

**AWKA JOURNAL
OF ENGLISH LANGUAGE AND
LITERARY STUDIES
(AJELLS)**

**Volume 12 Number 1
March, 2025**

Language and Identity in Computer-Mediated Communication: A Study of Select Blockchain Communities

Favour Amarachi Okoye-Agu

Department of Language and Literature
Nnamdi Azikiwe University, Awka
okoyeaguamarachi@gmail.com

&

Emmanuel Chukwudi Ugwu

Department of Language and Literature
Nnamdi Azikiwe University, Awka
ec.ugwu@unizik.edu.ng

Abstract

The rapid proliferation of blockchain technology has not only transformed financial systems but has also fostered the emergence of distinct online communities. Research has primarily focused on the technical, ethical, and financial aspects of blockchain technology, with limited attention given to its linguistic dimension. These communities exhibit unique linguistic practices that both shape and reflect their members' identities. Therefore, this study is aimed at investigating the interplay between language and identity within select blockchain communities, to understand how linguistic behaviours in computer-mediated communication (CMC) contribute to identity construction and community cohesion. This study is framed by Gerry Philipsen's Speech Codes Theory, which offers a framework for analyzing the cultural codes embedded in communication. It employs a netnography research design, using data sampled from distinct social media groups dedicated to blockchain discourse. Textual data from posts, comments, and interactions were subjected to content analysis to identify speech codes and their functions in constructing

community identity. The findings reveal that blockchain communities utilize a distinct lexicon, marked by technical jargon, memes, and ideologically charged phrases. Additionally, language usage reflects underlying tensions between inclusivity and exclusivity, particularly in the negotiation of novice versus expert identities. The study concludes that language is central to identity construction in blockchain communities, functioning as both a tool for social bonding and a mechanism of gatekeeping. This research contributes to understanding the role of language in digital identity formation and offers insights into the cultural dynamics of emerging technological communities.

Keywords: Language, identity, computer-mediated communication, blockchain communities, Speech Codes.

Introduction

The advent of blockchain technology has ushered in a new era of digital innovation, transforming various sectors such as finance, supply chain management, and decentralized applications. Consequently, this has led to the formation of diverse online communities, each with its unique culture, norms, and communication practices. These blockchain communities comprise developers, enthusiasts, investors, and users who engage in computer-related communication characterized by technical jargon, cryptographic concepts, and decentralized governance models. Within this context, language plays a crucial role in shaping individual and collective identities, as community members use linguistic strategies to establish expertise, assert authority, and negotiate social hierarchies. Thus, this study investigates how language functions within blockchain communities to construct and negotiate identity.

The study of language and identity in computer-related communication within blockchain communities is a multifaceted endeavor that intersects with various fields, including sociolinguistics, digital communication, community studies, and

technology studies. By delving into the linguistic practices, discourse strategies, and identity performances within these communities, researchers can unravel the complexities of online social interaction, explore the mechanisms of group formation and cohesion, and contribute to theoretical frameworks that elucidate the role of language in shaping digital identities. Both spoken and written language serve as mediums through which individuals express their ideas, values, and affiliations, shaping the collective identity of the community.

Hence, Understanding the intricate relationship between language use and identity construction within computer-related communication in blockchain communities is essential for comprehending the dynamics of these digital ecosystems and their broader sociolinguistic implications. In the context of online communities, language takes on additional dimensions, becoming a vehicle for identity construction, social bonding, and community building. Linguistic features such as vocabulary, syntax, discourse structures, and communicative styles contribute to the formation of individual and collective identities within digital spaces. Just as Ron Darvin (2016) asserts that we use language to articulate ideas and to represent ourselves and our social relations, in the realm of blockchain communities, language plays a pivotal role in shaping how members perceive themselves and others, negotiate their roles and affiliations, and establish norms and practices. The linguistic repertoire within these communities encompasses technical jargon, domain-specific terminology, informal discourse markers, memes, and cultural references, creating a unique communicative environment that distinguishes insiders from outsiders and reinforces group solidarity.

Additionally, identity construction within blockchain communities is a dynamic process influenced by linguistic practices, social interactions, and technological affordances. According to Norton (2016), identity is constituted in and through language. Members

engage in identity performances that reflect their expertise, values, affiliations, and aspirations within the blockchain ecosystem. These performances are manifested through linguistic markers such as self-presentation strategies, rhetorical devices, narrative constructions, and discursive positioning. The formation of identities within blockchain communities is not only influenced by individual agency but also shaped by collective narratives, community norms, and socio-technical protocols. For instance, developers may adopt technical language and coding expertise as central components of their professional identity, while investors may emphasize market analysis, risk management, and portfolio diversification in their communicative practices. The diversity of roles, perspectives, and motivations within blockchain communities contributes to a rich tapestry of identities that intersect and evolve over time.

Lastly, the study of language and identity in computer-related communication within blockchain communities intersects with broader sociolinguistic inquiries into language variation, identity construction, and social interaction. Thus, within digital environments, including online communities, social media platforms, and virtual worlds, language functions as a symbolic resource that individuals and groups deploy strategically to assert their identities, express solidarity, and perform social roles. The notion of "imagined communities," as conceptualized by Benedict Anderson, resonates with the formation of online communities, where shared language practices and discourses create a sense of belonging and collective identity among dispersed members.

Purpose of the Study

The present study seeks to investigate the complex relationship between language use and identity construction within blockchain communities. Specifically, the study aims to achieve the following objectives:

1. To examine the linguistic features that characterize communication in blockchain communities.
2. To analyze the role of pseudonymity and anonymity in shaping individual identity and interaction patterns within blockchain communities.
3. To assess the role of language in establishing credibility, authority, and reputation within decentralized and hierarchical blockchain networks.

Significance of the Study

This study is highly relevant to the field of sociolinguistics and digital communication. Insights from this study will benefit developers, designers, and stakeholders involved in blockchain technology and platform development. Understanding how language influences user experiences, community engagement, and platform design will lead to more user-centric and culturally sensitive technological solutions. It will also enhance digital literacy and communication skills among participants within blockchain communities. Moreover, by identifying linguistic strategies for effective communication, this research will empower community members to express themselves more clearly, engage in constructive dialogue, and collaborate on projects with greater efficacy. Hence, the study of language and identity within computer-related communication bridges the gap between linguistic studies and contemporary digital communication practices.

Statement of the Problem

In a rapidly globalizing and multicultural world, language serves not only as a tool for communication but also as a marker of cultural, social and personal identity. However, as linguistic landscapes evolve due to migration, social interactions and technological advancement, issues about how language influence identity formation, maintenance and negotiation within diverse social contexts arise. These issues include how language influence

identity negotiation in heterogeneous communities, how language fosters inclusivity and exclusion, how it preserves or erodes cultural identities and the role language plays in the emergence of hybrid identities. These issues reflect broader challenges at the intersection of language and identity in a rapidly changing world. Although existing research has explored identity in multilingual contexts, Nigerian novels, and crisis situations, little attention has been given to blockchain communities. Moreover, despite the growing importance of blockchain communities in shaping contemporary digital culture, scholarly investigations into the interplay between language and identity in such contexts remain limited. Existing researches on computer-mediated communications (CMC) largely focus on broader social media platforms or specific phenomena like digital discourse, virtual identity formation and so on. Some researches on blockchain have handled the technical aspects of blockchain technology, and the ethical concerns and implications of blockchain technology. Some researchers who conducted the aforementioned researches include: Onukwe and Gibson (2022), Yusuf and Nwaobasi (2024), Edem and Solomon (2024) and Ikeakaenyi (2024). However, there is scant research examining how language influences the negotiation of individuals and collective identities. They tend to overlook the intersection of language and the socio-political ideologies that underpin blockchain discourse. Therefore, this study seeks to fill these gaps in knowledge by investigating how language practices within select blockchain communities contribute to identity construction and negotiation. This article addresses the following questions:

1. What are the dominant linguistic features used in blockchain and how do they facilitate communication within the group?
2. In what ways do pseudonymity and anonymity influence identity construction and interaction dynamics among members of blockchain communities?
3. How does language use impact the perception of credibility, authority and reputation in decentralized blockchain networks?

Review of Related Scholarship

Language and Identity

Language is not just a means of communication but an essential aspect of human identity. It directs both self and outside perceptions of an individual; that is, language shapes the way individuals perceive themselves and the way they are perceived by others in their social environment. When it comes to the topic of identity in fact, language is undoubtedly “the beginning, it is part of who we are” (Rosen, 2002; quoted in Fasold and Connor-Linton, 2006: 375). This highlights the deep-seated connection between language and identity. The interaction between language and identity has been an interesting subject across various disciplines including Linguistics, Sociology, Psychology and Anthropology. In each of these disciplines, language is viewed not just as a neutral vehicle of communication but as a social tool that plays a critical role in the formation and expression of identity, both personal and collective. On the one hand, identity, although multifaceted, can refer to an individual's own subjective sense of self, to personal classification markers that appear as important, both to oneself and to others, and to those markers that delineate group membership(s) (Groebner 2004; quoted in Edwards, 2009).

An individual does not merely possess a single identity; rather, people embody multiple identities shaped by their interactions with others (Wardhaugh, 2006). This entails that everyone of us has a set of identities which are constructs of interactions and communications with others. Our socialization experiences and general interactions with the world permit us to create both individual and group identities. Factors like “race, ethnicity, gender, religion, occupation, physical location, social class, kinship, leisure activities, etc. affect and shape these identities” (Wardhaugh, 2006: 6). Moreover, through language, individuals express their belonging to these groups or sometimes distinguish themselves from such. For instance, linguistic choices such as the use of formal versus informal speech, slang or professional jargon

can signal different aspects of one's identity and can shift depending on context (Holmes, 2013). Language therefore, is used to negotiate, realise or even dissociate oneself from these identities.

Investigations into the use of language in various social contexts provide a wealth of information about the mechanics of language, the social interactions in society, and particularly the manner in which people construct and convey aspects of their social identity (Holmes, 2013). In this way, identity becomes a dynamic and adaptable concept, influenced not only by social factors, but by the speaker's conscious or unconscious linguistic choices. As noted, the language we use forms an important part of our sense of who we are – of our identity.

In all these, two distinctions or categories of identities are recognizable: personal identity and social identity(s). At the individual level, there is the need to have and feel the "sameness of oneself at all times and in all circumstances" (Edwards, 2009:19). Hence, personal identity entails that an individual is oneself and not another person by virtue of uniqueness, self-recognition and physical markers. This consistency, of course, gives rise to personality traits. Relating it to language, we can then talk about – *idiolects*. At the group level however, social identity is a more fluid construct that connects individuals to their larger communities. It represents the connectivity crafted in history and carried forward through tradition. In fact, the amorphous nature of individual identity further accentuates the notion of group identity. The assumption here is that besides our uniquely personal sense of self, we also have social identities which are based upon the various groups to which we belong. According to Eriksen (2004: 157), "social identification has to do with which group a person belongs to, who he or she identifies with, how people establish and maintain invisible but socially efficient boundaries between *us* and *them*."

Blockchain Community

The blockchain community is a unique digital space where the interaction of ideas and the development of technology take place collaboratively. As has been mentioned, this community comprises individuals, developers, investors, and enthusiasts working towards the advancement of blockchain technology. The decentralized nature of blockchain ensures that these communities form without central governance, operating instead through collective participation and shared knowledge. A blockchain community refers to a group of individuals who collaborate to develop, enhance, and utilize blockchain technologies. In other words, the blockchain community includes a wide range of participants such as developers, investors, enthusiasts, and users, all of whom support various projects like cryptocurrencies, decentralized applications (dApps), smart contracts, and decentralized finance (DeFi) solutions (Nakamoto, 2008). Unlike traditional communities, which may have hierarchies or centralized leadership, blockchain communities thrive on consensus and shared responsibility, maintaining transparency through distributed ledger systems (Buterin, 2013). These communities are often decentralized and operate through various online platforms, where members contribute ideas, knowledge, and innovations. Meanwhile, language plays a crucial role in the functionality and coordination of blockchain communities.

In summary, Yusuf and Nwaobasi (2024) conducted research on “*Sociolinguistic study of language, social identity and behavioural patterns of Keke operators in Lafia metropolis*”. This paper sought to discover how tricycle operators construct their social identity through their linguistic patterns as well as how these constructs suit their jobs and profession. Also, Edem and Solomon-Etefia (2024) worked on – “*A sociolinguistic investigation of language use and identity among inmates of Oko correctional service in Benin metropolis*.” The research wades into the problem of communication and identity construction among inmates. Hence, it

seeks to understand how identity through language is conceptualized among the inmates, by critically examining their various lexical and linguistic structures. Moreover, Ikeakaenyi (2024) conducted research on “The ethical concerns of blockchain technology”. The research investigates the ethical dilemmas of blockchain technology that could pose significant risks to individuals and society. Lastly, Onwukwe and Gibson (2022) researched on – “*Migrant identities in multilingual contexts: Nigerian immigrants' language use in public spaces in Cape Town*” which investigates the issue of identity construction by migrant Nigerians in Cape Town.

Theoretical Framework

Speech Codes Theory

The speech codes theory, first introduced and developed by Gerry Philipsen in 1997, is a linguistic framework created to understand how language is used within specific cultural groups and how it helps to shape group identity. It asserts that "each community has its unique speech code", a system of linguistic norms and meanings that reflects its cultural values, social roles and communication patterns. Philipsen outlines six core propositions of the theory:

Proposition 1: Distinctiveness

Different speech communities use different speech codes, and these codes are unique to each community. This means that each distinctive culture (community) has its own speech codes that are foreign to outsiders. Two distinctive questions can be asked through this proposition. The first being: Does every culture include symbols, meanings, premises, and rules about communicative conduct? The second is: Do such codes differ in terms of the particular words, meanings, premises, and rules about communicative conduct that they include?

Proposition 2: Multiplicity

This proposition emphasizes that multiple speech codes can coexist within any given society or cultural group, reflecting diversity in social roles and group affiliations. It suggests that no single speech code defines an entire society. Instead, different social groups within the same community may adopt distinct codes based on factors such as ethnicity, gender, profession, social status or situational context. Phillipsen further emphasizes that individuals navigate multiple speech codes depending on their roles and interactions. For example, the way one communicates at work may differ from the way they communicate at home or with peers, reflecting the coexistence of distinct cultural norms. This understanding is crucial for analyzing how individuals construct and negotiate identity in various technologically mediated contexts.

Proposition 3: Substance

The substance of speech codes delves into the essential components and functions that define these codes. The substance of a speech code refers to the content and principles embedded within it- what the code says about communication, human nature, and social life. These elements form the philosophical and normative backbone of how individuals and groups engage in interaction. Phillipsen identifies three core components of the substance of speech codes: Distinctive psychology, sociology and rhetoric.

Proposition 4: Interpretation/Meaning

This proposition addresses how individuals within a culture derive meaning from communication practices. It emphasizes that communication is not merely about the exchange of words but about the shared cultural understanding that gives those words significance. The meaning of any communicative act—be it verbal or nonverbal—is rooted in the cultural context of the speech code. Phillipsen argues that meaning is not universal; it is culturally

constructed and understood through shared experiences and values. The meaning of communication is relational rather than absolute. It depends on the relationships between the communicators and their shared cultural background. Hence, for communication to be meaningful, participants must share a common knowledge of the speech code.

Proposition 5: Socialization

This proposition focuses on how individuals learn and internalize these culturally specific systems of communication. It highlights that speech codes are not innate; they are acquired through social interaction and serve as tools for integrating individuals into their cultural communities. Socialization refers to the process by which individuals learn the norms, values, and communication practices of their culture. Through this process, people internalize the speech codes of their community and become competent communicators within that cultural framework. Speech codes are transmitted across generations and between members of a community through formal and informal social interactions. These interactions include: Family Communication, Educational Systems and Community Rituals. In addition to direct instruction, individuals learn speech codes by observing how others communicate. This includes learning acceptable topics, conversational styles, and nonverbal cues.

Proposition 6: Discursive Force

Discursive force refers to the ability of speech codes to guide and govern social behavior, enforce norms, and maintain cultural values through communication. It is the active, dynamic aspect of speech codes, wherein they are not just passive frameworks but exert influence in social interactions. The discursive force of speech codes highlights their power to influence, regulate, and sustain social practices. This proposition focuses on how speech codes are enacted and defended in everyday communication, demonstrating their practical role in shaping human interactions and social structures.

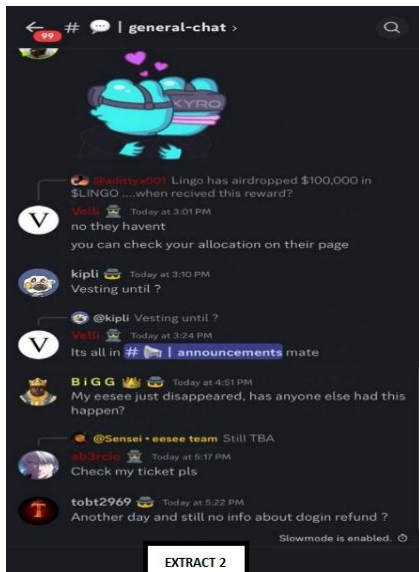
Research Methodology

This study is a netnographic research designed to explore the relationship between language and identity in blockchain communities. Purposive sampling was employed to generate data suitable for this study. Content analysis was also adopted to analyze data. Given that the study focused on how language constructs and reflects identity within online blockchain communities. This method of analysis serves as a suitable approach to identify, quantify, and interpret recurring themes and patterns in the data collected through observations, interviews, and Blockchain texts.

Data Analysis

What are the dominant linguistic features used in blockchain communities, and how do these features facilitate communication within the group?

According to the Speech Codes Theory (SCT), each community develops a distinctive speech code that embodies its unique cultural environment. Blockchain communities, however, have



cultivated lexicons filled with terms like HODL (Hold On for Dear Life), FOMO (Fear of Missing Out), smart contract and so on. These terms represent the linguistic features inherent in blockchain communities which range from Jargons, acronyms, memes, emojis and slogans and functioning as speech codes that signify membership within these communities.

Blockchain discussions often involve complex concepts, technical jargon, and references to specific technologies, protocols, or events. The use of acronyms condenses this information into shorter, easily recognizable terms, making it quicker and easier for community members to understand and contribute to discussions. Thus, the use of acronyms in blockchain communities serves as an efficient and practical way to streamline communication, particularly in environments where speed and clarity are essential.

For instance, in **Extract 1**:

Acronyms like "SOL" for Solana and "ETH" for Ethereum reduce the cognitive load of constantly writing or reading full terms. These abbreviations also foster a sense of belonging, as familiarity with the terminology signals one's insider status within the community. This shared linguistic shorthand reinforces group identity and enhances the efficiency of communication, enabling members to focus on the substance of their discussions rather than being bogged down by repetitive or overly formal language.

Moreover, 'Memes' are essential linguistic features prevalent in blockchain communities, that provides a unique and dynamic way for members to exchange ideas, share emotions, and foster a collective identity. Their effectiveness lies in their ability to encapsulate complex messages and shared experiences in a simple, engaging, and often humorous format. This makes them versatile mediums for expressing sentiments, disseminating information, and building camaraderie. Being an inherently complex technology, blockchain involves advanced technical terminologies,

intricate financial mechanisms, and abstract concepts like decentralization and consensus algorithms. Memes serve as a bridge, distilling these technical ideas into relatable, easily digestible content for members of blockchain communities, particularly newcomers. Thus, a single image or GIF paired with a witty caption can convey the essence of a sophisticated concept making these ideas more accessible to a broader audience.

From the collected data for this study, it can be said that blockchain communities are often highly emotional spaces,



characterized by the highs and lows of market activity, the excitement of technological advancements, and the frustration of regulatory challenges. Memes, consequently, provide safe and cathartic outlets for expressing these emotions. A humorous meme about a sudden market crash might allow members to bond over their collective disappointment while easing the tension through humor. Similarly, memes celebrating wins can amplify collective joy and foster a spirit of celebration as seen in **Extract 2**:

In this study, memes are seen as humorous reactions to information, comments, posts or statements made in particular blockchain communities. Being more than just humorous contents, memes are a rich and multifaceted form of communication that simplifies complex idea and fosters emotional connections among members. For instance, in **Extracts 3 and 4**:

The laughing meme which is a reaction to the post made by the polish presidential candidate means that what has been said is not attainable. This can also trigger other members of the community into laughter such that it creates a fun-filled atmosphere at the moment. By leveraging the power of humor, symbolism, and shared understanding, memes play a pivotal role in shaping the discourse and identity of blockchain communities. Members' adaptability ensures that memes will remain a vital part of blockchain culture.

Additionally, 'emojis' are linguistic features employed by members of blockchain communities to enhance communication, especially those tied to the crypto world. They serve as visual shorthand for sentiments, trends, or topics. In **Extract 5**:



The aeroplane emoji ✈️ represents market optimism or “to the moon” scenarios. The bird emoji 🐦 represents the dissemination of news and the linked circles represents connection and unity in the Solana community. These visual elements add striking richness

and immediacy to textual communication. From the represented data, it is evident that the linguistic landscape of blockchain communities is as innovative and dynamic as the technology itself. From jargons, acronyms, memes to emojis and more, these linguistic features reflect the community's ethos, creativity, and adaptability. Together, they foster engagement, solidarity, and distinct cultural identities within this rapidly evolving digital space.

In what ways do pseudonymity and anonymity influence identity construction and interaction dynamics among participants in blockchain communities?

The speech codes theory emphasizes the distinctiveness of Speech Codes. In blockchain communities, communication is characterized by pseudonymity and anonymity, forming distinct speech codes in various communities. This code reflects the communities' collective worldview, where individuals construct and negotiate identities using pseudonymous handles. Members often adopt usernames or pseudonyms as identity markers, which act as symbols of cultural belonging and expertise. For example, pseudonyms like "Coin_lord432" or "Web3Whale" embody both individuality and shared ideological alignment in **Extracts 6** and **7** respectively.

SCT also suggests that each speech code reflects its group's cultural premises and in blockchain communities, the cultural premise revolves around the value of decentralization and the ethos of privacy. That is to say that members' handles reflect their affiliations, roles, or values such as decentralization, transparency and innovation. Therefore, Anonymity and pseudonymity are culturally ingrained practices that signal respect for these values and conceal members' identities rather than the use of traditional markers of identity (i.e. real names or physical appearance).

In constructing self-identities, members construct their identities around contributions to discussions, projects, and protocols, often under pseudonymous profiles. In other words, this Pseudonymity permits individuals to construct speech code selves, or curated representations of their personality, expertise, or ideology, through their usernames and interactions. The absence of real-world identifiers means identity is performative, relying on the “honor” associated with their username's history and actions (e.g., writing smart contracts or contributing to governance). Anonymity, on the other hand, minimizes personal identifiers, reducing opportunities for individualized identity construction while fostering speech code egalitarianism, where contributions are evaluated solely on content.

Extract 8:

Interviewer: What blockchain communities do you belong, what's your username(s) and how long have you been part of these communities?

Interviewee: Developer's community

Chain_master222

6 years

Extract 9:

Interviewer: What blockchain communities do you belong, what's your username(s) and how long have you been part of these communities?

Interviewee: Investor's community

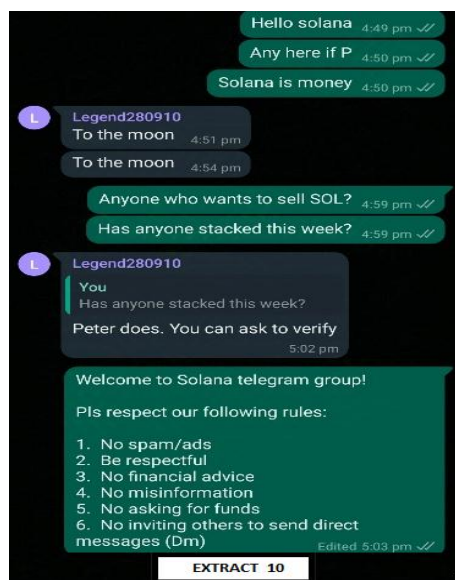
Staking_quin

3 years

In Extract 8, ‘chain’ refers to blockchain, signaling focus on expertise in the technology while ‘master’ suggests authority, skill or deep knowledge in the tech world. This pseudonym, ‘Chain_master222’, projects an identity of confidence, expertise, and active engagement with blockchain topics. It also gains legitimacy by showcasing his contributions rather than his real-world credentials. On the other hand, ‘Staking’ in Extract 9 refers to the blockchain activity of staking tokens to earn rewards,

signaling involvement in decentralized finance while ‘quin’ refers to a unique personal identifier, potentially meaning “queen” which suggests authority or prominence. This pseudonym suggests that the interviewee might be an investor. It also emphasizes participation in staking, aligning identity with financial activity and the ethos of the community. However, both pseudonyms maintain anonymity while building recognizable personas. They become brands representing their contributions, knowledge or activities within the communities.

Furthermore, in constructing relational or group identity, the psychology of communication is decentralized, with members avoiding traditional identity markers (e.g., names, geographies).



Anonymity shifts the focus from individual personalities to collective ideologies, reinforcing speech code groupness, where the community identity supersedes individual identities. Interaction dynamics in both scenarios prioritize shared discourse over personal identifiers, revealing the cultural reliance on trustless systems, self-regulation, and decentralized authority as governing

speech codes. This emphasis on anonymity and pseudonymity manifests explicitly in the sense that the use of pseudonyms is not just allowed but encouraged, signaling respect for the community's privacy ethos. Directly linking one's pseudonymous identity to their real-world identity is often discouraged which reflects a collective concern for personal security. However, violations of these codes, such as revealing personal information, often leads to social sanctions or exclusion, demonstrating the rhetoric within these groups. **Extracts 10 and 11:**

From the above extracts, pseudonym 'Legend280910' violated the speech code rules by revealing someone's real identity. This act consequently triggered series of warnings from a blockchain administrator which might eventually lead to exclusion that particular member from the community. Hence, the communicative practices in blockchain communities are deeply informed by their speech codes, emphasizing privacy and shared knowledge. Through pseudonymity, individuals construct dynamic, contribution-based identities, while anonymity reshapes interaction dynamics to prioritize inclusivity and focus on ideas over personal characteristics. It becomes evident that pseudonymity and anonymity do not merely conceal identities but actively shape the speech codes that govern how blockchain community members construct their social identities and interact with one another. This underscores the nuanced interplay between communication practices, cultural norms and identity in these unique digital spaces.

How does language use impact the perception of credibility, authority, and reputation in decentralized blockchain networks?

Distinct speech codes, in blockchain communities, emerge due to shared goals, technical knowledge, and decentralized structures. These codes include terminologies like "consensus mechanism," "staking," and "hash rate." The frequent and accurate use of these codes signals an individual's fluency in the community's specialized knowledge. For instance, individuals who

appropriately use these codes are more likely to be perceived as credible because they demonstrate an insider's understanding of blockchain-specific concepts. Moreover, given the second proposition of SCT and the diversity of blockchain communities, multiple speech codes coexist in the blockchain space. So, each community has its own linguistic markers for authority and credibility. For example, a developer in the Ethereum ecosystem might reference "EVM compatibility," while someone in the Solana network may emphasize "proof-of-history." Mastery of these localized codes enhances reputation within the specific communities. This is evident in Extract 12:

Terms such as ‘builders’ ‘Github handle’ ‘tasks’ and ‘community’ delineate the credibility of the member as he fluently and effortlessly uses specific codes to pass a message cross other



members of the community. It shows that he has gained mastery of speech codes that characterize the enthusiast community.

Conclusion

This study has examined the relationship between language and identity in computer-mediated communication within select

blockchain communities. Findings indicate that language is central to communication, identity construction, and interaction dynamics in decentralized, digitally mediated spaces. The discovered specialized linguistic features of blockchain communities does not only facilitate effective communication but also create an insider-outsider dichotomy, reinforcing group cohesion and establishing a shared cultural identity among members. Moreover, the use of pseudonymity and anonymity highlights the centrality of language in identity construction. The interplay between privacy and transparency, coupled with the community's self-regulation of language norms, further shapes individual and collective identities.

Additionally, the study underscores the impact of language on social hierarchies within blockchain communities as clear, context-relevant communication fosters trust, while linguistic missteps can erode credibility. The study further demonstrates that language is not merely a tool for interaction but a foundational element of identity and social dynamics in blockchain communities. Having uncovered the ways in which linguistic practices shape and sustain these groups, the research contributes to broader discussions on computer-mediated communication, digital subcultures, and the sociolinguistics of emerging technologies. These findings open avenues for future research into the evolving language practices of blockchain communities and their implications for identity and trust in decentralized ecosystems.

References

- Buterin, V. (2013). *Ethereum whitepaper: A next generation smart contracts and decentralized application platform*. Switzerland: Ethereum foundation. Retrieved from <https://ethereum.org/en/whitepaper/>
- Edem, S. and Solomon-Etefia, P. O. (2024). A sociolinguistic investigation of language use and identity among inmates of Oko correctional service in Benin metropolis. *ANSU journal of language and literary studies (AJLLS)*. 2 (2), 49 – 59.

- Edwards, J. (2009). *Language and identity: An introduction*. Cambridge: Cambridge university press.
- Eriksen, T. H. (2004). *What is Anthropology?* London: Pluto press.
- Fasold, R. and Connor-Linton, J. (2006). *An introduction to language and linguistics*. Cambridge: Cambridge university press.
- Holmes, J. (2013). *An introduction to sociolinguistics, 4th ed*. Oxford: Blackwell publishing.
- Ikeakaenyi, S. (2024). *The Ethical Concerns of Blockchain Technology*. Unpublished Project, Department of Philosophy, Nnamdi Azikwe University, Awka. x+71.
- Nakamoto, S. (2008). *Bitcoin: A peer-to-peer electronic cash system*. <http://www.Bitcoin.org>.
- Onwukwe, C. and Gibson, H. (2022). Migrant identity in multicultural contexts: Nigerian immigrants' language use in public spaces in Cape Town. *Journal of multilingual and multicultural development*. Doi: 10.1080/01434632.2022.2046009. 12th July, 2024.
- Philipsen, G. (1997). "The speech code theory: A sociocultural approach to communication." In G. Philipsen & T. Albrecht (Eds.), *Developing Communication Theories*. 120 – 140. Albany, New York: State University of New York Press.
- Wardhaugh, R. (2006). *An introduction to sociolinguistics, 5th ed*. Oxford: Blackwell publishing.
- Yusuf, T. and Nwaobasi, C. E. (2024). Sociolinguistic study of language, social identity and behavioral patterns of Keke operators in Lafia metropolis. *African journal of humanities and contemporary education research*. Doi: 10.6215/gyc4xj17. 14 (2), 16th June 2024.