectiveness of Mahama's speech greatly hinges on its structure. This helps sustain energy and persuade listeners through a clear introduction of the problem, an expatiated development, and a precise call for action. The sequence in which he presents his ideas is such that they become common knowledge to all those who listen to him, but with some level of passion motivating them, thereby making it informative and inspiring. This coherence instils a sense of participation and encourages proactive involvement in addressing the challenges.

Discussion

From the results, Mahama often resorts to an emotional appeal by reckoning the environmental and social consequences of illegal mining. He described *galamsey* as an activity that threatens the nation's natural resources and the welfare of communities. The current study supports these findings from Aristotle (2007), who mentions that the audience accepts the speaker's message when the speaker exhibits competence, integrity, and goodwill. Again, Charteris-Black (2011), Fairclough (1995), Van Dijk (1997), Walton (2006), Gee (2014), Chilton (2004), and Van Leeuwen (2008) suggest that political leaders build authority by presenting themselves as knowledgeable, trustworthy, and able to solve societal problems. These scholars further contend that credibility is often built on the basis of reference to leadership, experience and commitment to public welfare.

These findings are consistent with the findings of the present study, where Mahama constructs his ethos by underscoring his leadership position, commitment to mining sector reforms and readiness to partner with stakeholders, thus making his message more persuasive. The emotional context also makes the audience more involved and encourages them to support a public action (Nisbet, 2009; Petty & Cacioppo, 1986; Pezzullo & Cox, 2017).

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The devastating impact of galamsey on rivers, forests, agricultural lands, and local livelihoods has also been documented in empirical studies on illegal mining in Ghana (Armah et al., 2012; Hilson, 2016; Bansah et al., 2019). These studies support the present findings in which Mahama uses emotionally charged descriptions of environmental degradation as well as the suffering of the community to construct illegal mining as a national crisis that demands collective and urgent action.

Evidence and well-structured reasoning are essential elements of persuasive discourse (Toulmin, 2003). Wodak (2009) also note that political leaders often frame problems with solutions to legitimise proposals for policies.

Tannen (2007), Halliday and Hasan (1976) and Hoey (1991) argue that repetition reinforces important messages, improves textual coherence and increases audience engagement by constantly reinforcing key messages. Lakoff and Johnson (2003) and Semino (2008) affirm that metaphors and imagery enable speakers to tone down complex issues, create vivid mental images and shape public understanding of social realities. Furthermore, the formal tone and coherent arrangement of political speeches, especially the adoption of a problem-solution structure, are important in making political speeches persuasive because they take audiences from the identification of a problem to the acceptance of proposed solutions in a logical way (Fairclough, 1995; Halliday & Matthiessen, 2014; Chilton, 2004; van Leeuwen, 2008). These works together confirm the findings of this research, which reveal that Mahama uses a combination of logical reasoning, repetition, metaphor, imagery, and effective discourse to emphasize the urgency of dealing with illegal mining as well as to call for sustainable changes in Ghana's mining industry.

Limitations and Recommendations for Future Research

This study is limited by its focus on only one speech, which may restrict generalisability. Future research should expand the range of this research by studying speeches made by various political figures, policymakers, and others on illegal mining to establish whether they make use of similar linguistic tactics in building the discourse of galamsey.

Comparative studies would be useful in identifying the ways in which various political regimes communicate issues of environmental protection through the use of speeches.

In addition, further research could involve an application of mixed methods approaches where researchers use qualitative analysis of speeches together with audience responses in order to establish the impacts of such speeches on public opinions on the environment and the policies relating to mining operations.

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Future researchers may also look at the extent to which the proposed policies by politicians are implemented.

Conclusion

This study establishes that Mahama's speech employs rhetoric and language to construct 'galamsey' as an environmental, economic, and governance issue. This is through the use of ethos, pathos, and logos, which help him in establishing his authority, eliciting an emotional response and coming up with logical solutions to the problems facing the mining industry. The research findings also indicate that the repetition, metaphor, imagery and tone help in making the speech more persuasive through the emphasis on sustainability, responsibility and collective action. It is therefore recommended that there be practical policy measures to go hand-in-hand with the communication in dealing with the issue of illegal mining.

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Data Availability Statement

The data that support the findings of this study are available from the corresponding author, Rosina Achiaa Annoh, upon reasonable request.

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Authorship and Level of Contribution

Rosina Achiaa Annoh: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Writing – original draft, Writing – review & editing.

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