

Unprecedented Variation: A Sociophonetic Re-Indexicalization Of A Javanese Vulgar Lexeme /Jancuk/ Within Indonesian Digital Discourse

Fariq Shiddiq Tasaufy, Cicilia Deandra Putri, Slamet Setiawan, Ayunita Leliana, Lina Purwaning Hartanti, Imam Hanafi

Universtas Negeri Surabaya

fariqtasaufy@unesa.ac.id.

HOW TO CITE:

Fariq Shiddiq Tasaufy, Cicilia Deandra Putri, Slamet Setiawan, Ayunita Leliana, Lina Purwaning Hartanti, Imam Hanafi (2026). Unprecedented Variation: A Sociophonetic Re-Indexicalization Of A Javanese Vulgar Lexeme /Jancuk/ Within Indonesian Digital Discourse. International Journal of Special Education, 41(2), 526-544

OPYRIGHT STATEMENT:

Copyright: © 2026 Authors.
Open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

ABSTRACT:

This study investigates the sociophonetic variations and re-indexicalization of the Javanese vulgar lexeme /JANCUK/ within Indonesian digital discourse, specifically during live video game streaming sessions. Broadly categorized as a local sexual taboo or an Arekan regional solidarity marker in its native East Javanese baseline ([dʒan.tʃɔʔ]), the lexeme has transformed into a trans-local digital slang particle among non-native speakers. Employing a descriptive qualitative-quantitative sociophonetic framework, this study analyzes audio corpus extracted from 10 non-Javanese digital streamers across various ethnolinguistic backgrounds using Praat spectrographic analysis and International Phonetic Alphabet (IPA) transcriptions. The findings reveal a systematic departure from the native baseline toward hyper-orthographic re-velarization (shifting the coda from [ʔ] to [k̠] or [k]) and vowel raising (from [o] to [u] or [ʊ]). Non-Javanese speakers deploy diverse phonological processes—such as apheresis, de-affrication, homorganic assimilation, lenition, and duration elongation—to navigate interactional stances, perform gaming personae, and mitigate automated digital content moderation. Drawing on Silverstein's indexical order framework and Eckert's indexical field, this paper demonstrates how the lexeme shifts from a first-order sexual taboo and second-order Arekan regional marker to a third-order indexicality. Ultimately, the study highlights how digital ecosystems facilitate the linguistic re-indexicalization and naturalization of regional vulgarities into trans-local markers of gamer identity and youth solidarity.

Keywords: Sociophonetics, Re-indexicalization, Javanese, Vulgar Lexeme, Digital Discourse, Gaming Streamers.

INTRODUCTION

As one of the most-spoken dialects in Indonesia, Javanese language possesses vast and complex dialectal variations. The variation is not limited to lexical differences, but including phonological and phonemic differences (Kartikasari, Larasati,

& Rais, 2020). Despite standardization efforts, codification of vulgar lexemes, especially in Javanese, remains limited. This variation is influenced by sociocultural, psychological, and geographical aspects, resulting in a linguistic landscape that is ever-evolving (Hamed &

Mohamed, 2023; Pinget & Voeten, 2023). In the context of Indonesian communities that are multilingual in nature, the use of Javanese language functions as one of the resources to negotiate identity. The use of Javanese language levelling: *ngoko*, *madya*, and *krama*, represents not only linguistic variations but also social relations, including age and intimacy among the speakers. However, following the advancement of digital technology, the Javanese language transforms contextually.

This research aims to investigate how segmental and suprasegmental features of vulgar Javanese lexemes are employed during the online gaming/streaming session. Additionally, the purpose of the present research is to analyse re-indexicalization phenomena that might occur depending on Javanese dialectal variations. Approaching the problem using the socio-phonetic paradigm, this research explores the prosodic mechanism of Javanese vulgar language pronunciation of non-native speakers during online gaming/streaming sessions, and the assimilation process of emerging social indexicality through deliberate and non-deliberate linguistic appropriation. It is expected that this research can contribute further to the understanding of socio-phonetic variations within digital ecosystems as a form of identity negotiation within intensive multilingual settings.

Javanese Language Variation and Sociophonetics

Foundation on Javanese dialectal diversity and acoustic parameters as social markers.

Javanese represents a linguistically complex landscape characterized by substantial internal dialectal variation that extends well beyond broad categorical divisions. While Javanese is often broadly categorized into Central Javanese, East Javanese, and Yogyakarta varieties, this classification obscures the significant dialectal differentiation present within regions [1]. Research demonstrates that dialectal differences manifest across multiple linguistic dimensions, including lexical, phonological, morphological, and sociolinguistic features [1]. The word "jancuk" (also spelled "jancok" or "dancok")

originates from the Javanese language of the Arekan dialect, which is the Javanese spoken in the Surabaya region by the "arek-arek Suroboyo" (Surabaya children). [1] Etymologically within Javanese, "jancuk" is believed to derive from the root word "encuk," which means sexual intercourse or bersenggama, with the form evolving from "di-encuk" (being subjected to sexual intercourse) into "diancok," then "dancok," and finally "jancuk." [2]. "Jancuk" became deeply embedded in the linguistic practices of the Arekan region, particularly in Surabaya, Malang, and surrounding areas. [1] The speakers of this dialect—the arek population—are characterized as having egalitarian, direct communication styles and speaking in louder voices. [1] The word initially served as a crude expletive expressing anger, annoyance, or contempt, but has since undergone a significant re-indexicalization, transforming from purely vulgar terminology into a symbol of in-group solidarity and friendship among East Javanese youth. [2]

Acoustic parameters play a crucial role in distinguishing dialectal variation and encoding social information within speech communities. Language communicators utilize acoustic-phonetic cues to convey a variety of social information in spoken language, with research revealing that speakers employ segmental features (such as formant values and center of gravity), suprasegmental features (including mean fundamental frequency and duration), and source features (such as harmonic to noise ratio) to distinguish meaningful variations [3]. The acoustic characterization of dialects demonstrates that phonetic variation is systematically organized across dimensions such as fundamental frequency, vowel quality, voice quality, voice onset time, and vowel duration [4]. Furthermore, acoustic variation operates synergistically with other linguistic structures to construct social meaning; phonetic variation can work alongside grammatical processes to establish particular personas and allow speakers to position themselves in relation to specific audiences [5]. These acoustic patterns reveal that dialect-specific production strategies reflect both

systematic phonetic organization and speakers' strategic use of acoustic resources for social communication.

Acoustic properties of speech function as salient markers of social identity, regional belonging, and community membership through mechanisms of language perception and social cognition. Research demonstrates that relatively mild rhythmic variation is measured as the proportional duration of vowels in utterances, and contributes significantly to social identification and ethnic perception, suggesting that acoustic variables are socially salient enough to be involved in style shifting and identity performance [6]. The socially weighted encoding of spoken words indicates that listeners learn acoustic patterns mapped simultaneously to both linguistic and social representations, with consequences for how linguistic variation is processed and retained in memory [7]. Additionally, acoustic features gain social meaning as markers of particular stances, communities, and identities; speakers may exploit specific phonetic realizations to perform authentic stances or align with community values [8]. These findings suggest that acoustic parameters in Japanese dialects, like other linguistic systems, serve as multifunctional resources through which speakers construct and negotiate social identities while simultaneously marking regional, generational, and cultural affiliations within their communities [6].

2. Re-indexicalization: Theoretical Framework and Mechanisms

Conceptual grounding in how linguistic forms acquire new indexical meanings and social associations [2].

The conceptual grounding for understanding how linguistic forms acquire social meaning rests upon foundational theories developed within third-wave sociolinguistics, which reconceptualize language variation as a dynamic resource for constructing social meaning. Rather than viewing linguistic variation as merely reflecting pre-existing social categories, third-wave approaches emphasize speakers' agentive roles in exploiting linguistic differences to index

social identities, communities, and stances [1]. Scholars such as Michael Silverstein, Penelope Eckert, and Asif Agha have theorized indexicality as the central mechanism through which linguistic signs "point to" contextual variables including speaker identity, communicative roles, and social relationships [1]. Crucially, indexical meanings are not inherent properties of linguistic forms themselves but rather emerge through social practice and cultural convention. Within this framework, sociality is enacted by individuals through language, with semiotic ties established between linguistic signs and social values through iterative use across communicative contexts [1]. This theoretical shift positions linguistic variation not as passive reflection but as active semiotic work through which communities construct their social worlds, with acoustic parameters, dialectal features, and other linguistic variables serving as meaningful resources in this ongoing process of meaning-making.

Understanding how linguistic forms acquire specific indexical associations requires examining the sociolinguistic mechanisms through which meanings become crystallized and stabilized. A crucial mechanism in this process is metapragmatics—the reflexive activity through which speakers and listeners strategically target and interpret the social meanings carried by linguistic signs [2]. Social indexical meaning is actualized when linguistic forms can be interpreted in social interaction as expressing particular connotations and social attributions; through repeated metapragmatic commentary and reflection on language use, speakers learn to associate specific acoustic or phonological features with particular social identities and values [2]. Additionally, the process of enregisterment—through which linguistic features become recognized as belonging to a particular register or style associated with specific speakers, contexts, or identities—demonstrates how meanings become conventionalized and transmitted within communities [citation_75294]. In digital and mediatized contexts, linguistic innovations rapidly accumulate indexical associations as features emerge as markers of particular identities, such as

intimacy, contemporaneity, in-group membership, or cosmopolitanism, with these associations reinforced through platform affordances, algorithmic visibility, and community-internal norming [citation_75294]. Through these interconnected mechanisms of metapragmatics and enregisterment, acoustic parameters and dialectal features gradually transition from being neutral phonetic variations to becoming saliently meaningful markers of social affiliation and cultural identity.

The acquisition of new indexical meanings by linguistic forms depends fundamentally on speakers' strategic agency and their creative negotiation of linguistic resources within specific social contexts. Drawing from a framework that conceptualizes identity as an interactional product rather than a pre-determined attribute, speakers leverage linguistic variation as a primary resource for constructing, performing, and negotiating social identities across diverse communicative situations [4]. Rather than treating the indexical potential of linguistic variants as fixed or predetermined, speakers demonstrate remarkable creativity in reconfiguring and reinterpreting the indexical values of forms, simultaneously maintaining connections to established meanings while exploiting these forms to convey new social meanings and stances [5]. This dynamic interplay between structure and agency reveals that while particular phonetic or dialectal features may acquire initial indexical associations through community patterns and social structures, speakers can strategically deploy these variants to align with specific audiences, project particular personas, or perform authentic stances that either reinforce or challenge existing ideological associations [6]. Furthermore, speakers' exploitation of specific phonetic realizations demonstrates how individuals contribute to the maintenance, modification, and innovation of indexical meanings within their communities [6]. Consequently, the conceptualization of how linguistic forms acquire social meaning must account not only for systematic patterns of variation conditioned by social structure but also for the creative, agentic practices through which

speakers continuously reshape and negotiate the indexical landscape of their speech communities.

There are no specific types of re-indexicalization but rather than key characteristics. The first and foremost is dynamic negotiation of social meanings. It is the fundamental aspect that involves linguistic features acquiring different indexical meanings depending on context, register, and stylistic choices. Research on adnominal gender variation in urban Dutch youth shows that the same linguistic feature can be re-indexed through "a dynamic process negotiating in-group norms at the level of interactions," where meanings are not fixed but constantly renegotiated. The second is enregisterment-driven re-indexicalization. This occurs when linguistic features become formally recognized and associated with specific social types or identities through processes of public discourse and media representation. [2] Studies of dialect writing in literature show how particular features become "enregistered"—linked to authenticating practices—and gain new indexical connections to identity and cultural values over time.

, 2), 3) ideological reframing, 4) indexical deprivation and elevation, 5) indexical hijacking and 6) metapragmatic processes.

Sociophonetic Variation and Social Indexicality

The study of sociophonetic variation has evolved significantly over the past decades, with contemporary research moving beyond simple correlational approaches (Drager, 2010; Becker, 2014) to examining how phonetic features acquire and convey social meaning (Weirich, Jannedy, & Schüppenhauer, 2020; D'Onofrio & Stecker, 2022; Ramos & Shea, 2023). Variationist sociolinguistics uses empirical and quantitative methods to study the production and perception of linguistic variation, examining how speakers choose between linguistic forms that differ in their social meaning (Chevrot et al., 2018). This field has increasingly intersected with cognitive science, bringing together data and modeling approaches to understand the cognitive mechanisms through which sociolinguistic

variation is processed (Chevrot et al., 2018). The theoretical framework has expanded to integrate linguistic, cognitive, and social aspects of language at both collective and individual levels, providing a comprehensive approach to understanding how language functions in society.

The concept of social indexicality has become central to modern sociolinguistics and linguistic anthropology, describing the capacity of linguistic signs to point to variables in the context of their usage (Molodychenko & Chernyavskaya, 2022). Social indexicality evokes social values such as forms of identity, communicative roles, and social relations drawing on these forms. The malleability and mutability of social indexical meanings are crucial prerequisites for stylization in social encounters, with ethno-metapragmatic activity—reflexive activity targeting these meanings and the signs carrying them—driving linguistic change (Molodychenko & Chernyavskaya, 2022). Contemporary scholarship has transformed views on agentivity and identity from static, predefined social structures passively projected through semiotic media to performative, creatively stylized identities constructed in social encounters.

Research in sociophonetics has documented how linguistic variation serves as a medium through which individuals and groups evoke or reconstruct the social world (Molodychenko & Chernyavskaya, 2022). The expansion of language ontology from purely verbal resources toward multimodal constructs has enabled sociolinguists to pursue meaning-making, indexicalities, and social variations in their most authentic state (Wang et al., 2023). Language as a multimodal construct focuses on social constructs, social meaning, and language as a force in social change rather than merely the combination of various communicative modes. This perspective has become the dominant trend in contemporary sociolinguistic studies, reflecting the growing recognition that social meaning is actualized when it can be interpreted in social interaction as expressing certain connotations (Chernyavskaya, 2023).

Case studies have demonstrated how specific phonetic variables can function as social indexicals across different linguistic communities. Research on Dongxiang uvular and prosodic variation indicates these variables as indexicals, with speakers showing divergent linguistic attitudes that account for observed variation patterns (Orlando, 2024). The study provides preliminary findings on the social meanings of phonetic variations, demonstrating how features observed predominantly among urban speakers contrast with those absent or at earlier stages elsewhere. Such research illustrates the systematic relationship between phonetic variation and social stratification, showing how linguistic features become associated with particular social groups and contexts.

Digital Discourse and Youth Language Practices

Digital communication platforms have transformed linguistic practices, particularly among younger generations who have developed distinctive language varieties for online interaction. Research on Filipino TikTok slang demonstrates that digital slang is not merely a playful linguistic trend but a significant cultural tool that fosters digital camaraderie and reflects evolving youth identity (Sawe, 2025). Slang terms illustrate how language adapts to digital spaces, blending traditional expressions with modern internet-inspired phrases. The study concludes that digital media plays a transformative role in shaping linguistic practices, with slang serving as more than just communication but also as a marker of social belonging.

Youth slang penetrates various spheres of modern existence, including radio, television, print media, and especially the internet. Analysis of Persian-language forums and youth platforms reveals ten main thematic groups in youth slang lexical-semantic fields, with the most frequent topics being humor, technology, social networks, and business, while politics and sports are least common (Levchyn & Petruk, 2023). This thematic distribution reflects the primary communication interests of young people in digital spaces, demonstrating how slang

vocabulary organizes around topics relevant to youth culture. The findings indicate that technology-mediated communication creates specific needs for specialized vocabulary that traditional language varieties do not adequately serve.

Internet slang and digital neologisms challenge traditional linguistic norms while enriching language systems. Research on Italian digital language demonstrates that neological units and specific internet slang raise questions about language evolution, with younger generations adapting communication styles to fit the fast-paced digital landscape (Seliverstova, 2024). The active use of borrowed and altered anglicisms is observed across multiple language communities, suggesting cross-linguistic patterns in digital language innovation. These phenomena are changing linguistic norms, influencing grammatical structures, and challenging traditional approaches to language learning, representing a fertile field for investigating how languages transform in the digital age.

Fandom communities exemplify how digital spaces facilitate linguistic innovation. Research on Indonesian internet slang influenced by fandom language reveals that Twitter has become a comprehensive medium for fandom communities to interact, with word-formation processes showing multiple transformations indicating not only word changes but also meaning changes (Permatasari & Karjo, 2023). The adoption of new words from other language experiences results in meaning change and contextual transformation from original words. This demonstrates how digital communities serve as incubators for linguistic creativity, with platform affordances shaping the types of innovations that emerge and spread.

The lexicon of new youth subcultures, particularly virtual communities like informal artists, exhibits specificity reflected in vocabulary and phraseology (Kochelaeva, 2024). Thematic grouping includes names of the community itself, representatives, creative processes, and materials used. Both neutral borrowed terms (mostly from English) and emotionally marked slangisms

characterize these lexicons, with phraseological combinations grouped according to their correlation with acting subjects, processes, and evaluation results. French youth blogs similarly demonstrate wealthy, stylistically marked language that differs from standard varieties with exceptional vocabulary sets, with no strict rules leading to breaking of orthographical and grammatical rules (Author, 2018). Gaming slang represents another subtype, serving as a means of self-expression, emotional and evaluative expression, and time-saving communication (Antonova, 2024).

Re-indexicalization and Semantic

Re-indexicalisation refers to the process by which a linguistic form acquires new social meanings, stances, or identities, replacing or reshaping its earlier indexical associations. Siverstain (1970, 2003) introduced the term indexicals as linguistic forms that point to (index) aspects of the social context, such as speaker identity, stance, or social relations. Agha (2003, 2007) formalised this term into enregisterment; Linguistic forms become socially recognized registers through repeated circulation and metapragmatic commentary.

Social meaning acquisition represents a dynamic process through which linguistic signs develop stable indexical character for expressing social attribution. Analysis of Russian nouns demonstrates how language signs acquire stable indexical character through usage in specific social contexts, becoming markers of social distinction (Chernyavskaya, 2023). Social meaning emerges as a social index in context, referring to typified social situations and social roles of communicative act participants. This process illustrates how initially neutral or regionally-specific terms can undergo re-indexicalization, acquiring new connotations as they circulate through different social contexts and speaker communities.

The theoretical framework for understanding social meaning has evolved to recognize pragmatic increments that linguistic units receive in context. Social indexicality describes how signs come to evoke particular social values, with metapragmatic activity playing a crucial role in

establishing and maintaining these associations (Chernyavskaya, 2023). Contemporary sociolinguistic approaches recognize that social meaning is not fixed but rather emerges through situated usage, with speakers actively constructing and negotiating indexical associations through their linguistic choices.

Language variation serves as a medium through which individuals and groups reconstruct social worlds, with variants differing in their social meaning even when semantically equivalent (Chevrot et al., 2018). The transformation from static views of identity to performative, creative stylization in social encounters reflects broader theoretical shifts in understanding language and society (Molodychenko & Chernyavskaya, 2022). Expanding language ontology toward multimodal constructs enables pursuit of meaning-making and indexicalities in authentic states, with language functioning as a force in social change rather than merely reflecting pre-existing social structures (Wang et al., 2023).

Contemporary sociolinguistic theory emphasizes the malleability of social indexical meanings, with ethno-metapragmatic processes driving meaning change (Molodychenko & Chernyavskaya, 2022). Reflexive activity targeting social meanings and their associated signs allows for reinterpretation and transformation of indexical values. This perspective helps explain how linguistic features can shift from indexing one social category or meaning to indexing another, particularly as they move across different contexts, communities, and media platforms.

Stylistic transformation across contexts involves both formal linguistic changes and shifts in associated social meanings. Research demonstrates how language adapts to digital spaces, blending traditional expressions with modern internet-inspired innovations (Sawe, 2025). Word-formation processes show not only word transformations but also meaning changes, indicating that adoption of new words results in contextual transformation from original forms (Permatasari & Karjo, 2023). This dual transformation—of form and meaning—characterizes the re-indexicalization process as

linguistic features circulate through new contexts and acquire novel social associations.

Phonemic Variation as Identity Construction and Social Meaning

Research in third-wave sociolinguistics establishes that linguistic variation functions as a medium through which individuals and groups evoke or reconstruct the social world, with phonetic features serving as resources for identity performance rather than passive markers of demographic categories (Molodychenko & Chernyavskaya, 2022). The theoretical framework demonstrates a crucial transformation from viewing identity as predefined by social structures and passively projected through language to understanding identity as creatively stylized in social encounters through strategic deployment of linguistic variants. This malleability of social indexical meanings is driven by ethno-metapragmatic activity—reflexive processes targeting social meanings and the signs that carry them (Molodychenko & Chernyavskaya, 2022). The capacity of linguistic signs to point to variables in their context of usage allows phonetic variants to acquire social meanings that extend beyond their original regional or demographic associations.

Contemporary sociolinguistic research emphasizes that linguistic variation involves speakers choosing between forms that say the same thing in different ways, with variants differing in their social meaning rather than their referential content (Chevrot et al., 2018). The expanded ontology of language as a multimodal construct enables sociolinguists to pursue meaning-making, indexicalities, and social variations in their most authentic state, focusing on social constructs and language as a force in social change (Wang et al., 2023). This perspective is particularly relevant for understanding how phonemic realizations of vulgar lexemes can vary while maintaining recognizability and acceptability within specific communities, as the variation itself becomes a resource for constructing particular social identities and stances.

Identity construction through sociolinguistic variation adopts a constructionist approach emphasizing the central role of stylistic variation in identity formation (Deckert & Vickers, 2011). The relationships between identity and stylistic variation operate through interactional and dialogic perspectives that include notions of construction and co-construction, demonstrating that speakers actively deploy phonetic variants to enact multiple identities depending on context, interlocutors, and communicative goals. Digital identity construction through linguistic play illustrates how phonetic alterations and morphological structures contribute to fostering digital camaraderie and reflecting evolving youth identity (Sawe, 2025). Language adaptation to digital spaces blends traditional expressions with modern internet-inspired phrases, serving not merely as communication but as markers of social belonging.

Enregisterment, Salience, and Stereotype Formation

The process through which linguistic features acquire stable social meanings—known as enregisterment—provides the theoretical mechanism for understanding how regional vulgar language becomes nationally recognized (Jaeger & Weatherholtz, 2016). Salience plays a central role in this process, with some sociolinguistic variables becoming prone to hypercorrection, stigmatization, and style shifting due to increased meta-linguistic awareness. The research distinguishes between initial salience when first encountering a novel variant and salience at later stages, which represents the cumulative product of an individual's experience related to the variant, including both direct exposure and discourse about the variant such as explicit stereotyping or enregisterment (Jaeger & Weatherholtz, 2016). This framework explains how regional vulgar lexemes can gain national currency: initial encounters create salience through expectation violation, followed by accumulation of associations through media exposure and social discourse, ultimately resulting in stable enregisterment with nationwide recognition.

Case study research on dialect stereotypes demonstrates how media reproduces and maintains stereotypes through normalized humor that mocks dialects, using features with negative connotations to marginalize certain varieties while privileging others (Kleemann-Andersen, 2024). The analysis reveals how people in power reproduce language ideologies over decades, with democratized new media maintaining these ideologies through research, television, and social media memes. Significantly, the study shows how processes of iconization, erasure, and fractal recursivity alongside enregisterment explain how dialects become more marginalized or, conversely, how certain features become emblematic and widely recognized. For vulgar language originating in specific regions, similar processes operate: media representation can transform regional profanity into nationally-recognized expressions, with phonemic variants becoming iconic of particular social types or communicative functions. The relationship between salience and frequency presents an important dimension for understanding vulgar language spread (Jaeger & Weatherholtz, 2016). Initial salience functions as expectation violation relative to prior language experience, with quantifiable measures based on probability and information theory. As regional vulgar lexemes circulate through digital media and streaming platforms, their initial salience for non-native speakers triggers attention and potential adoption. Over time, increased exposure reduces unexpectedness while building associations between phonetic variants and social meanings, facilitating the transition from regionally-marked to nationally-circulating forms. The acceptance of phonemic variation among non-native speakers may reflect this process: multiple phonetic realizations coexist as speakers from different regional backgrounds adapt the lexeme according to their phonological systems while maintaining sufficient similarity for mutual recognition and shared social meaning.

METHODOLOGY

This study employs a descriptive qualitative-quantitative sociophonetic approach combining acoustic spectrographic analysis of speech signals

with sociolinguistic indexicality frameworks¹. The research specifically focuses on 10 independent speakers (digital game streamers on YouTube, Twitch, and TikTok Gaming Indonesia) who are **non-native Javanese speakers (L1 Non-Javanese)** originating from diverse ethnolinguistic backgrounds across Indonesia.

Ethnolinguistic Baseline of the Target Lexeme

In native East Javanese (Suroboyoan/Arekan) phonology, word-final voiceless velar stops /k/ in closed final syllables systematically undergo debuccalization to a glottal stop [ʔ]. Furthermore, the nuclear vowel in the final syllable undergoes lowering/backing /u/ -> [o]/ [ɔ]). Consequently, the canonical ethnolinguistic baseline for this vulgar lexeme within its native East Javanese speech community is realized as [dʒan.tʃoʔ] (or [dʒan.tʃɔʔ]), with its enregistered truncated form realized as [tʃoʔ]. This native baseline serves as the benchmark against which non-Javanese digital stream realizations are evaluated.

Research Subjects and Sampling Criteria

The selection of subjects was conducted through purposive sampling based on the following criteria:

1. Possessing a non-Javanese L1/regional ethnolect background (Sundanese, Betawi, Batak, Minangkabau, Bugis/Makassar, Banjar, Riau/Sumatran, Balinese, Ambon/Maluku, and Urban Non-Javanese).
2. Actively live-streaming video games and spontaneously uttering the vulgar lexeme /JANCUK/ or its allophonic variants within digital interactional contexts.

Data Collection Procedures

Audio data collection was carried out through three systematic stages:

1. **Digital Audio Corpus Extraction:** Audio streams were extracted from archived broadcast recordings (*past live streams/VODs*) in uncompressed WAV format with a sampling rate of 44.1 kHz

and a bit depth of 16 bit.

2. **Isolation of Spontaneous Speech Tokens:** Extracting speech tokens of the word /JANCUK/ along with their surrounding pragmatic context (2 - 3 seconds prior to and following the utterance) to preserve ecological game-play interaction.
3. **Audio Signal Pre-processing (*Noise Reduction*):** Audio signals were cleaned of background music (*BGM*) and game sound effects (*SFX*) using a band-pass filter (80 Hz - 8000 Hz) in audio signal processing software to ensure spectrogram clarity for vocalic and consonantal analysis.

Data Analysis Procedures

Data analysis proceeded through four logical tiers:

1. **Standardized IPA Phonetic Transcription:** Each audio token was transcribed in detail using the International Phonetic Alphabet (IPA) across three levels: full word, syllable boundaries, and individual segmental phonemes (*sound-by-sound*).
2. **Spectrographic Acoustic Analysis via Praat:**
 - a) **Vowel Nuclei (V_1 and V_2):** Measurement of Formant 1 (F_1), which correlates inversely with vowel height, and Formant 2 (F_2), which correlates directly with vowel advancement, measured at the vowel midpoint³.
 - b) **Acoustic Duration (D):** Measurement of segmental vowel and consonant duration in milliseconds (ms).
 - c) **Fundamental Frequency (F_0) Contour:** Measurement of pitch contours (F_0 in Hz) to detect expressive intonational patterns.
 - d) **Coda Release Mechanism (C_4):** Analyzing the realization of the coda consonant against the native East

Javanese glottal stop benchmark [ʔ], specifically identifying shifts to unreleased velar stops [k̚], audible burst releases [k], retention of glottal stops [ʔ], or total apocope (∅).

- 3. Classification of Phonological Processes:** Categorizing sound variation based on sociolectal phonological processes (de-affrication /ts/ → [s], homorganic assimilation, spirantization/lenition /dʒ/ => [h], apheresis/syllable truncation ∅, hyper-orthographic vowel shifting, coda velarization, glottalization, and apocope).

- 4. Indexical Re-mapping:** Correlating sociophonetic features with pragmatic functions and social stances of non-Javanese speakers within the digital ecosystem, drawing upon Silverstein's indexical order framework and Eckert's indexical field⁴.

FINDINGS

Utterances of the lexeme /JANCUK/ produced by the 10 non-Javanese streamers exhibited diverse phonetic realizations and acoustic profiles when evaluated against the native East Javanese benchmark [dʒan.tʃʊʔ], as detailed in Table 1 and Table 2.

Table 1. Complete IPA Phonetic Transcription of 10 Non-Javanese Streamers vs. East Javanese Baseline

Speaker Group / Streamer ID	Full Word IPA Transcription	Syllable Breakdown	Sound-by-Sound Breakdown
Native East Javanese Baseline	[dʒan.tʃʊʔ]	S1: [dʒan] S2: [tʃʊʔ]	S1: [dʒ] + [a] + [n] S2: [tʃ] + [ʊ] + [ʔ]
S-01 (Sundanese - Bandung)	[dʒan.sʊk̚]	S1: [dʒan] S2: [sʊk̚]	S1: [dʒ] + [a] + [n] S2: [s] + [ʊ] + [k̚]
S-02 (Betawi - Jakarta Urban)	[dʒan.tʃʊk̚]	S1: [dʒan] S2: [tʃʊk̚]	S1: [dʒ] + [a] + [n] S2: [tʃ] + [ʊ] + [k̚]
S-03 (Batak - Medan)	[dʒan.tʃʊk]	S1: [dʒan] S2: [tʃʊk]	S1: [dʒ] + [a] + [n] S2: [tʃ] + [u] + [k]
S-04 (Minangkabau - Padang)	[dʒan.tʃʊk̚]	S1: [dʒan] S2: [tʃʊk̚]	S1: [dʒ] + [a] + [n] S2: [tʃ] + [ʊ] + [k̚]
S-05 (Bugis/Makassar - S. Sulawesi)	[dʒan.tʃʊʔ]	S1: [dʒan] S2: [tʃʊʔ]	S1: [dʒ] + [a] + [n] S2: [tʃ] + [u] + [ʔ]
S-06 (Urban Non-Javanese - Truncated)	[tʃʊk̚]	S1: ∅ S2: [tʃʊk̚]	S1: ∅ S2: [tʃ] + [ʊ] + [k̚]
S-07 (Banjar - S. Kalimantan)	[dʒan.krɪk̚]	S1: [dʒan] S2: [krɪk̚]	S1: [dʒ] + [a] + [ŋ] S2: [k] + [r] + [ɪ] + [k̚]
S-08 (Riau/Sumatran - Hyper-dramatic)	[dʒaːn.tʃʊːk̚]	S1: [dʒaːn] S2: [tʃʊːk̚]	S1: [dʒ] + [aː] + [n] S2: [tʃ] + [uː] + [k̚]
S-09 (Balinese - Denpasar)	[han.tʃʊk̚]	S1: [han] S2: [tʃʊk̚]	S1: [h] + [a] + [n] S2: [tʃ] + [ʊ] + [k̚]

S-10 (Ambon/Maluku - E. Indonesia)	[dʒan.tʃo]	S1: [dʒan] S2: [tʃo]	S1: [dʒ] + [a] + [n] S2: [tʃ] + [o] + ∅
--	------------	---------------------------------------	--

Table 2. Phonetic Realization and Acoustic Profile Matrix of 10 Non-Javanese Streamers

Streamer ID	L1 / Ethnolinguistic Background	IPA Realization	Segmental Breakdown (C1–V1–C2 –C3–V2–C4)	Acoustic Profile (F ₁ /F ₂ V ₁ & V ₂)	Pragmatic Stance & Discourse Function
S-01	Sundanese (W. Java)	[dʒan.sok]	[dʒ] - [a] - [n] - [s] - [o] - [k]	V₁ : F₁ = 750 Hz, F₂ = 1400 Hz V₂ : F₁ = 480Hz, F₂ = 1220 Hz	Performative humor; de- affrication and velarization of native glottal coda [ʔ] .
S-02	Betawi / Jakarta Urban	[dʒan.tʃok]	[dʒ] - [a] - [n] - [tʃ] - [o] - [k]	V₁ : F₁ = 720 Hz, F₂ = 1380 Hz V₂ : F₁ = 450Hz, F₂ = 1180 Hz	Spontaneous startled reaction; palatal assimilation [n] and hyper- orthographic velar coda [k].
S-03	Batak (Medan)	[dʒan.tʃuk]	[dʒ] - [a] - [n] - [tʃ] - [u] - [k]	V₁ : F₁ = 820 Hz, F₂ = 1500 Hz V₂ : F₁ = 320Hz, F₂ = 1350 Hz	High emotional emphasis; coda replaced with fully released velar stop [k] with audible burst.
S-04	Minangkabau (Padang)	[dʒan.tʃok]	[dʒ] - [a] - [n] - [tʃ] - [o] - [k]	V₁ : F₁ = 790 Hz, F₂ = 1440 Hz	Spontaneous interjection; standard Indonesian orthographic

				$V_2 : F_1 = 460\text{Hz}, F_2 = 1190 \text{ Hz}$	reading ([ʊ] + [k̚]).
S-05	Bugis/Makas sar (S. Sulawesi)	[dʒan.tʃuʔ]	[dʒ] - [a] - [n] - [tʃ] - [u] - [ʔ]	$V_1 : F_1 = 770 \text{ Hz}, F_2 = 1460 \text{ Hz}$ $V_2 : F_1 = 360\text{Hz}, F_2 = 1250 \text{ Hz}$	Spontaneous astonishment; preserves native glottal coda [ʔ] due to Bugis/Makas sar phonotactic alignment.
S-06	Urban Non-Javanese (Truncated)	[tʃʊk̚]	[tʃ] - [ʊ] - [k̚]	$V_1 : \text{N/A}$ $V_2 : F_1 = 450\text{Hz}, F_2 = 1150 \text{ Hz}$	Total apheresis of syllable I; truncated form adopts hyper-orthographic [k̚] instead of native [tʃʊʔ].
S-07	Banjar (S. Kalimantan)	[dʒaŋ.krik̚]	[dʒ] - [a] - [ŋ] - [k] + [ɾ] - [i] - [k̚]	$V_1 : F_1 = 760 \text{ Hz}, F_2 = 1450 \text{ Hz}$ $V_2 : F_1 = 390\text{Hz}, F_2 = 1980 \text{ Hz}$	Euphemism / <i>taboo avoidance</i> ("jangkrik") for digital algorithmic moderation mitigation.
S-08	Riau/Sumatran (Hyper-dramatic)	[dʒaːn.tʃuːk̚]	[dʒ] - [aː] - [n] - [tʃ] - [uː] - [k̚]	$V_1 : F_1 = 810 \text{ Hz}, F_2 = 1410 \text{ Hz}$ $V_2 : F_1 = 340\text{Hz}, F_2 = 1290 \text{ Hz}$	Comedic <i>rage-quit</i> ; extreme duration elongation (> 450 ms) on hyper-orthographic [u] and [k̚].

S-09	Balinese (Denpasar)	[han.tʃʊk]	[h] - [a] - [n] - [tʃ] - [ʊ] - [k]	V₁ : F₁ = 700 Hz, F₂ = 1390 Hz V₂ : F₁ = 460Hz, F₂ = 1160 Hz	Lenition of Onset I /dʒ/ -> [h] ("hancuk"); muted ironic stance paired with velar coda [k].
S-10	Ambon/Malu ku (East. Indonesia)	[dʒan.tʃo]	[dʒ] - [a] - [n] - [tʃ] - [o] - ∅	V₁ : F₁ = 790 Hz, F₂ = 1480 Hz V₂ : F₁ = 520 Hz, F₂ = 1010 Hz	Coda apocope ∅; retains native vowel height [o] but dilesapkan the glottal coda entirely.

Detailed Sound-by-Sound Segmental Analysis

- Slot Onset I (C₁: /dʒ/):** Standardly produced as a voiced palato-alveolar affricate [dʒ]. Batak (S-03), Minang (S-04), and Bugis (S-05) speakers preserve the fully voiced stop release [dʒ]. However, the Balinese speaker (S-09) undergoes lenition/spirantization into a voiceless glottal fricative [h] ([han.tʃʊk]), which softens the aggressive impact of the insult. In S-06 (Urban Non-Javanese), **total apheresis** occurs (pelesapan ∅ of the entire first syllable [dʒan]), yielding a monosyllabic form [tʃʊk].
- Slot Nucleus I (V₁: /a/):** Both native East Javanese speakers and non-Javanese speakers consistently realize V₁ as an open front unrounded vowel [a] (F₁ = 700 – 820 Hz). This sets both groups apart from Central Javanese/Mataraman speakers, who tend to round V₁ to [ɔ]. Non-Javanese speakers adopt the open vowel /a/ based on standard Indonesian orthography.
- Slot Coda I (C₂: /n/):** The alveolar nasal coda /n/ undergoes homorganic place assimilation to a palatal nasal [ɲ] in the Betawi speaker's realization (S-02) preceding

the palatal affricate [tʃ]. In the Banjar euphemistic variant (S-07), Coda I shifts to a velar nasal [ŋ] ([dʒan.kɾɪk]).

- Slot Onset II (C₃: /ts/):** Articulated constantly as a voiceless palato-alveolar affricate [tʃ]. Prominent sociophonetic variation is observed in the Sundanese speaker (S-01), who exhibits **de-affrication** to an alveolar fricative [s] ([dʒan.suk]), driven by substrate interference from Sundanese phonology.
- Slot Nucleus II (V₂: /u/ vs /o/):** While native East Javanese speech utilizes the lowered/backed vowel [o] / [ɔ] ([dʒan.tʃo]), non-Javanese streamers predominantly shift V₂ to a near-close rounded vowel [ʊ] (S-01, S-02, S-04, S-06, S-09) or a close back rounded vowel [u] (S-03, S-05, S-08). This reflects a **hyper-orthographic spelling pronunciation** based on the national Indonesian spelling "Jancuk". Only the Ambonese speaker (S-10) retains the native East Javanese close-mid back rounded vowel [o] ([dʒan.tʃo]). In S-08, the vowel [u] undergoes extreme duration elongation ([u:], > 450 ms) as a

stylistic device for performative *rage-quit*.

6. **Slot Coda II (C₄: /k/ vs [ʔ]):** This slot reveals the most critical ethnolinguistic divergence. In native East Javanese, final /k/ is strictly debuccalized to a glottal stop [ʔ]. However, non-Javanese streamers systematically **re-velarize** the coda to an unreleased velar stop [k̚] (S-01, S-02, S-04, S-06, S-07, S-08, S-09) or a fully released velar stop [k] (S-03). Remarkably, only the Bugis/Makassar streamer (S-05) **preserves the glottal stop [ʔ]** ([dʒan.tʃuʔ]), because Bugis/Makassar phonotactics prohibit word-final velar stops and systematically require coda glottalization. Finally, the Ambonese streamer (S-10) exhibits **total apocope** (∅), deleting the coda altogether to produce an open syllable [dʒan.tʃo].

B. Integrated Acoustic Data Graphs and Phonetic Plot Matrices

To synthesize the empirical findings from Tables 1 and 2 into an integrated, highly readable format, the three structured plot matrices below present the acoustic vowel space ($F_1 \times F_2$), coda realization statistics, and segmental duration dynamics across all streamers relative to the native East Javanese baseline.

Graph Matrix 1. Vowel Acoustic Space Scatter-Plot Coordinates ($F_1 \times F_2$ Formant Coordinates)

This acoustic matrix maps the position of V_1 and V_2 in Hz across speakers, demonstrating the vocalic shift from native East Javanese lowered vowels ([ɔ]/[o]) to hyper-orthographic high-close vowels ([ʊ]/[u]).

Speaker Group / Streamer ID	Realized V ₁ IPA	V ₁ F ₁ (Hz)	V ₁ F ₂ (Hz)	Realized V ₂ IPA	V ₂ F ₁ (Hz)	V ₂ F ₂ (Hz)	Vowel Space Classification
Native Arekan Baseline	[a]	780 Hz	1420 Hz	[ɔ]	680 Hz	1050 Hz	Open-Mid Back Rounded Baseline
Native East Javanese Baseline	[a]	780 Hz	1420 Hz	[o]	520 Hz	1010 Hz	Close-Mid Back Rounded Baseline
S-01 (Sundanese)	[a]	750 Hz	1400 Hz	[ɔ]	480 Hz	1220 Hz	Hyper-Orthographic Near-Close Back
S-02 (Betawi)	[a]	720 Hz	1380 Hz	[ɔ]	450 Hz	1180 Hz	Hyper-Orthographic Near-Close Back
S-03 (Batak)	[a]	820 Hz	1500 Hz	[u]	320 Hz	1350 Hz	High-Close Back Rounded
S-04 (Minangkabau)	[a]	790 Hz	1440 Hz	[ɔ]	460 Hz	1190 Hz	Hyper-Orthographic Near-Close Back
S-05 (Bugis/Makassar)	[a]	770 Hz	1460 Hz	[u]	360 Hz	1250 Hz	High-Close Back

kassar)							Rounded
S-06 (Urban Non- Javanese)	Ø	N/A	N/A	[ʊ]	450 Hz	1150 Hz	Hyper- Orthograp hic Near- Close Back
S-07 (Banjar)	[a]	760 Hz	1450 Hz	[ɪ]	390 Hz	1980 Hz	Euphemist ic Near- Front ("Jangkrik")
S-08 (Riau/Sum atra)	[a:]	810 Hz	1410 Hz	[u:]	340 Hz	1290 Hz	Elongated High- Close Back Rounded
S-09 (Balinese)	[a]	700 Hz	1390 Hz	[ʊ]	460 Hz	1160 Hz	Hyper- Orthograp hic Near- Close Back
S-10 (Ambon/ Maluku)	[a]	790 Hz	1480 Hz	[o]	520 Hz	1010 Hz	Retained Native Close-Mid Back

Graph Matrix 2. Statistical Distribution of Coda Realizations (C₄ Shift)

This statistical graph table categorizes the transformation of the final coda consonant across non-Javanese streamers away from the native debuccalized glottal stop [ʔ].

Coda Realization Category	IPA Symbol	Streamer Distribution	Token Count (N=10)	Percentage Distribution (%)	Structural & Phonotactic Mechanism
Hyper- Orthographic Re- velarization (Unreleased)	[k̚]	S-01, S-02, S- 04, S-06, S-07, S-08, S-09	7	70%	Spelling pronunciation based on Indonesian orthography
Hyper- Orthographic Re- velarization (Released)	[k]	S-03	1	10%	L1 Batak explosive coda release enhancement
Native Debuccalizati on (Glottal Stop)	[ʔ]	S-05	1	10%	Bugis L1 substrate alignment with native glottal target
Coda Apocope (Total Deletion)	[Ø]	S-10	1	10%	Ambonese open syllable structure optimization

This acoustic continuum table ranks streamers by total utterance duration and fundamental frequency range, demonstrating how acoustic prosody encodes interactional stance. Bellow is the graph Matrix 3. Acoustic Duration & Pitch Contour Spectrum (D in ms & F_0 in Hz)

Streamer ID & Ethnolect	Realized Full Word IPA	Total Duration D (ms)	Mean Pitch F_0 (Hz)	Pitch Range F_0 (Hz)	Primary Interactional Stance & Discourse Function
S-08 (Riau/Sumatra)	[dʒaːn.tʃuːk]	480 ms	245 Hz	165 Hz - 340 Hz	Comedic <i>Rage-Quit</i> Spectacle (Extreme Duration)
S-03 (Batak)	[dʒan.tʃuk]	280 ms	215 Hz	180 Hz - 265 Hz	High Emotional Intensity / Verbal Aggression
S-01 (Sundanese)	[dʒan.suk]	240 ms	195 Hz	160 Hz - 220 Hz	Performative Playful Slang (De-affricated)
S-02 (Betawi)	[dʒan.tʃok]	220 ms	185 Hz	150 Hz - 210 Hz	Spontaneous Startled Reaction
S-05 (Bugis/Makassar)	[dʒan.tʃuʔ]	210 ms	190 Hz	155 Hz - 225 Hz	Astonishment Interjection (Glottalized Coda)
S-04 (Minangkabau)	[dʒan.tʃok]	200 ms	180 Hz	145 Hz - 200 Hz	Spontaneous Slang Interjection
S-09 (Balinese)	[han.tʃok]	190 ms	145 Hz	130 Hz - 165 Hz	Soft-Spoken Irony (Glottalized Onset)
S-10 (Ambon/Maluku)	[dʒan.tʃo]	180 ms	175 Hz	140 Hz - 195 Hz	Open Syllable Adaptation (Coda Apocope)
S-07 (Banjar)	[dʒaŋ.krik]	175 ms	170 Hz	140 Hz - 190 Hz	Euphemistic Algorithmic Moderation ("Jangkrik")
S-06 (Urban Non-Javanese)	[tʃok]	110 ms	165 Hz	145 Hz - 180 Hz	Rapid In-Group Gamer Clitic (Truncated)

DISCUSSION

1. Ethnolinguistic Baseline vs. Hyper-Orthographic Re-Velarization

The comparison between the native East Javanese benchmark [dʒan.tʃoʔ] and the realizations of non-Javanese digital streamers uncovers a profound sociophonetic phenomenon: **hyper-orthographic re-velarization**.

In native Arekan speech communities, the enregistered second-order indexical form relies on two crucial phonetic targets: vowel lowering ($V_2 = [o]/[ɔ]$) and coda debuccalization ($C_4 = [ʔ]$). When non-Javanese streamers encounter this lexeme through digital text (game chats, memes, social media orthography "Jancuk"), they process it not via oral Javanese dialectal exposure, but via national Indonesian reading rules. Consequently:

- a) They replace the native glottal stop [ʔ] with a velar stop [k] or [ŋ] (seen in 80% of streamer tokens in Graph Matrix 2).
- b) They replace the native lowered vowel [o] with the close/near-close vowels [u] / [ʊ] (shown in Graph Matrix 1).

This systematic shift from [dʒan.tʃoʔ] to [dʒan.tʃʊk], [dʒan.sʊk], or [dʒan.tʃʊŋk] provides acoustic proof that non-Javanese streamers are borrowing a **written/digital representation** of the word, which they then re-phonologize according to their own L1 constraints and Indonesian orthography.

2. Integration of Third-Wave Variationism and Indexical Field

The phonetic variations documented among non-Javanese streamers align closely with Penelope Eckert's framework of *Third-Wave Variationism*¹. In third-wave approaches, sociophonetic variables are deployed as **active semiotic resources** to construct interactional stances and digital personae¹.

Eckert conceptualizes the *Indexical Field* as a fluid constellation of ideologically related social meanings associated with a variable⁴. When the lexeme /JANCUK/ is uttered by non-Javanese

streamers, its indexical field is selectively activated through phonetic modifications:

- a. **Gamer In-Group Stance:** Syllable truncation (*apheresis*) into the monosyllabic [tʃʊk] (S-06) or Betawi assimilation [dʒan.tʃʊk] (S-02) activates indexical meanings of in-group solidarity⁵. By substituting the hyper-orthographic [k] for the native Arekan [tʃoʔ], non-Javanese streamers strip away local Javanese ethnicity, transforming the lexeme into a marker of national gaming subculture¹.
- b. **Phonotactic Convergence Stance:** The Bugis/Makassar streamer (S-05) produces [dʒan.tʃuʔ], retaining the glottal stop coda [ʔ]. While this accidentally matches the native East Javanese glottal coda, it is driven by Bugis/Makassar substrate rules (which mandate glottal codas for final stops). This creates an intriguing convergence where L1 phonotactics accidentally preserve native dialect features while shifting the nuclear vowel to orthographic [u].
- c. **Dramatic Performativity Stance:** Extreme duration elongation of V_1 and V_2 ([dʒa:n.tʃu:k], 480 ms in Graph Matrix 3) in S-08 and Onset lenition [han.tʃʊk] in S-09 exploit sound iconicity³. These acoustic modifications serve as commodified entertainment (*spectacle*) during live broadcasts.
- d. **Algorithmic Mitigation Stance:** The euphemistic variant [dʒaŋ.kɾɪk] (S-07) demonstrates sociophonetic maneuvering to navigate automated content moderation (*demonetization*) on digital platforms while retaining interjectional force⁷.

3. Re-indexicalization Across Indexical Orders

The evolution of meaning in /JANCUK/ when produced by non-Javanese speakers validates Michael Silverstein's framework of *Indexical Orders*⁴:

1. First-Order Indexicality (Presupposition

of Taboo): At the first order, /JANCUK/ is presuppositionally tied to its Javanese etymological origin (*di-encuk*, copulation) as a local sexual taboo⁵. First-order phonetic realizations feature full segmental articulation [dʒan.tʃuk] accompanied by high pitch contours, indexing direct anger and verbal aggression.

2. Second-Order Indexicality (Enregisterment in Arekan Culture):

Through processes of *enregisterment* (Agha, 2007), the lexeme was re-conceptualized within East Javanese *Arekan* culture (Surabaya/Malang)³. Through specific regional phonetic targets—specifically vowel lowering and glottal coda debuccalization [dʒan.tʃoʔ] or [tʃoʔ]—the swear word underwent semantic bleaching and became enregistered as an index of egalitarianism, informal intimacy, and local solidarity.

3. Third-Order Indexicality (Re-indexicalization in Digital Discourse):

Re-indexicalization (third order) occurs when **non-Javanese** speakers adopt the lexeme within trans-local digital discourse¹. Silverstein notes that indexical entailment allows speakers to create new interactional contexts through speech. When a Sundanese speaker utters [dʒan.sok], a Batak speaker utters [dʒan.tʃuk], or an Ambonese speaker utters [dʒan.tʃo], they actively entail a new social context: detaching the word from Javanese ethnic origin and re-indexicalizing it as a national youth slang interjection, a marker of real-time gaming surprise, and an emblem of digital gamer identity.

4. Substrate Interference as a Naturalization Mechanism

Phonotactic interference from non-Javanese L1 substrates—such as Sundanese de-affrication [ts] -> [s], Bugis/Makassar glottalization /k/ -> [ʔ],

Ambonese apocope /k/ -> [Ø], and Batak explosive release [k]—demonstrates that non-Javanese speakers process this borrowed lexeme through their own regional phonological filters. Sociolinguistically, this phonotactic adaptation serves as a **naturalization mechanism**. By filtering the Javanese vulgarity through regional non-Javanese phonology and national orthography, potential inter-ethnic friction or accusations of cultural appropriation are neutralized. The word /JANCUK/ is no longer perceived as "a Javanese taboo misused by outsiders," but rather as a fully adopted, trans-local digital slang word embedded within urban Indonesian discourse.

CONCLUSION

This sociophonetic investigation into the pronunciation of the vulgar lexeme /JANCUK/ across 10 non-Javanese streamers confirms that segmental variations ($C_1 - V_1 - C_2 - C_3 - V_2 - C_4$) and acoustic parameters (F_1 , F_2 duration D , F_0 contour) serve as the empirical drivers of linguistic re-indexicalization. By contrasting non-Javanese realizations against the native East Javanese ethnolinguistic baseline [dʒan.tʃoʔ], this study reveals a systematic shift toward hyper-orthographic re-velarization ([k]/[k]) and vowel raising ([u]/[ʊ]). Non-Javanese speakers deploy phonetic modifications—including apheresis, de-affrication, homorganic assimilation, glottalization, apocope, and vowel elongation—as semiotic resources to construct interactional stances within digital communities⁵. This study concludes that /JANCUK/ has transformed from a local sexual taboo (*first-order index*)⁵ and an Arekan ethnic identity marker [dʒan.tʃoʔ] (*second-order index*)³ into a versatile trans-local stylistic marker, a particle of gamer intimacy, and a digital interjection detached from its original etymological vulgarity (*third-order index / re-indexicalization*)¹. These findings demonstrate that digital media ecosystems create new indexical fields that transcend traditional geolinguistic boundaries in contemporary Indonesia.

REFERENCES

- Hamed, S. H., & Mohamed, S. (2023). Social Factors and Dialect Variation: An Analysis of Age, Gender, and Social Class in Linguistic Practice. *Refereed Journal of Northern Europe Academy for Studies & Research (Denmark)*, (21).
- D'Onofrio, A., & Stecker, A. (2022). The social meaning of stylistic variability: Sociophonetic (in)variance in United States presidential candidates' campaign rallies. *Language in Society*, 51(1), 1–28. doi:10.1017/S0047404520000718
- Drager, K. (2010). Sensitivity to grammatical and sociophonetic variability in perception. *Laboratory Phonology*, 1(1), 93-120.
- Kartikasari, E., Larasati, D. A., & Rais, W. A. (2020). Lexical and Phonological Differences in Javanese in Probolinggo, Surabaya, and Ngawi, Indonesia. *Journal of Language Teaching and Research*, 11(2), 231-241.
- Pinget, A. F., & Voeten, C. C. (2023). Social factors in accent recognition: a large-scale study in perceptual dialectology. *Journal of Linguistic geography*, 11(2), 78-90.
- Ramos, J. E., & Shea, C. (2023). Speaking Race or Racialized Speaking: Evidence from Perceptions of Lateral Variants by Puerto Rican Listeners. *Hispania*, 106(3), 473–494. <https://www.jstor.org/stable/27253721>
- Weirich M, Jannedy S and Schüppenhauer G (2020) The Social Meaning of Contextualized Sibilant Alternations in Berlin German. *Front. Psychol.* 11:566174. doi: 10.3389/fpsyg.2020.566174