

“Forensic Dialectology As Evidence For Authorship Attribution”

Tirth S. Dave¹, Dr. Deepak Mashru^{2*}, Keshav Jha³

¹Research scholar, NFSU. National Forensic Sciences University, Gandhinagar. INDIA.

^{2*}Assistant Professor National Forensic Sciences University, Gandhinagar, Gujarat E-mail- deepak.mashru@nfus.ac.in
Mob: 9824210500

³Ph.D. Scholar National Forensic Sciences University, Gandhinagar, Gujarat E-mail- keshavjee96@gmail.com
Mob: 9473070074

***Corresponding Author:** Dr. Deepak Mashru

Assistant Professor National Forensic Sciences University, Gandhinagar, Gujarat E-mail- deepak.mashru@nfus.ac.in
Mob: 9824210500

Abstract

Forensic dialectology is a subfield of forensic linguistic. It basically examines regional social and individual language variation. It throws light at criminal investigation and legal proceedings by forensic dialectological markers. This paper explores the role of dialectal evidence as reliable linguistic tool for authorship attribution. Drawing on the analytical dimensions of Idiolect sociolect and dialect. The study shows how recurring dialectal markers, grammatical construction and orthographic habits reveals an author's linguistic background and individual writing style. The particular paper will take qualitative approach form comparing questioned documents with known language samples to identify consistent dialectal features and measure their individual value. The particular study is very prominent in the sectors like multilingual and multidialectal societies like India America and Britain where code switching and nonstandard forms often provide crucial attribution cues. The findings highlight that while dialectal features alone may not establish authorship conclusively but their systematic approach for Idiolect analysis remarkably makes attributions reliability. This research presents importance of Forensic Dialectology as linguistics evidence also a study presents Forensic Dialectology as tool for narrowing pools and supporting expert testimony. It provides grounded framework to ensure the ethical use of dialectal evidence in international forensic and legal context.

Keywords: Forensic Dialectology, Authorship Attribution, Idiolect, Sociolect, Forensic Linguistics.

How to cite this article: Dave TS, Mashru D, Jha K, Forensic Dialectology As Evidence For Authorship Attribution. Int J Drug Deliv Technol. 2026;16(4s): 588-590; DOI: 10.25258/ijddt.16.4s.68

INTRODUCTION

Language is not a neutral or uniform medium of expression rather, it carries distinctive social, regional, and individual markers that reflect a speaker's or writer's identity. In forensic contexts, these linguistic patterns can become crucial forms of evidence, particularly when the authorship of a disputed text is unknown or contested. Among the various branches of forensic linguistics, forensic dialectology has emerged as a significant analytical tool for identifying and attributing authorship by examining dialectal variation embedded in language use.

Forensic dialectology focuses on the systematic study of regional, social, and individual language features—such as phonological patterns, lexical choices, grammatical structures, and discourse conventions that unconsciously manifest in written and spoken communication. These dialectal markers often persist even when an author attempts to disguise their identity, making them especially valuable in criminal investigations involving anonymous letters, threat messages, ransom notes, online communications, and extremist propaganda. As digital communication expands across borders, the relevance of dialect-based analysis in authorship attribution has increased substantially. Authorship attribution traditionally relied on stylistic analysis, statistical methods, and computational models; however,

such approaches may overlook the socio-dialectal dimensions of language. Forensic dialectology complements these methods by situating linguistic evidence within its social and regional context. Dialectal features can reveal information about an author's geographical origin, educational background, social group affiliation, and linguistic exposure, thereby narrowing suspect pools and strengthening evidentiary interpretations. When combined with other linguistic and non-linguistic evidence, dialectal analysis can contribute meaningfully to investigative and judicial decision-making.

Despite its growing application in casework, forensic dialectology remains underrepresented in mainstream forensic research and legal discourse. Questions concerning methodological rigor, evidentiary reliability, and admissibility in court continue to challenge its broader acceptance. This research seeks to address these gaps by examining how forensic dialectology functions as credible linguistic evidence in authorship attribution. By exploring theoretical foundations, analytical frameworks, and practical implications, the study aims to demonstrate the evidentiary value of dialectal markers in forensic investigations and to highlight their potential contribution to the advancement of forensic linguistics as a discipline.

*Author for Correspondence: deepak.mashru@nfus.ac.in

2. Literature Review

The study of language variation has long been a central concern in sociolinguistics. Foundational scholars such as Labov (1972) established that linguistic variation is systematic and socially meaningful. Later research expanded this understanding to include regional dialectology and idiolectal variation, emphasizing that no two individuals use language in exactly the same way. In forensic linguistics, authorship attribution has been explored through stylistics, corpus linguistics, and computational modeling. Works by Coulthard, Johnson, and McMenamain have demonstrated that linguistic patterns can link a text to its author with varying degrees of probability. McMenamain (2002) emphasized the role of idiolect the unique linguistic fingerprint of an individual while acknowledging that idiolectal features often overlap with dialectal patterns.

Objectives of the Study

Primary Objective

- To examine the role of **forensic dialectology** as a reliable and supportive form of linguistic evidence in **authorship attribution** within forensic investigations.

Specific Objectives

- To identify and analyze **dialectal markers** (lexical, grammatical, orthographic, and discourse-level features) present in disputed texts.
- To explore how **regional and social dialectal variations** contribute to distinguishing between potential authors.
- To assess the effectiveness of **dialect-based analysis** in narrowing suspect pools in forensic cases.
- To examine the relationship between **dialect, sociolect, and idiolect** in establishing an author’s linguistic profile.
- To evaluate the **methodological frameworks** used in forensic dialectology for authorship attribution.
- To investigate the **evidentiary value and limitations** of dialectal features in legal and investigative contexts.
- To highlight the role of forensic dialectology in detecting **authorial disguise or manipulation** in written communication.
- To analyze the applicability of forensic dialectology in **digital and online texts**, including emails, social media posts, and anonymous messages.
- To address challenges related to **reliability, standardization, and judicial admissibility** of dialectal evidence.
- To propose recommendations for strengthening the use of forensic dialectology in future forensic linguistic research.

Forensic dialectology specifically addresses regional and social language features. Studies have shown that lexical choices, spelling conventions, grammatical constructions, and discourse markers can indicate an author’s dialect background. However, compared to forensic phonetics, forensic dialectology has received limited empirical attention, particularly in written-text

analysis. This paper builds upon existing scholarship by integrating sociolinguistic theory with forensic practice.

4. Methodology

This research adopts a qualitative-descriptive methodology supported by comparative linguistic analysis. The methodological framework includes the following steps:

1. **Data Collection:** Disputed texts (e.g., anonymous letters, digital messages) are collected alongside known writing samples from potential authors.
2. **Dialectal Feature Identification:** Linguistic features indicative of regional or social variation—such as spelling patterns, lexical preferences, grammatical constructions, and pragmatic markers—are identified.
3. **Comparative Analysis:** Features in the questioned document are compared with those in known samples to identify similarities and divergences.
4. **Contextual Interpretation:** Findings are interpreted within the socio-cultural and linguistic context of the suspected author.
5. **Evidentiary Evaluation:** Results are presented in probabilistic terms, avoiding absolute claims of authorship.
6. Ethical considerations, including confidentiality and avoidance of linguistic profiling bias, are strictly maintained throughout the analysis.

Role of Forensic Dialectology in Authorship Attribution

Forensic dialectology contributes to authorship attribution in several key ways:

1. **Narrowing Suspect Pools:** Dialectal markers can indicate an author’s regional or social background, reducing the number of potential suspects.
2. **Corroborating Evidence:** Dialectal analysis supports other forensic methods, strengthening overall evidentiary conclusions.
3. **Detecting Disguise:** Persistent dialectal features may reveal an author’s identity despite deliberate attempts at disguise.
4. **Interpreting Digital Communication:** In online contexts, non-standard spelling and grammar often reflect dialectal influence.
5. These contributions demonstrate that forensic dialectology is not a standalone solution but a complementary tool within a multidisciplinary forensic framework.

Results

The analysis revealed that dialectal features present in disputed texts exhibited consistent and identifiable patterns that aligned closely with known writing samples. Lexical choices, non-standard spellings, grammatical constructions, and discourse markers emerged as the most prominent indicators of regional and social dialectal influence. These features were found to be largely unconscious and stable across texts, even in instances where the author appeared to attempt stylistic modification or identity concealment.

Comparative analysis demonstrated a high degree of correspondence between the dialectal markers in questioned documents and those observed in the reference texts. The convergence of regional dialect features with individual language habits strengthened the attribution process by enabling the construction of a coherent linguistic profile of the author. In several instances, dialectal evidence effectively narrowed the pool of potential authors by excluding individuals whose linguistic backgrounds were inconsistent with the observed patterns.

The findings further indicated that forensic dialectology is most effective when employed alongside other linguistic approaches rather than as a standalone method. When integrated with stylistic and contextual analysis, dialect-based evidence enhanced the overall reliability of authorship attribution. However, the results also highlighted limitations related to dialect overlap and variation, emphasizing the need for cautious, probabilistic interpretation rather than absolute claims of authorship.

Overall, the study confirms that forensic dialectology provides meaningful and supportive evidence in authorship attribution, particularly in cases involving anonymous or disputed texts, digital communication, and attempts at authorial disguise.

Role of Dialect in Authorship Attribution

Dialectal Features



Regional Dialect Indicators



Social Dialect (Sociolect) Indicators



Individual Language Habits (Idiolect)



Forensic Analysis



Narrowing of Suspect Pool

Evidentiary Value in Legal Context

Dialectal Analysis



Corroboration with Other Evidence (digital, forensic, behavioural)



Expert Testimony



Judicial Evaluation



Support to Investigation / Trial

Conclusion

Forensic dialectology offers a valuable lens through which authorship attribution can be examined and

strengthened. By uncovering dialectal patterns embedded in language use, it provides insights into an author’s linguistic identity that are often inaccessible through purely stylistic or statistical methods. While challenges remain regarding standardization and admissibility, the evidentiary potential of forensic dialectology is undeniable. As communication becomes increasingly global and digital, the role of dialectal analysis in forensic investigations will continue to expand, contributing significantly to the advancement of forensic linguistics.

References

1. Coulthard, M., Johnson, A. (2007). *An Introduction to Forensic Linguistics*. Routledge.
2. Labov, W. (1972). *Sociolinguistic Patterns*. University of Pennsylvania Press.
3. McMenamin, G. (2002). *Forensic Linguistics: Advances in Forensic Stylistics*. CRC Press.
4. Trudgill, P. (2000). *Sociolinguistics: An Introduction to Language and Society*. Penguin.
5. Coulthard, M. (2013). Forensic linguistics: The application of language description in legal contexts. *Language and Law / Linguistics and the Human Sciences*, 6(1), 1–15.
6. Coulthard, M., & Johnson, A. (2010). *The Routledge Handbook of Forensic Linguistics*. Routledge.
7. Grant, T. (2010). Textual analysis in forensic authorship attribution. *Applied Linguistics*, 31(2), 215–231.
8. Grant, T., & Baker, K. (2018). Identifying reliable authorship attribution results in forensic linguistics. *International Journal of Speech, Language and the Law*, 25(1), 73–95.
9. McMenamin, G. (2010). Linguistic individuality and forensic authorship attribution. *Journal of Law and Policy*, 18(1), 159–187.
10. Turell, M. T. (2010). Textual kidnapping revisited: The case of the missing necktie. *International Journal of Speech, Language and the Law*, 17(2), 211–238.
11. Nini, A. (2018). Authorship attribution in forensic linguistics: A computational perspective. *Language and Law / Linguistics and the Human Sciences*, 12(1), 45–69.
12. Trudgill, P. (2003). *A Glossary of Sociolinguistics*. Edinburgh University Press.
13. Gibbons, J. (2003). *Forensic Linguistics: An Introduction to Language in the Justice System*. Blackwell.
14. Biber, D., Conrad, S., & Reppen, R. (1998). *Corpus Linguistics: Investigating Language Structure and Use*. Cambridge University Press.