LINGUISTICS AND VIETNAMESE LINGUISTICS

NON-HUMAN AGENCY: RECONFIGURING OBJECTIVITY IN BIOMEDICAL RESEARCH WRITING

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ABSTRACT**:** Scientific objectivity has long been tethered to the passive voice—a convention that often obscures the rhetorical complexity of modern biomedical writing. Challenging this 'passive-centric' paradigm, this study conceptualizes objectivity as an emergent discursive effect, strategically achieved through agency reconfiguration. Drawing on Halliday's (1994) transitivity system and Hyland's (2005) interactional model, we propose an "Outcome-Oriented Pathway"—an integrated framework designed to analyze how researchers promote non-human entities (e.g., *data*, *results*, *assays*) to agentive roles. Based on a comparative corpus of 150 Results sections from Vietnamese-based and international biomedical journals (2021–2025), our findings reveal a distinct rhetorical divergence: while international articles oscillate between passivization and various agentive pathways, Vietnamese scholars demonstrate a systematic, purpose-driven preference for active, non-human agency to construct 'self-validating' knowledge. We demonstrate that these discursive choices are not stylistic 'deficits' but sophisticated rhetorical operations that stabilize empirical findings as incontrovertible "matters of fact." By reframing this agency redistribution as a professional adaptation rather than a linguistic limitation, this study offers a compelling perspective on how diverse academic communities navigate the epistemic rigors of global biomedical publishing.

KEYWORDS: Scientific objectivity; agency reconfiguration; biomedical discourse; non-human agency; rhetorical strategy.

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1. Introduction

Objectivity is widely regarded as the cornerstone of scientific discourse; however, the linguistic mechanisms underpinning its construction remain a subject of persistent scholarly debate. Traditionally, academic writing has been guided by the "passive-centric" view, which equates objectivity with the suppression of human agency (Banks, 2008). While this convention continues to dominate pedagogical standards, recent functional research (Hyland, 2018; Halliday & Martin, 1993) argues that objectivity is not a byproduct of fixed grammatical forms but an emergent discourse effect, shaped by context-sensitive, purposeful configurations.

Despite this theoretical shift, a significant gap remains in our understanding of agency reconfiguration—the process by which abstract entities (e.g., results, data, assays) are promoted to agentive participants to establish epistemic authority. In the Results section, where empirical observations are transformed into knowledge claims (Swales, 2004), the choice of the sentence "doer" is a pivotal strategic move. Existing scholarship often interprets deviations from international passive-voice norms by non-native speakers through a 'deficit' lens, mislabeling these choices as stylistic limitations.

To address this, we propose an "Outcome-Oriented Pathway"—an integrated framework that builds upon Halliday's (1994) transitivity system and Hyland's (2005) model of epistemic stance to provide a systematic way to analyze how objectivity is constructed through non-human agency. Using this framework, we analyze a corpus of 150 Results sections from Vietnamese and international journals (2021-2025). We demonstrate that Vietnamese-based writers actively

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orchestrate non-human agents to construct a form of "impersonal objectivity" that is both rhetorically robust and globally competitive. Ultimately, this research posits that agency reconfiguration is not an artifact of linguistic constraints, but a purposeful, strategic adaptation to the high-stakes demands of contemporary biomedical discourse.

2. Literature Review

2.1. The Discursive Construction of Scientific Knowledge

Scientific discourse is no longer viewed as a neutral medium for reporting objective facts; instead, it is conceptualised as a structured system of meaning-making shaped by disciplinary social practices. From a Systemic Functional Linguistics (SFL) perspective, language does not simply reflect reality but actively construes experience, as it is understood to be a system of meaning-making through social interaction (Martin & Rose, 2008). As argued by Halliday and Martin (1993), scientific writing is a discursive process that reconfigures experience into "specialised knowledge" through grammatical resources that increase abstraction and distance the observer from the observed. Similarly, Bazerman (1988) and Myers (1990) emphasize that the experimental article is a rhetorical achievement where "facts" are socially constructed through patterned linguistic choices. Within this framework, reporting results is seen as a strategic act where writers must balance the need to present findings as autonomous while maintaining professional credibility.

2.2. Rethinking Objectivity: Beyond Passive-centrism

Traditional accounts of scientific style have long associated objectivity with the suppression of human agency, primarily through the use of passive constructions. Banks (2008) and Martínez (2003) note that the historical rise of the passive voice in science correlates with a disciplinary requirement to background the researcher in favour of the phenomenon under study. However, this "passive-centric" view creates a tension in the literature. While corpus studies confirm a high density of passives in international journals, this alone does not explain how objectivity is achieved when passives are less prevalent.

Recent scholarship—most notably Ken Hyland (2005, 2018)—challenges the idea that objectivity is a fixed property of a single grammatical form. Instead, objectivity is reframed as an emergent discourse effect arising from the interaction of evaluation, evidentiality, and rhetorical organisation. This study aligns with this interactional view, suggesting that if objectivity is essentially about the redistribution of agency, it can be realised through various "functionally convergent" resources beyond the canonical passive.

2.3. Agency Reconfiguration and the Power of Non-human Entities

A critical mechanism in scientific reporting is Agency Reconfiguration, where agency is redistributed to non-human or abstract participants. Within the transitivity system, scientific writing often promotes research outcomes (e.g., the results, the data, the study) to the role of Agent. As Halliday and Matthiessen (2014) observe, this shift allows outcomes to function as thematic centers, serving as the "point of departure" for the message. When an author writes "The results demonstrate..." instead of "We observed...", they are strategically allowing the data to lead the discourse. Charles (2006) supports this by identifying recurrent phraseological patterns where inanimate subjects systematically perform roles equivalent to human researchers in establishing epistemic weight.

2.4. A Functional Framework for Reporting Orientations

The existing literature reveals a significant disjunction between high-level functional accounts of objectivity and micro-linguistic clause-level analysis. To bridge this gap, we propose a functional framework—the "Outcome-Oriented Pathway"—to systematically categorize agency distribution in the Results sections. This framework integrates Halliday's (1994) transitivity system with Hyland's (2005) interactional model, serving as our analytical roadmap to reveal how biomedical writers assert clinical authority through non-human agents.

As illustrated in Figure 1, this model visualizes the tension between traditional passive-centric conventions and strategic agency reconfiguration. It conceptualizes objectivity not as a binary choice, but as a dynamic interaction between two competing pathways within a shared epistemic system.

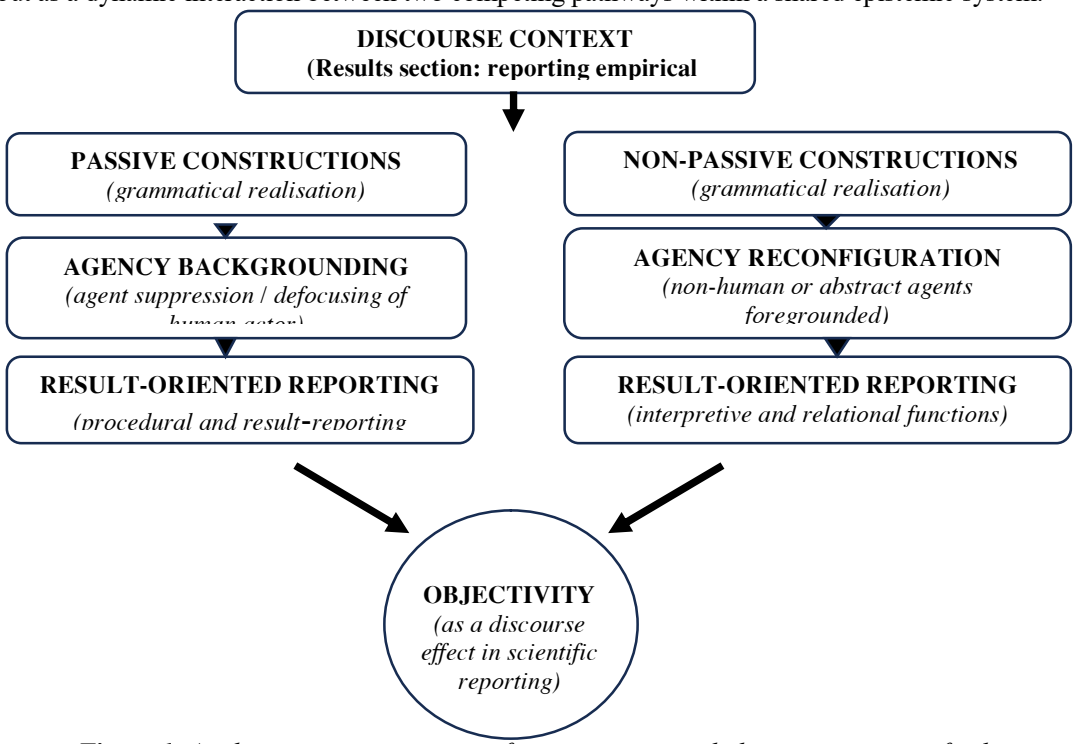

Figure 1. *A schematic representation of voice, agency, and objectivity in scientific discourse*
[Adapted from Halliday, 1994 and Hyland, 2005]

**Note: This model visualizes the tension between passive-centric conventions and strategic agency reconfiguration.*

The model posits that these are not merely stylistic preferences, but parallel functional pathways for constructing a robust objective stance. By foregrounding non-human agency, writers—particularly in Vietnamese-based biomedical contexts—effectively navigate the epistemic tension between detached evidence and authoritative claim-making.

Our framework categorizes non-human agency across two critical dimensions: functional typology (the discourse role of the participant, e.g., empirical reporting vs. methodological validation) and epistemic imposition (the degree of authority delegated to the agent). As established by Charles (2006) and Hood (2010), the choice of reporting verb and subject-participant functions as a 'rhetorical calibrator' for the truth-value of findings. By integrating these theoretical perspectives, our analysis (presented in Tables 2-4) provides a structured, empirical typology to examine how specific verbal patterns—such as the interplay between 'data-referencing' and 'interpretive' verbs—function as epistemic anchors. Ultimately, this frameworkmoves beyond a descriptive account of linguistic features to an explanatory model, illustrating how the 'Outcome-Oriented Pathway' functions as a strategic stabilization mechanism that validates the rhetorical sophistication of researchers in competitive biomedical publishing.

3. Methodology

3.1. Research Design and Research Questions

This study adopts a corpus-based, contrastive discourse-analytic design to investigate how agency is reconfigured through non-human entities to construct objectivity. Unlike traditional accounts focusing

on agency suppression via passive voice, this analysis examines the non-passive pathway where outcomes and data assume agent-like roles. The research design is grounded in standard methodological practices within applied linguistics (Dörnyei, 2007). The study addresses the following research questions:

RQ1: To what extent do the frequencies and types of non-human agents differ between Vietnamese and international biomedical Results sections?

RQ2: What discourse functions do these non-human participants realise in the reporting of findings?

RQ3: How does the reconfiguration of agency through non-human entities contribute to the construction of an objective stance?

3.2. Corpus Construction and Comparability

The corpus consists of 150 English-medium biomedical research articles published between 2021 and 2025. The dataset is divided into two balanced sub-corpora:

- International Corpus (INT): 75 articles from journals indexed in Scopus/Web of Science (e.g., *BMJ Open, PLOS Medicine*), representing global publication standards.
- Vietnamese-based Corpus (VN): 75 articles from national peer-reviewed journals (e.g., *BMRAT, MedPharmRes*), reflecting locally situated reporting practices.

Only the Results sections were extracted, as they provide a functionally comparable environment for examining how empirical observations are transformed into reportable outcomes. This extraction aligns with the established understanding that the structure of medical research articles is fundamentally shaped by specific discourse functions (Nwogu, 1997).

3.3. Unit of Analysis and Corpus Size

All Results sections were segmented into clauses following Systemic Functional Linguistics (SFL) criteria. A clause is treated as a finite unit containing a verbal group. The total corpus size includes 3,607 clauses (Table 1). To ensure reliability, 10% of the data was independently annotated, reaching an inter-coder agreement of 93% (Cohen's $\kappa = .87$).

Table 1. *Clause distribution across Results sections*

Sub-corpus	Articles (n)	Total clauses	Mean clauses per article	Percentage of total (%)
International	75	1,947	25.96	54.0
Vietnamese-based	75	1,660	22.13	46.0
Total	**150**	**3,607**	—	**100**

3.4. Operationalising Non-human Agency and Reconfiguration

To operationalize the dual-pathway model (Figure 1), we apply the following inclusion criteria:

Non-human Agency: Any active clause where an inanimate or abstract noun phrase (e.g., *the data, the assay, the results*) functions as the Transitivity Actor, Sayer, or Sensor.

Agency Reconfiguration: Identified where non-human entities are promoted to thematic status to serve as the point of departure for the message, effectively marginalizing the human researcher.

3.5. Analytical Procedure

The analysis was conducted through a multi-stage workflow:

Data Identification: We employed a combined method of manual annotation and targeted corpus-assisted queries (using concordancing tools) to isolate all clauses featuring non-human subjects in Results sections.

Functional Taxonomy: Clauses were categorized based on their discourse function, drawing on the taxonomy of reporting verbs (e.g., procedural vs. interpretive-validating).

Statistical Analysis: To determine the statistical significance of observed differences between the INT and VN sub-corpora, we performed chi-square tests ($\chi 2$) on normalized frequencies per 1,000 words. This allows for a rigorous comparison of how distinct publication contexts influence the preference for specific discursive pathways.

4. Results and Discussion

The empirical analysis confirms that the deployment of non-human agency is not a stylistic idiosyncrasy, but a deliberate, systematic discourse strategy within biomedical reporting. This section integrates quantitative corpus data with systemic functional analysis to demonstrate that Vietnamese biomedical writers do not merely 'use' non-human agents as grammatical placeholders; rather, they actively orchestrate these entities to navigate the epistemic tension between objective detachment and the authoritative requirements of high-impact publishing. By shifting the scholarly focus from passive suppression to active Agency Redistribution (the mechanism), this study delineates how Vietnamese-based writers leverage an Outcome-Oriented Pathway (the resulting discourse strategy) to construct a distinctive form of scientific objectivity.

4.1. The Prevalence and Typology of Non-human Agents (RQ1)

To address RQ1, this section examines both the frequency and the functional distribution of non-human agents across the INT and VN corpora. Table 2 presents the normalized frequencies of these agents, while the subsequent analysis categorizes them into distinct types to reveal how biomedical writers prioritize evidence-centered discourse. While conventional wisdom—historically constrained by the passive-centric paradigm—equates scientific objectivity with the mechanical effacement of the researcher (Banks, 2008; Martínez, 2003), recent scholarship has begun to challenge this view, reframing objectivity as an emergent discourse effect (Hyland, 2018). Building upon our previous investigation of grammatical choices within this corpus, this section extends the dialogue by exploring a complementary strategy: agency-reconfiguration. Rather than viewing these strategies as binary opposites, our analysis suggests a more complex rhetorical landscape where agency is not simply suppressed, but systematically redistributed among different categories of non-human agents.

Quantitative analysis reveals a striking distributional gap in how these agents are utilized across the two corpora. While the International corpus exhibits a more balanced distribution of agentive types, the Vietnamese corpus shows a statistically significant preference for specific non-human agents ($\chi 2=14.2$, $p<0.001$). This indicates that the preference for active-voice non-human agency in the VN corpus is not a stylistic variation but a deliberate discursive choice aimed at enhancing the visibility of evidence.

Table 2. *Distribution of Non-human Agency in Results Sections*

Non-human Subject Type	Intl (n=950)	VN (n=1010)	Chi-square $\chi 2$	Rhetorical Strategy
Data-referencing (e.g., findings, results)	450 (47.4%)	520 (51.5%)	$p < 0.05$	Evidential Anchoring: Asserting claim-validity.
Study-referencing (e.g., study, analysis)	320 (33.7%)	280 (27.7%)	$p > 0.05$	Process Framing: Authoritative procedural stance.
Instrument/Tool (e.g., model, assay)	180 (18.9%)	210 (20.8%)	$p < 0.05$	Technical Validation: Methodological transparency.
Total Non-Passive Agency	950 (100%)	1010 (100%)	-	Agency Redistribution
Normalized Freq (per 1,000 clauses)	487.9	608.4	$p < 0.001$	-

**Note: Statistical significance is indicated by $p < 0.05$. The n values (950 and 1010) represent the total number of non-passive agentive clauses identified in each corpus, out of a total of 1947 and 1660 clauses analyzed respectively (Table 1). Normalized frequencies (per 1,000 clauses) are provided for all categories to ensure cross-corpora comparability..*

As shown in Table 2, the overwhelming preference for 'Data-referencing' agents in the VN corpus—accounting for 51.5% of all non-passive agentive clauses—suggests a strategic pivot towards evidence-centered discourse. Consistent with the 'Agency Reconfiguration' pathway, the statistically significant reliance on 'Data-referencing' agents in the Vietnamese corpus ($p < 0.05$) complicates the traditional view championed by earlier scholars like Banks (2008). When normalized per 1,000 clauses, the frequency of these agents in the VN corpus (608.4) significantly outperforms the International corpus (487.9), underscoring a heightened reliance on outcome-oriented framing.

Drawing on Halliday's (1994) systemic functional framework, we argue that Vietnamese-based writers engage in a process of Agency Redistribution. By promoting empirical evidence to the thematic position—the point of departure for the message (e.g., "The current results indicate a distinct shift...")—authors transform these findings into 'autonomous discourse objects.' This practice establishes 'functional transparency,' where the evidentiary weight is anchored directly to the claim. Unlike the International corpus, which often relies on a broader range of agentive types to maintain a conventionalized stance, the Vietnamese corpus demonstrates a marked preference for syntactic compactness, where the agentive subject and its epistemic verb create a more direct information flow. This reflects a move towards a more explicit, evidence-centered discourse, leveraging the lexical density of these agentive structures to meet the rigorous information-load requirements of contemporary biomedical research (Biber & Gray, 2010).

4.2. Functional Stratification of Non-human Agency in Reporting Findings (RQ2)

This section examines the strategic delegation of agency as a mechanism for calibrating clinical and epistemic authority. By moving beyond a syntactic description of agentivity, we apply the framework illustrated in Figure 1 to categorize how authors systematically delegate agency to non-human actors, reflecting the core values of biomedical research.

Table 3. *Discourse-functional Typology of Non-human Agents*

Functional Category	Clause Type (Pattern & Exemplar)	Epistemic Authority	Verb Group	VN Corpus (n/%)	Intl Corpus (n/%)
Empirical Reporting	*Evidence-reporting clauses:* [Data-agent] + [Neutral Verb] (e.g., "Results indicate...")	Objective (Neutral)	Neutral Reporting Verbs: indicate; show; reveal; demonstrate	520 (55.9%)	450 (44.4%)
Methodological Validation	*Instrument-agentive clauses:* [Instrument-agent] + [Validating Verb] (e.g., "Assay confirms...")	Validated (Anchored)	Validating Verbs: confirm; validate; verify	210 (22.6%)	180 (17.7%)
Argumentative Positioning	*Inference-based clauses:* [Interpretive-agent] + [Inference Verb] (e.g., "Data suggest...")	Interpretive (Inferred)	Inference-based Verbs: suggest; argue; imply; propose	200 (21.5%)	385 (37.9%)
GRAND TOTAL	-	-	-	930 (100%)	1015 (100%)

**Note: The classification is based on the interaction between agent types and verb groups (n=1945).*

Neutral Reporting focuses on the presentation of empirical observations via [Data-agent] (e.g., results, findings, data).

Methodological Validation emphasizes the reliability of the research process, utilizing [Instrument-agent] (e.g., assays, models, analyses).

Argumentative Positioning signifies an authorial shift from mere reporting to active interpretation, employing [Interpretive-agent] (e.g., analysis, interpretation, discussion, study).

As Table 3 illustrates, the rhetorical landscape differs significantly between the two corpora, particularly in how authors anchor their claims in the research process. A primary divergence lies in Methodological Validation, where Vietnamese-based (VN) authors demonstrate a higher reliance on instrument-agentive clauses (22.6%) compared to their international (INT) counterparts (17.7%).

In the biomedical tradition, the "truth" of a finding is treated not as a subjective observation but as a direct output of standardized technical procedures. Therefore, the preference for [Instrument-agent] structures is a deliberate reflection of Methodological Rigor. By elevating a technical instrument to the role of an "Actor" or "Sayer," authors assert that results are independent of personal bias, affirming a belief in "mechanical objectivity" where the standardized process itself generates the "fact". For instance, in a study on RNA extraction by Duong et al. (2023), the authors employ the following structure to validate their process: *"The optimized protocol confirms the consistency of RNA yields across all FFPE samples."* Rather than stating "We confirmed...", the agency is delegated to the "protocol," establishing the research artifact as the primary architect of scientific truth.

Furthermore, the overwhelming preference for Empirical Reporting (55.9%) in the VN corpus functions as a tactical negotiation of authority. While traditional Anglo-centric views might interpret this as rhetorical hesitation, we argue that it represents a sophisticated form of "delegated validation". As mapped in the Outcome-Oriented Pathway (Figure 1), the burden of proof is strategically transferred from the human author to the empirical data. This is clearly exemplified in the work of Nguyen et al. (2024) regarding perinatal outcomes: *"The clinical data reveal a significantly higher prevalence of adverse outcomes in the late-onset group."* By foregrounding "clinical data" as the agent of the verb "reveal," the authors construct an "evidentiary transparency" where the findings are presented as autonomous "matters of fact" that exist independently of human intervention.

In contrast, the International corpus exhibits a marked preference for Argumentative Positioning (37.9% vs. 21.5% in VN), where writers favor inference-based agency to signal a shift toward active interpretation. While Hyland (2002) posits that academic authority is often achieved through overt authorial stance, our analysis reveals an equally rigorous alternative favored by Vietnamese writers. In this pathway, authority is projected through the clarity of the evidence itself, meeting the rigorous information-load requirements of contemporary research as observed by Biber and Gray (2010). Consequently, the systematic use of non-human agency in the VN corpus serves as a professional safeguard, securing scientific authority by ensuring that the primary focus remains on the procedural integrity and the transparency of the findings.

4.3. Reconfiguring Objectivity: The "Outcome-Oriented" Pathway (RQ3)

Objectivity in biomedical discourse is not the absence of the researcher, but the presence of evidence. As illustrated in Figure 1, this objective stance is achieved through the "Outcome-Oriented Pathway"—a strategic framework where epistemic authority is systematically delegated from the fallible researcher to the "infallible" research process. By analyzing the functional distribution in Table 4, we observe that authors effectively transform subjective clinical observations into autonomous "matters of fact" through this reconfiguration of agency.

Table 4. *Semantic Shifts in Agency Reconfiguration*

Agent Category	Process Type (Verbs)	Epistemic Stance	VN Corpus (n/%)	Intl Corpus (n/%)	Rhetorical Function
Data-agent (Objective)	hints at, reflects,	Tentative	520 (55.9%)	450 (44.4%)	Delegated Mitigation:

(eg. Results, Data, Observations…)	indicates, show, reveal…				Reducing authorial responsibility to maintain a cautious scientific tone.
Instrument-agent (Validated) (eg. Assays, Models, Analyses…)	uncovers, highlights, demonstrates, confirm, validate, verify…	Authoritative	210 (22.6%)	180 (17.7%)	Delegated Autonomy: Establishing the research process as an objective, independent voice.
Interpretive-agent (Interpretive) (eg. The findings, The study, This discussion, Interpretation)	suggest, argue, propose, imply, conclude…	Assertive	200 (21.5%)	385 (37.9%)	Delegated Validation: Anchoring conclusions in empirical certainty to preempt skepticism.
GRAND TOTAL			930 (100%)	1015 (100%)	

**Note: Data distribution is based on clausal analysis of Result sections, where each clause is assigned to its primary agentive verb.*

The divergence in Table 4 provides an empirical foundation for a necessary critique of current scholarship. Traditional views, such as those of Banks (2008), have long equated scientific objectivity with the passive voice and the "erasure" of the researcher. However, our data suggests a more nuanced reality. The higher reliance on [Data-agents] (55.9%) in the VN corpus compared to the International corpus (44.4%) is not a stylistic deficit, but a deliberate "Delegated Mitigation." While Hyland (2005) argues that authority in academic discourse is constructed through the author's visible stance, our findings suggest an alternative pathway in the biomedical domain: authority is performed through *invisibility*. In high-stakes clinical research, where interpretive errors carry immediate consequences, VN authors strategically shift the epistemic burden from the "fallible" researcher to the "infallible" data. This is a profound rhetorical adaptation: by letting the data "speak," authors perform a professional safeguard that aligns with the core tenets of Evidence-Based Medicine (EBM).

This rhetorical tension is further highlighted by the higher density of [Instrument-agents] in the VN corpus (22.6% vs. 17.7%). When VN authors assign verbs like *validate* or *confirm* to technical instruments, they are effectively engaging in what Latour (1987) describes as the construction of "matters of fact." As shown in the "Instrumental" stage of Figure 1, authority is not claimed via the authorial "I"—which the International corpus asserts more confidently through [Interpretive-agents] (37.9%)—but via the robustness of the empirical process.

The contrast with the International corpus reveals a distinct cultural adaptation in the performance of scientific authority. While international writers assert authority through overt interpretive agency—positioning themselves as the "narrators" of truth—Vietnamese authors secure rigor through an evidence-centered focus. This "non-human" agency is a functional alignment with the epistemic values of global biomedicine. Ultimately, this pathway is a performative achievement: it demonstrates that scientific authority can be successfully established not through the author's overt

interpretive presence, but through the irrefutable clarity of the empirical process itself. This aligns with the broader paradigm where truth is not "argued," but "demonstrated"—a standard of objectivity that Vietnamese biomedical writers are actively navigating and mastering.

4.4. Adaptation as Clinical Authority: Rethinking Non-human Agency in Biomedical Discourse

The "Outcome-Oriented Pathway" we have identified—visualized in Figure 1—is far from a default habit carried over from local classrooms. Instead, it is a deliberate rhetorical choice: a calculated move to align with the rigorous standards of global biomedical discourse. As shown by the structural preferences in Table 4, by consistently placing inanimate entities like *data* or *assays* at the heart of their sentences, Vietnamese researchers are doing more than just avoiding "I" or "we." They are effectively depersonalizing the truth, a hallmark of high-impact clinical reporting that shifts the spotlight away from the researcher and onto the evidence itself.

This shift is deeply rooted in the ethos of Evidence-Based Medicine (EBM). In the high-stakes world of clinical research, legitimacy is not earned through the author's personal voice, but through the transparency of the empirical process. As our findings in sections 4.1 and 4.2 reveal, Vietnamese writers favor a distinct brand of "Instrumental Objectivity." By assigning active verbs like *validate* or *confirm* to technical tools—rather than relying on their own interpretive claims—they conduct a sort of "validation ritual." This process, which we have categorized in 4.3 as a form of "Delegated Mitigation," transforms subjective clinical observations into autonomous, indisputable "matters of fact" (Latour, 1987). By consciously subordinating their personal voice to the weight of the findings, these authors are not being passive; they are actively insulating their work from the risks of subjective bias.

This discursive evolution reflects a deeper, successful negotiation of professional identity. The transition from "narrator" to "evidence-steward" highlights a clear maturity in rhetorical strategy. Writers are essentially repurposing the empirical directness emphasized in their local training as a sophisticated tool to navigate the skeptical, competitive environment of international peer review.

Ultimately, the prevalence of this pathway proves that Vietnamese researchers are not merely following global norms; they are mastering them. By transforming the Results section into a neutral, transparent zone where the evidence does the heavy lifting, they have moved beyond simple linguistic compliance. This adaptation is a bold assertion of clinical authority, marking a clear evolution from simply "learning to write" to "writing to command scientific authority" on the global stage.

5. Conclusion

This study does not aim for abstract theorization; rather, it examines the reality of how we—as biomedical researchers in Vietnam—navigate the complexities of international publishing. Instead of remaining constrained by the long-standing convention that "objectivity requires the passive voice," our findings demonstrate that we are actively forging a distinct discursive path: the "Outcome-Oriented Pathway." This is not a stylistic limitation, but a sophisticated, purpose-driven strategy that aligns our reporting with the core ethos of Evidence-Based Medicine (EBM).

We contend that in clinical research, scientific legitimacy is not earned through the author's personal narrative, but through the transparency of the empirical process. The preference for using inanimate entities—such as *data*, *assays*, or *models*—as the primary actors in our sentences is a calculated rhetorical choice. By doing so, we transition from the role of a subjective "narrator" to that of an "evidence-steward." This shift effectively neutralizes the authorial voice, allowing empirical findings to stand as autonomous, indisputable matters of fact.

It is time for the academic community to recognize this writing style as a professional competency rather than a "deficit" to be corrected. For researchers, educators, and journal gatekeepers, the key to success is not the mechanical imitation of native-speaker conventions. Instead, rhetorical authority lies in the ability to position evidence as the sole "arbiter" of truth. When data is elevated to the role of the primary actor, it provides a level of scientific weight and clinical credibility that flowery prose

cannot replicate. We must move beyond the reflexive urge to "correct" these patterns and instead view them as what they are: a robust, evidence-centered rhetorical strategy.

Limitations and Future Directions: This study remains anchored in the biomedical domain, where precision is paramount. We view this domain-specificity as both a boundary and a springboard. Future research could explore whether this "Outcome-Oriented Pathway" represents a broader rhetorical evolution across other scientific disciplines, or conduct longitudinal studies to map how non-native writers evolve from "learners" to "masters" of scientific discourse.

Final Remark: Ultimately, this study reveals that scientific writing is not a rigid adherence to grammatical rules, but a high-stakes negotiation of authority. By confidently allowing the evidence to speak for itself, we are no longer merely "learning to write"—we are actively commanding scientific authority. This transition marks a bold assertion of our professional identity, securing a competitive and influential space for our rhetorical traditions within the global scientific community.

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Chủ thể phi nhân: tái cấu trúc tính khách quan trong văn phong nghiên cứu y sinh

Tóm tắt: Tính khách quan khoa học từ lâu đã bị đóng khung trong thể bị động - một quy ước diễn ngôn dễ che khuất sự phức tạp trong văn phong y sinh hiện đại. Nghiên cứu này đặt lại vấn đề với mô hình "lấy thể bị động làm trung tâm" bằng cách khái niệm hóa tính khách quan như một hiệu ứng diễn ngôn, được kiến tạo chiến lược thông qua việc tái cấu trúc tác nhân. Bằng việc tích hợp hệ thống chuyển tác (transitivity system) của Halliday (1994) và mô hình tương tác (interactional model) của Hyland (2005), nghiên cứu đề xuất khung phân tích "Lộ trình định hướng kết quả" (Outcome-Oriented Pathway) nhằm làm rõ cách các tác giả nâng tầm các thực thể phi nhân, như *data* (dữ liệu), *results* (kết quả), *instruments* (công cụ), v.v. thành các tác nhân chủ chốt trong báo cáo khoa học. Dựa trên kho ngữ liệu gồm 150 phần Kết quả từ các tạp chí y sinh quốc tế và Việt Nam (2021–2025), kết quả cho thấy một sự phân kỳ tu từ trọng yếu: trong khi các tác giả quốc tế phối hợp linh hoạt nhiều lộ trình tác nhân, các nhà nghiên cứu Việt Nam lại ưu tiên tác nhân phi nhân (non-human agency) ở thể chủ động để kiến tạo loại hình tri thức "tự kiểm chứng". Chúng tôi khẳng định rằng, đây không phải là một 'khiếm khuyết' ngôn ngữ, mà là các thao tác tu từ có chủ đích nhằm củng cố các phát hiện thực nghiệm thành những 'sự thực hiển nhiên'. Nghiên cứu này mở ra góc nhìn mới về sự thích nghi chuyên môn, qua đó làm rõ cách cộng đồng học thuật Việt Nam điều hướng và làm chủ các chuẩn mực khắt khe trong bối cảnh xuất bản y sinh toàn cầu.

Từ khoá: Khách quan trong khoa học; tái cấu trúc tác nhân; diễn ngôn y sinh; chủ thể phi nhân; chiến lược tu từ.