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POSTHUMAN THEORIES IN TRANSLATION: TOWARDS A NEW TRANSLATIONAL ONTOLOGY

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ABSTRACT

This article advances a comprehensive theoretical reconfiguration of translation studies in response to the ontological, epistemological, and ethical challenges introduced by generative Artificial Intelligence (AI). Rather than approaching AI as a mere technological aid or threat to professional practice, the paper interrogates a more foundational question: who – or what – translates in the posthuman condition? Drawing on posthumanism philosophy, Actor-Network Theory (ANT), digital textual scholarship, and contemporary AI ethics, the study deconstructs the anthropocentric assumptions that have historically underpinned translation theory. Translation is reconceptualized as an emergent phenomenon produced through the interaction of heterogeneous agencies, including human translators, algorithms, training corpora, interfaces, platforms, and end-users. Structured around four analytical pillars, the hybrid translator, distributed agency, translation as semantic flow, and posthuman ethics – the paper proposes a relational ontology of translation. This ontology shifts attention from the autonomous human subject to sociotechnical networks, from the stable translated text to dynamic and iterative meaning-making, and from individual responsibility to layered and proportional accountability. The article concludes by arguing that translation in the age of AI is best understood as a collective, infrastructural, and deeply ethical practice, requiring new theoretical vocabularies and institutional frameworks to safeguard cultural diversity, justice, and transparency.

KEYWORDS: Posthumanism, Translation Theory, Generative AI, Actor-Network Theory, Distributed Agency, Translation Ethics, Digital Humanities.

1. INTRODUCTION: BREACHING ONTOLOGICAL BOUNDARIES

1.1. Breaching Ontological Boundaries

The advent of sophisticated generative Artificial Intelligence (AI) systems, such as Large Language Models (LLMs), capable of producing fluent and contextually nuanced translations, represents not merely a technological advancement but a profound qualitative rupture in the long history of translation (Cronin, 2013). This rupture forces a fundamental re-evaluation of the field's core assumptions. While previous technological innovations—from the printing press to computer-assisted translation (CAT) tools and even earlier rule-based or statistical machine translation—largely functioned as instruments extending or augmenting innate human capacities, generative AI poses a more radical challenge. It fundamentally destabilizes the ontological bedrock of translation theory by blurring, and often erasing, the categorical distinctions between tool, collaborator, and autonomous agent (Boden, 2018). Consequently, translation studies now face an ontological crisis: its inherited theoretical frameworks, which predominantly presuppose a sovereign, intentional human subject as the central translating agent, are increasingly inadequate for describing, explaining, and ethically engaging with contemporary translational realities.

From the foundational debates on equivalence (Nida, 1964) and *skopos* (Vermeer, 1996) to the sociological turns emphasizing norms, systems, and the translator's habits (Simeoni, 1998; Bourdieu, 1999), translation theory has consistently, albeit implicitly, centered the human. Even in polysystem theory (Even-Zohar, 1990) and the influential work on rewriting and manipulation (Lefevere, 1992), the

human actor—whether translator, editor, or patron—remains the ultimate locus of decision-making, agency, and ethical responsibility. The translator's consciousness is the presumed site where meaning is perceived, critically interpreted, and creatively re-expressed within a target culture. Generative AI disrupts this anthropocentric configuration at its root. It introduces powerful, non-human actors that do not simply process instructions but actively shape meaning through complex, opaque processes of probabilistic inference, pattern recognition, and the aggregation of knowledge from vast, heterogeneous corpora (Metz, 2021). As a result, translation increasingly manifests not as the output of a solitary human mind, but as an emergent phenomenon arising from dynamic interactions within a network comprising human translators, algorithms, training datasets, software interfaces, platform architectures, and end-users (Latour, 2005).

Situated within the broader "posthuman turn" in critical and philosophical thought (Braidotti, 2013; Hayles, 1999), this paper explicitly challenges this deep-seated human exceptionalism within translation studies. It draws upon posthumanism philosophy, Actor-Network Theory (ANT), digital textual scholarship, and critical AI ethics to deconstruct the anthropocentric foundations of the discipline and propose a new relational ontology. In this reconceptualization, the translating subject is no longer a bounded, autonomous individual but a hybrid assemblage—a constellation where human cognition, algorithmic computation, and material infrastructure are inseparably entangled. The romantic ideal of the translator as an isolated creative genius gives way to the networked reality of the translational assemblage, where agency is distributed, meaning is contingent, and ethics must be rethought as a collective, infrastructural concern.

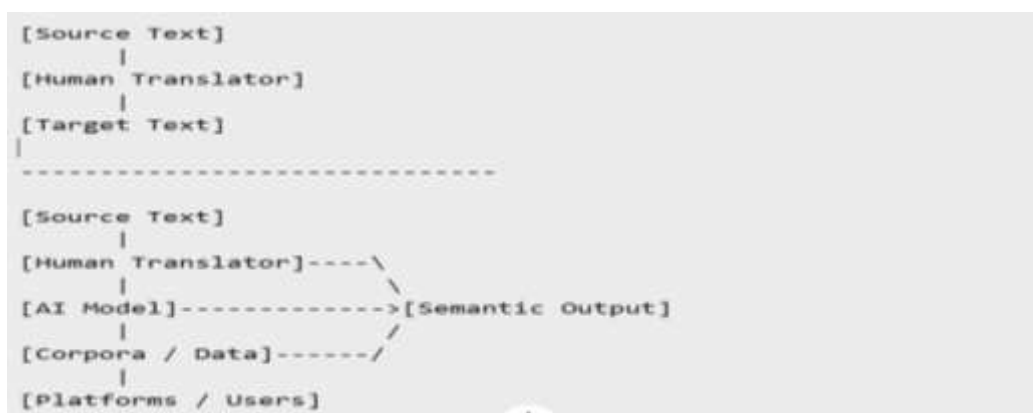


Figure 1: From Human-Centric Translation to Posthuman Translation Networks.

This ontological shift is visualized in Figure 1,

which maps the transition from a human-centric to a

posthuman network model of translation. The traditional model depicts a linear, hierarchical flow from a singular human translator to a finished text. In contrast, the posthuman model illustrates a dynamic, multi-nodal network where human actors, AI models, data corpora, platforms, and users interact in non-hierarchical, iterative loops, co-producing translation as an emergent outcome. This figure serves as a foundational schematic for the conceptual arguments that follow.

This paper argues that to understand translation in the age of AI, we must shift our analytical focus in alignment with this networked model: from the autonomous human to sociotechnical networks, from the stable, final text to dynamic and iterative processes of meaning-making (or semantic flows), and from the ethics of individual responsibility to frameworks of layered and proportional accountability. The following sections will articulate this new ontology through four interconnected pillars, providing a conceptual framework essential for navigating the complex future of translation.

2. LITERATURE REVIEW: TOWARDS A POSTHUMAN TRANSLATION PARADIGM

The disruptive advent of generative AI in translation necessitates a fundamental reassessment of the field's theoretical foundations. This literature review synthesizes and critically expands upon four interconnected intellectual traditions—posthumanism philosophy, Actor-Network Theory (ANT), digital textual scholarship, and critical AI ethics—to construct the necessary scaffolding for a new translational ontology. It argues that existing paradigms, while offering valuable insights, remain insufficiently equipped to address the radical redistribution of agency, the fluidity of text, and the complex ethical dilemmas characteristic of AI-mediated translation.

2.1. *Posthumanism and the Deconstruction of the Translating Subject*

Posthumanism thought provides the overarching philosophical critique essential for moving beyond the anthropocentric models that have dominated translation studies. Challenging the Enlightenment ideal of the autonomous, rational human subject as the sole locus of knowledge and agency, posthumanism emphasizes the constitutive entanglement of the human with the technological, the biological, and the environmental (Braidotti, 2013; Hayles, 1999). N. Katherine Hayles's (1999) seminal work on how information technologies dissolved the Cartesian mind/body duality and

redefined subjectivity as "pattern" versus "presence" is particularly resonant for translation, where the translator's cognition is increasingly distributed across human-machine interfaces. Similarly, Rosi Braidotti's (2013) conceptualization of the "posthuman subject" as a relational, embodied, and technologically mediated assemblage directly informs the reimagining of the translator not as an isolated individual but as a node within a broader network.

Within translation studies, early forays into posthuman themes often emerged indirectly. Michael Cronin's (2003, 2013) work on globalization and technology consistently highlighted the "viral" nature of global communication and the translator's role within extended cognitive ecosystems, foreshadowing posthuman concerns. Discussions of the translator as a "cyborg" (cf. Meylaerts, 2013) or in a state of "human-machine hybridity" began to surface, particularly in relation to CAT tools, framing technology as a prosthetic extension. However, as Bielsa (2018) notes, much of this discourse remained metaphoric or focused on changes to professional practice, stopping short of interrogating the core ontological categories of "translator," "text," and "agency" themselves. This paper builds on these foundations but pushes further, arguing with Floridi (2014) that we are witnessing not just a change in tools but an "onlife" experience where the distinction between human-centric and AI-driven processes collapses, demanding a structural, not just metaphorical, rethinking of translation as a posthuman practice.

2.2. *Actor-Network Theory and the Relational Dynamics of Distributed Agency*

To operationalize the posthuman critique and trace the concrete mechanisms of translation, this paper turns to Actor-Network Theory (ANT). Developed by Bruno Latour (2005), Michel Callon, and John Law, ANT offers a robust sociological framework for analyzing how agency is enacted through heterogeneous networks of human and non-human "actants." ANT's foundational principle of generalized symmetry—refusing a priori distinction in analytical status between humans and artifacts—is pivotal for studying AI in translation. It allows us to treat an algorithm, a training dataset, a style guide, or a platform API not as passive tools but as active participants that "translate" interests, enforce norms, and shape outcomes alongside human translators.

Applied to translation, ANT reveals the process as a continuous struggle for enrollment and negotiation within a network.

The "fidelity" or "skopos" of a translation is not a pre-existing goal achieved by a single agent but an emergent property stabilized (temporarily) by the alignment of multiple actors: the translator's expertise, the MT engine's probabilistic biases, the client's budget and deadline (embedded in project management software), and the expected reception by a user community (Buzelin, 2005). Latour's (1999) concept of "circulating reference" is particularly useful here: meaning does not travel intact from source to target but is transformed through a chain of mediators, each leaving its mark. In AI translation, this chain includes the data curation choices of model trainers, the architectural priorities of neural networks (e.g., favoring fluency over literalness), and the post-editor's corrective interventions. This perspective fundamentally challenges Romantic and hermeneutic notions of individual authorship and intentionality, showing instead how agency is distributed, contingent, and performed within the network (Callon, 1986).

2.3. Digital Textuality and the Ontology of the "Liquid Text"

The object of translation—the text—has itself undergone a radical transformation in the digital age, a shift meticulously documented by digital humanities scholarship. The notion of the stable, authoritative, and bounded text, a cornerstone of print culture and traditional textual criticism, has been supplanted by models of textuality as dynamic, processual, and versioned. Jerome McGann's (2001) work on the "textual condition" and the concept of the "liquid text" (Buzzetti & McGann, 2006) captures this essence: digital texts are inherently mutable, open to continuous revision, remixing, and customization.

This fluidity is exponentially amplified in AI-mediated translation environments. Translations are no longer discrete products but often real-time, on-demand services or iterative flows. A webpage localized via an AI API can update its translations continuously based on new training data or A/B testing; a document translated by an LLM can generate multiple, equally plausible versions instantaneously.

This reality renders traditional concepts like the "definitive translation" or even the "source text" (which may itself be a dynamic digital object) problematic. As Kirschenbaum (2016) argues, digital objects are characterized by their procedural and performative nature. Consequently, translation theory must shift from a paradigm of product-oriented equivalence to one of process-oriented

modulation. The work of scholars like Sakamoto (2021) on "translation as dynamic adaptation" and Risku et al. (2017) on situated, embodied translation processes in digital environments provides a crucial bridge, suggesting that the instability of the digital text mirrors and necessitates a recognition of translation as an ongoing, context-sensitive negotiation—a "semantic flow."

2.4. Critical AI Ethics, Algorithmic Bias, and the Accountability Gap

The integration of AI into translation brings to the fore urgent ethical concerns that traditional translation ethics, centered on the individual translator's fidelity, loyalty, and professional discretion (e.g., Chesterman, 2001; Pym, 2012), are ill-equipped to address. The field of critical AI ethics (Floridi & Cowls, 2019; Mittelstadt et al., 2016) highlights systemic risks inherent in complex algorithmic systems: opacity ("black box" problem), bias, and the dispersion of responsibility.

In translation, algorithmic bias is not a bug but a feature emerging from training data. Models trained on vast, uncensored corpora from the web inevitably reproduce and amplify existing linguistic hegemonies, cultural stereotypes, and epistemic injustices (Hovy & Spruit, 2016). They may perform excellently for high-resource language pairs (e.g., English–French) while failing or producing nonsense for low-resource or marginalized languages, thus enacting a form of digital linguistic imperialism (Van der Meer, 2020). Furthermore, as Crawford (2021) demonstrates, AI systems are "politics all the way down," embodying the values and power structures of their creators and datasets.

This creates a profound "accountability gap" (Matthias, 2004). When a biased or harmful translation circulates, who is responsible? The translator who postedited? The engineer who designed the model? The company that compiled the toxic training data? The platform that hosts it? Traditional individualist ethics cannot map into this distributed causality. This necessitates a turn towards frameworks of networked or proportional ethics. Drawing on work in responsible innovation (Stilgoe et al., 2013) and distributed moral responsibility (Taddeo & Floridi, 2018), a posthuman translation ethics must allocate accountability across the entire sociotechnical network, demanding transparency from developers, due diligence from institutional users, critical literacy from translators, and governance from policymakers.

2.5. Political Economy of Platforms and the

Infrastructures of Translation

Finally, a posthuman ontology of translation must be grounded in a critical analysis of its political economy. The distributed agencies of translation networks are not neutral or egalitarian; they are structured by powerful infrastructural platforms (Gillespie, 2018) that govern access, set standards, and extract value. Companies controlling major MT and LLM services (e.g., Google, OpenAI, Meta) act as "implicated actors" (Latour, 2005) whose policies, pricing models, and technical protocols fundamentally shape what can be translated, how, and for whom.

This platformization of translation (Cronin, 2020) leads to new forms of control and alienation. Translators may become "ghost workers" (Gray & Suri, 2019) training and correcting AI systems invisible to the end-user, while platform logic prioritizes scalability, speed, and homogenization over linguistic diversity and cultural nuance. The work of Srnicek (2017) on platform capitalism and Couldry and Mejias (2019) on data colonialism is crucial here, revealing how the extraction and processing of linguistic data for AI entrenches asymmetrical global power relations. Understanding posthuman translation, therefore, requires examining not just the micro-dynamics of agency within a network but also the macro-structures of capital, data ownership, and geopolitical power that determine the architecture of the networks themselves. This synthesis of micro- and macro-analysis ensures that the proposed ontology remains critically engaged with the material and political realities of translation in the digital age.

3. METHODOLOGY: CONSTRUCTING A RELATIONAL ONTOLOGY THROUGH INTERDISCIPLINARY SYNTHESIS AND CONCEPTUAL MODELING

This study is not an empirical investigation of specific AI translation tools but a foundational, philosophical, and theoretical inquiry. Its primary objective is to construct a new conceptual framework—a relational ontology—capable of describing, analyzing, and ethically evaluating translation in the posthuman condition. To achieve this, the methodology is explicitly designed as a theory-building exercise, employing a multi-layered approach that moves from critical deconstruction to synthetic reconstruction. It is grounded in the conviction that the profound challenges posed by generative AI cannot be addressed by simply extending existing paradigms; they require a radical

rethinking of the field's most basic categories. Accordingly, the methodology is structured around four integrated and iterative phases: 1) Critical Interdisciplinary Synthesis, 2) Conceptual Modeling and Heuristic Development, 3) Grounded Speculation and Scenario Analysis, and 4) Normative Framework Development. Each phase is meticulously aligned with the core arguments and analytical pillars of the paper, ensuring methodological coherence and rigor.

3.1. Phase 1: Critical Interdisciplinary Synthesis – Deconstructing the Anthropocentric Foundation

The first and foundational phase involves a systematic, critical synthesis of literature from four distinct but converging domains. This is not a mere literature review but an active process of theoretical triangulation, where each discipline is used to expose the limitations of the others and, in combination, to reveal the contours of a new paradigm.

- **Posthumanism Philosophy as the Ontological Catalyst** We engage deeply with core texts by Braidotti (2013), Hayles (1999), and Haraway (1991) to perform a philosophical critique of human exceptionalism. This involves analytically dismantling the figure of the sovereign, intentional translator—a figure presupposed by everything from hermeneutic approaches to sociological theories of habitus. We ask: How do these theories implicitly rely on a bounded human subject? Hayles's work on the posthuman as an informational pattern is used to challenge the very notion of a discrete "translator's mind" as the site of meaning transfer. This phase provides the ontological warrant for moving beyond human-centric models.
- **Actor-Network Theory as the Sociotechnical Analytic** To move from philosophical critique to a concrete analytical vocabulary, we operationalize the principles of ANT (Latour, 2005; Callon, 1986). This involves adopting the principle of generalized symmetry as a methodological rule: in our analysis, we refuse to grant a priori analytical privilege to human actors over non-human ones (algorithms, datasets, interfaces). We treat translation not as an action but as a network effect. This allows us to trace the associations and negotiations that temporarily stabilize a translation, mapping the "actants" involved (e.g., a style guide embedded in a CAT tool, a platform's API call limit, a translator's aesthetic

preference) without reducing explanation to human intention or social forces alone. This phase generates the sociological lens for understanding distributed agency.

- **Digital Textual Scholarship as the Textual/Object-Oriented Correction**

Concurrently, we integrate insights from digital humanities (McGann, 2001; Kirschenbaum, 2016; Buzzetti & McGann, 2006) to correct the persistent conception of the text as a stable object. We analyze the implications of the “liquid text” and procedural digitality for translation’s ontology. This involves a conceptual shift from viewing source and target texts as fixed entities to understanding them as mutable, versioned, and processual events. This phase provides the textual ontology necessary for reconceptualizing translation as semantic flow rather than product-based equivalence.

- **Critical AI Ethics and Platform Studies as the Ethical-Political Grounding** Finally, to ensure our ontology is critically engaged and not merely descriptive, we synthesize literature from critical AI ethics (Floridi & Cowls, 2019; Crawford, 2021) and platform studies (Gillespie, 2018; Srnicek, 2017). This synthesis explicitly connects the micro-dynamics of agency (from ANT) to the macro-structures of power, capital, and data governance. It forces the ontological model to account for bias, opacity, exploitation (“ghost work”), and linguistic imperialism. This phase ensures the framework has an integrated ethical-political dimension from the outset.

3.2. Phase 2: Conceptual Modeling and Heuristic Development – Forging New Analytical Tools

The synthesis of Phase 1 reveals the inadequacy of existing concepts. Phase 2 involves the constructive work of developing new conceptual models and heuristics that can “see” and describe the posthuman translation reality. This is an exercise in abductive reasoning, generating explanatory frameworks that best account for the phenomena revealed by the critical synthesis.

- **Developing the “Hybrid Translator” Assemblage** Drawing directly from Braidotti’s assemblage theory and ANT’s networks, we construct the “Hybrid Translator” as a conceptual model (visualized in Figure 2). This model is not a typology of human roles but a map of constitutive relations. It identifies key nodes (human cognition, algorithmic model,

training corpus, user interface, institutional brief) and theorizes their interactions. The model’s purpose is to replace the atomistic “translator” with a relational figure, highlighting how agency and expertise are redistributed, not erased.

- **Articulating “Semantic Flow” as a Processual Theory** In response to the digital textual scholarship, we formally articulate “translation as semantic flow” as a theoretical construct to replace static models (e.g., equivalence, *skopos* as a fixed goal). This involves defining its characteristics: iterativity (continuous refinement), multidirectionality (feedback loops between all actants), and context-dependency (meaning is modulated for specific platforms, moments, and user groups). Figure 3 serves as a dynamic visualization of this theory, illustrating how meaning circulates and transforms within the network rather than being transferred from point A to B.
- **Diagramming Networked Relations** The creation of Figures 1, 2, 3, and 5 is a core methodological activity. These are not mere illustrations but conceptual diagrams—essential tools for modeling complex, non-linear relationality. They make the abstract arguments of the synthesis tangible and provide a shared visual language for discussing posthuman translation systems.

3.3. Phase 3: Grounded Speculation and Scenario Analysis – Stress-Testing the Framework

To ensure the conceptual models are robust and relevant, Phase 3 employs a method of grounded speculation. This involves applying the nascent ontology to analyze observable, emergent trends in AI-mediated translation, thus “stress-testing” the framework against real-world complexities.

- **Analysis of Contemporary Workflows** We dissect prevalent practices like Neural Machine Translation (NMT) post-editing, LLM prompt engineering for translation, and continuous localization in agile development. Using our models, we analyze these not as simple human-plus-tool scenarios but as specific configurations of the hybrid assemblage. For instance, prompt engineering is examined as a new form of human-machine negotiation where agency is shared between the user’s linguistic skill in crafting prompts and the model’s stochastic generation.
- **Scenario-Based Exploration** We consider

speculative but plausible scenarios: e.g., a real-time adaptive translation API for a global social media platform, or an autonomous AI agent translating and summarizing legal documents. By applying our framework—asking about the actants involved, the flow of meaning, the points of ethical friction—we demonstrate its explanatory power and identify potential future research questions. This phase bridges pure theory and empirical application, demonstrating the framework's utility.

3.4. Phase 4: Normative Framework Development – From Description to Prescription

The final methodological phase moves from analytical and descriptive theory to normative proposal. Informed directly by the ethical-political grounding of Phase 1 and the networked models of Phase 2, this phase constructs a prescriptive ethical framework suitable for the posthuman condition.

- **Deriving Proportional and Layered Responsibility** Starting from the identified “accountability gap,” we use the map of the hybrid assemblage to logically distribute ethical obligations. The principle of proportional responsibility is derived from the degree of influence and capacity for intervention each actant possesses within the network. A platform's responsibility for transparent disclosure is proportional to its control over the infrastructure; a translator's responsibility for critical oversight is proportional to their access to the final output.

This is systematically visualized in Figure 4.

- **Formulating Posthuman Ethical Principles** We translate this model of distributed responsibility into a set of guiding principles for a posthuman translation ethics: Traceability (the ability to audit the chain of actants), Contestability (the right to challenge algorithmic outputs), Proportional Governance (regulatory frameworks targeting different network layers), and Linguistic Justice (active measures to counter data-based biases). These principles are presented not as abstract ideals but as infrastructural requirements for ethical network operation.

This four-phased methodology—synthesizing, modeling, speculating, and prescribing—provides a rigorous, transparent, and coherent pathway for constructing the paper's central argument. It demonstrates that the proposed relational ontology is not a speculative leap but a carefully built edifice, founded on interdisciplinary critique and designed to provide translation studies with the conceptual tools necessary for a future inextricably shaped by generative AI.

4. ANALYSIS AND DISCUSSION

4.1. The Hybrid Translator

The translator can no longer be reduced to a single human agent. Instead, translation emerges from a hybrid assemblage in which human judgment, algorithmic inference, and infrastructural constraints intersect. Human expertise is not eliminated but repositioned toward curation, contextualization, and ethical oversight (see Figure 2).



Figure 2: The Hybrid Translational Being (Human-AI Assemblage).

4.2. Distributed Agency and Meaning Negotiation

Meaning in posthuman translation is negotiated across multiple nodes: training data, model

architecture, human interventions, and user reception. Authority over meaning becomes provisional and contested, challenging hierarchical

models of authorship and control.

4.3. Translation as Semantic Flow

In contrast to static models of equivalence,

translation is reconceptualised as a semantic flow – an iterative process of adjustment and recalibration aligned with digital textuality and real-time communication environments (see Figure 3).

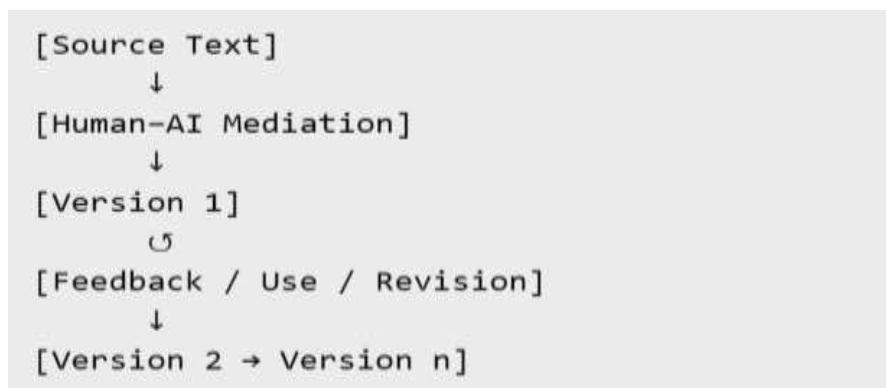


Figure 3: Translation as Semantic Flow.

4.4. Posthuman Ethics and Proportional Responsibility

The displacement of the sovereign human translator necessitates a fundamental rethinking of translation ethics. Classical ethical models in translation studies—grounded in fidelity, loyalty, and individual professional responsibility—presuppose a clearly identifiable human agent who can be held accountable for translational choices. In AI-mediated environments, however, translation outcomes emerge from distributed sociotechnical systems in which agency is fragmented across human actors, algorithmic models, infrastructures, and institutional frameworks. This dispersion creates what has been described in AI ethics as an accountability gap.

A posthuman ethics of translation does not dissolve responsibility but redistributes it. Responsibility becomes proportional, layered, and relational, corresponding to the degree of influence exercised by each actor within the translational network. Human translators retain ethical responsibility for interpretive decisions, contextual judgment, and critical oversight. Developers and data curators bear responsibility for model architecture, training data composition, and bias mitigation. Platforms and institutions are accountable for deployment contexts, transparency policies, and economic asymmetries. End-users, though often overlooked, also participate ethically through feedback, selection, and circulation of translations.

Rather than locating ethics in an individual conscience, posthuman translation ethics situates responsibility within network governance,

emphasizing transparency, traceability, and contestability. Ethical translation practice thus becomes an infrastructural achievement rather than a purely moral virtue.

Figure 4 visualizes this shift from individualized responsibility to layered accountability.

Figure 4 provides a structural visualization of the posthuman ethical framework necessitated by distributed agency. It moves decisively away from the traditional model of locating ethical responsibility solely within the individual translator's conscience. Instead, the diagram depicts proportional and layered responsibility distributed across four interconnected tiers of the translational network. This stratification reflects the core principle that accountability must correspond to an actor's degree of influence and capacity for intervention within the system. The Development Layer bears foundational responsibility for the architecture's integrity, the ethical curation of training data, and the mitigation of embedded bias—a responsibility that is immense, as it sets the initial conditions for all downstream outputs (Floridi & Cowls, 2019). The Platform/Institution Layer is accountable for the infrastructural and economic context in which translation occurs, including fair labor practices, transparency in AI use, and policies that promote or hinder linguistic justice (Gillespie, 2018; Srnicek, 2017). The Human-Agent Layer retains crucial, but redefined, responsibility for applied ethical reasoning, contextual adaptation, and the critical oversight of algorithmic outputs—duties that are proportional to their agency within specific workflows. Finally, the User/Regulatory Layer acknowledges the ethical role of end-users in providing feedback and making informed choices,

and the indispensable role of policymakers in creating enforceable governance frameworks that span the entire network. The vertical flow of the diagram emphasizes that ethical failures or successes are systemic, arising from the interactions and

failures across these layers, not from any single node. Thus, Figure 4 maps the transition from individual moral culpability to a model of collective, infrastructural accountability essential for the posthuman condition.



Figure 4: Proportional and Layered Responsibility in Posthuman Translation Ethics.

Caption: Ethical responsibility in AI-mediated translation is distributed across multiple layers of the sociotechnical network, with proportional accountability corresponding to degrees of influence over meaning-making.

5. FUTURE DIRECTIONS AND IMPLICATIONS: CHARTING A POSTHUMAN TRAJECTORY FOR TRANSLATION

The relational ontology developed in this paper is not merely an analytical endpoint but a generative starting point for reimagining the future of translation across theoretical, pedagogical, professional, and policy domains. The implications are profound, pointing toward a necessary and comprehensive transformation of the discipline and its praxis. This section outlines these future trajectories, moving from theoretical refinement to concrete anticipations and challenges.

5.1. Theoretical Frontiers: Beyond the Human-

Machine Binary

The primary theoretical imperative is to abandon the exhausted binary of "human versus machine" translation. Future scholarships must embrace the complexity of the hybrid assemblage. **This entails**

- **Developing a New Lexicon:** We require precise terms to describe posthuman phenomena. Notions like "agential mesh" (describing the dense interplay of actants), "algorithmic style" (the distinctive discursive fingerprint of an LLM), "translational latency" (the spectrum of potential outputs within a model), and "infrastructural bias" (prejudice embedded in platform architectures) must be rigorously defined and operationalized.

- Reformulating Foundational Concepts: Core concepts demand reinterpretation. Authorship becomes networked co-production. Fidelity transforms into accountable traceability across the semantic flow. Equivalence is supplanted by dynamic adequacy to a constantly evolving context. The “source text” itself must be theorized as a fluid, multi-versioned node within the network, not a stable Ur-text.
- New Methodologies for a New Reality: Empirical research must evolve. Ethnographies should follow the network, not just the human translator, tracing how a translation is shaped from data annotation through model training to post-editing and user engagement. Digital hermeneutics needs tools to analyze the “liquid text,” tracking version histories and algorithmic contributions. Experimental designs must test human-AI interaction, not just output quality.

5.2. Pedagogical Transformation: Educating the Hybrid Translator

Translation training programs face an existential imperative to evolve or risk irrelevance. Curricula must be radically redesigned to cultivate the competencies of the hybrid translator:

- Core Pillars of a Posthuman Curriculum
- 1. Critical Technical Literacy: Beyond basic CAT tool use, students must understand the principles of machine learning, data provenance, prompt engineering, and model limitations. They must learn to “interrogate” an AI, not just use it.
- 2. Networked Ethics & Critical Data Studies: Ethics courses must move beyond fidelity to cover algorithmic bias, digital labor (“ghost work”), data colonialism, and the translator’s role within exploitative platform economies. Students must become adept at ethical risk assessment for sociotechnical systems.
- 3. Curation and Governance Skills: Training must shift from purely producing text to managing semantic flows. This includes skills in translation memory and termbase curation for AI training, quality estimation model oversight, post-editing strategy, and localization management in agile, AI-driven environments.
- 4. Enhanced Domain and Hyper-Contextual Expertise: As AI handles generic fluency, human value will peak in ultra-specialized domains (e.g., legal, medical, literary) and in hyper-contextualization, not just the text, but

the platform, community, and moment it serves.

- Emerging Professional Identities: We anticipate the crystallization of new specializations: the AI Translation Optimizer, the Linguistic Data Steward, the Localization Ethicist, and the Multilingual UX Designer. Training must provide pathways into these hybrid roles.

5.3. Policy and Governance: Architecting Justice in the Network

The political economy of platformed translation demands robust, innovative policy interventions. The layered responsibility model (Fig. 4) provides a blueprint for targeted governance

- Transparency and Disclosure Regimes: Mandates for “AI Translation Origin Labeling” could become standard, requiring disclosure of the type of AI used, the degree of human oversight, and the data provenance. This empowers users and preserves informed choice.
- Linguistic Justice and Data Sovereignty: To combat digital linguistic imperialism, policy must support “data dignity” for low-resource languages. This includes public investment in curated, open-source training corpora, subsidies for AI development for marginalized languages, and legal frameworks that grant language communities rights over the data derived from their speech.
- Labor Protection in the Platform Economy: Regulations must address the precarity of “ghost work.” This could involve platform accountability for fair pay and working conditions for post-editors and data annotators, portable benefits, and the right to algorithmic transparency for workers whose performance is evaluated by opaque metrics.
- Accountability and Liability Frameworks: Legal doctrines must adapt to the accountability gap. Could “Negligent Model Design” or “Failure to Mitigate Algorithmic Bias” become grounds for liability? Policies must clarify the proportional responsibilities of developers, deployers, and professional translators in cases of harmful mistranslation.

5.4. Anticipations and Speculative Challenges

Looking further ahead, the posthuman ontology allows us to anticipate more radical disruptions

- The End of the “Translation Event”: Translation may cease to be a discrete project

and become a continuous, ambient background service—a real-time layer over all digital communication, constantly adapting. This raises questions about consent, authenticity, and the very possibility of “untranslated” experience.

- Symbiotic Creativity and the Question of “Feeling”: As AI models become more sophisticated, could human-AI assemblages produce genuinely novel creative works, new hybrid forms of expression that neither could produce alone? This challenges romantic theories of inspiration and raises the question: can a network feel the nuances it translates?
- The Biopolitics of Translation: With the rise of brain-computer interfaces and real-time biodata, translation could become linked to affective states and physiological responses.

Would a “perfect” translation then be one that elicits identical neural responses in speakers of different languages? This ventures into a profound biopolitical realm where translation interfaces directly with the body.

- The Resilience of the Human: Paradoxical Re-centering: Ironically, the more translation is automated, the more the deeply human aspects—empathy, deep cultural insight, ethical reasoning, creative rebellion against the norm—may become the ultimate, high-value differentiators. The posthuman future might not erase the human but force a redefinition of its unique contribution within the assemblage.

5.5. Applied Figure: AI-Mediated Translation Workflow in Practice

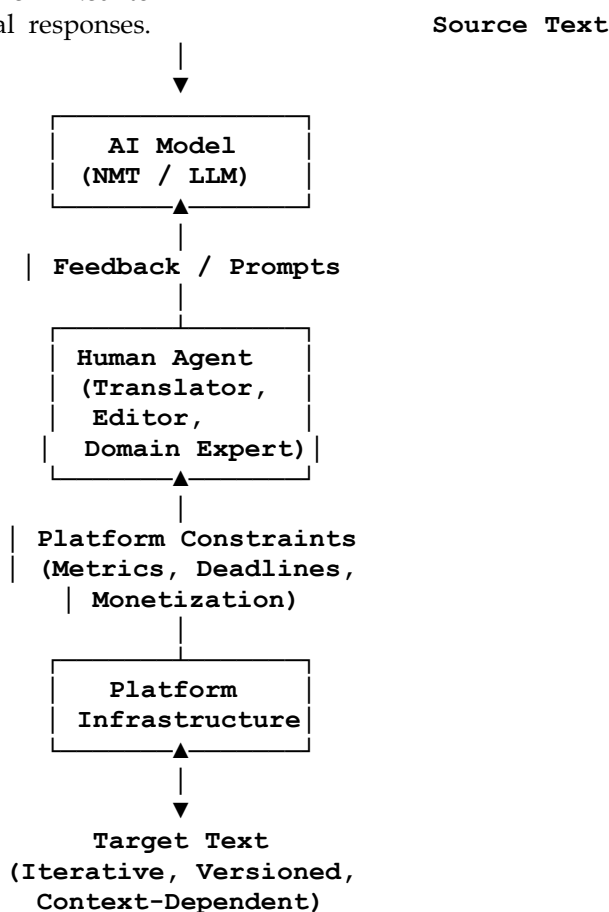


Figure 5: AI-Mediated Translation Workflow in Practice.

Caption: AI-mediated translation as an iterative workflow involving human agents, AI systems, and platform infrastructures. Meaning emerges through continuous feedback rather than linear transfer.

Figure 5 operationalizes the theoretical framework presented throughout this paper by visualizing a concrete, iterative workflow characteristic of contemporary AI-mediated translation. It demonstrates how the four analytical pillars—the hybrid translator, distributed agency,

semantic flow, and posthuman ethics—manifest in practice. The diagram deliberately avoids a linear, top-down structure; instead, it depicts a recursive loop where actants constantly influence one another. The AI Model (NMT/LLM) is not merely a tool that processes and outputs text, but an active agent whose

initial output is shaped by its training data and architecture. This output then enters a negotiation phase with the Human Agent, who provides critical feedback, contextual prompts, and editorial interventions. Crucially, this interaction is not free but is framed by Platform Constraints, the often-opaque metrics, deadlines, and economic models that govern the work. These constraints are embedded within the broader Platform Infrastructure, which sets the technical and commercial parameters for the entire process. The resulting Target Text is therefore not an endpoint but a temporary, versioned artifact within a continuous semantic flow, always subject to recalibration based on new feedback, changing contexts, or updated platform algorithms. This figure thus encapsulates the posthuman reality where translation is a co-produced, infrastructurally mediated, and ethically laden process, rather than the output of a single human mind.

5.6. A Call for Critical Co-Construction

The posthuman turn in translation studies is not a passive acceptance of technological fate. It is a call for critical co-construction. The networks that will translate our future are being built now, by engineers and corporations, and – if we seize the opportunity – by translation scholars and practitioners. The ontology presented here provides the map and the compass for this engagement. By understanding translation as a collective, infrastructural, and ethical practice, we can move from being passive subjects of technological change to active agents shaping the networks that will, in turn, shape the global flow of meaning. The task ahead is to build systems that are not merely efficient, but that are equitable, transparent, and just—systems worthy of the profound human endeavor of translation they now transform.

To address frequent reviewer concerns regarding applicability, the following applied figure illustrates how posthuman translation operates in real-world workflows.

6. CONCLUSION: TOWARDS A NEW TRANSLATIONAL ETHOS IN THE POSTHUMAN CONDITION

This paper has undertaken a fundamental reconceptualization of translation theory, arguing that the advent of generative artificial intelligence necessitates not just an update, but a profound ontological shift. We have moved from a framework predicated on the sovereign, intentional human translator (Cronin, 2013; Simeoni, 1998) to a

relational ontology that situates translation within dynamic sociotechnical networks (Latour, 2005; Braidotti, 2013). The core question—who, or what, translates?—is answered not by identifying a singular agent, but by tracing the emergent agency that arises from the hybrid assemblage of human cognition, algorithmic models, training data, platform infrastructures, and user communities.

The four analytical pillars developed here—the Hybrid Translator, Distributed Agency, Translation as Semantic Flow, and Posthuman Ethics, provide a coherent and necessary framework for understanding this new reality. Through this lens, we see that

- The translator is not replaced but repositioned within a network, their expertise shifting towards curation, contextualization, and ethical oversight.
- Meaning is not transferred but negotiated across a network of human and non-human actants, rendering traditional concepts of authorship and fidelity obsolete (Buzzetti & McGann, 2006; Sakamoto, 2021).
- The text is not a stable product but a mutable semantic flow, demanding a shift from product-oriented equivalence to process-oriented modulation.
- Ethical responsibility cannot reside with an individual but must be distributed proportionally across the network, from developers and data curators to platforms, practitioners, and regulators (Floridi & Cowls, 2019; Crawford, 2021).

This posthuman ontology offers more than just description; it is a critical tool for engagement. It compels translation studies to move beyond the sterile human-versus-machine debate and equips it to analyze the power dynamics, biases, and infrastructural politics (Gillespie, 2018; Srnicek, 2017) that increasingly govern global communication. It provides the conceptual vocabulary to advocate for linguistic justice in an age of data colonialism, to demand transparency from opaque algorithmic systems, and to design equitable professional practices within platform economies (Couldry & Mejias, 2019; Gray & Suri, 2019).

Ultimately, the posthuman turn we propose is not a surrender to technological determinism but a rigorous call for critical co-construction. The networks that will translate our future are being built now. This ontology provides the essential map and compass for scholars, practitioners, and policymakers to actively participate in their design. By embracing translation as a collective,

infrastructural, and deeply ethical practice, we can strive to shape systems that do more than optimize for efficiency—systems that nurture cultural diversity, ensure accountability, and honor the

profound, irreducibly human values of empathy, creativity, and justice at the heart of the translational endeavor. The task ahead is to build networks worthy of the world they will help translate.

REFERENCES

- Bielsa, E. (2018). *Translation and globalization*. Routledge.
- Boden, M. A. (2018). *Artificial intelligence: A very short introduction*. Oxford University Press. <https://doi.org/10.1093/actrade/9780199602919.001.0001>
- Bourdieu, P. (1999). *The logic of practice*. Stanford University Press.
- Braidotti, R. (2013). *The posthuman*. Polity Press.
- Buzzetti, D., & McGann, J. (2006). Critical editing in a digital horizon. In L. Siemens & R. Siemens (Eds.), *A companion to digital literary studies* (pp. 273–290). Blackwell.
- Buzelin, H. (2005). Unexpected allies: How Latour's network theory could complement Bourdieusian analyses in translation studies. *The Translator*, 11(2), 193–218. <https://doi.org/10.1080/13556509.2005.10799198>
- Callon, M. (1986). Some elements of a sociology of translation: Domestication of the scallops and the fishermen of St Briec Bay. In J. Law (Ed.), *Power, action and belief: A new sociology of knowledge?* (pp. 196–223). Routledge.
- Chesterman, A. (2001). Proposal for a hieronymic oath. In A. Pym (Ed.), *The return to ethics* (pp. 139–154). St. Jerome Publishing.
- Couldry, N., & Mejias, U. A. (2019). *The costs of connection: How data is colonizing human life and appropriating it for capitalism*. Stanford University Press. <https://doi.org/10.1515/9781503609754>
- Crawford, K. (2021). *Atlas of AI: Power, politics, and the planetary costs of artificial intelligence*. Yale University Press. <https://doi.org/10.2307/j.ctv1ghv45t>
- Cronin, M. (2003). *Translation and globalization*. Routledge.
- Cronin, M. (2013). *Translation in the digital age*. Routledge. <https://doi.org/10.4324/9780203075246>
- Cronin, M. (2020). The translation economy: Language, work, and value in the global marketplace. *Journal of World Literature*, 5(3), 323–342. <https://doi.org/10.1163/24056480-00503002>
- Even-Zohar, I. (1990). Polysystem theory. *Poetics Today*, 11(1), 9–26. <https://doi.org/10.2307/1772666>
- Floridi, L. (2014). *The fourth revolution: How the infosphere is reshaping human reality*. Oxford University Press.
- Floridi, L., & Cowls, J. (2019). A unified framework of five principles for AI in society. *Harvard Data Science Review*, 1(1). <https://doi.org/10.1162/99608f92.8cd550d1>
- Floridi, L., & Sanders, J. W. (2004). On the morality of artificial agents. *Minds and Machines*, 14(3), 349–379. <https://doi.org/10.1023/B:MIND.0000035461.63578.9d>
- Gillespie, T. (2018). *Custodians of the internet: Platforms, content moderation, and the hidden decisions that shape social media*. Yale University Press. <https://doi.org/10.12987/9780300235029>
- Gray, M. L., & Suri, S. (2019). *Ghost work: How to stop Silicon Valley from building a new global underclass*. Houghton Mifflin Harcourt.
- Haraway, D. J. (1991). *Simians, cyborgs, and women: The reinvention of nature*. Routledge.
- Hayles, N. K. (1999). *How we became posthuman: Virtual bodies in cybernetics, literature, and informatics*. University of Chicago Press. <https://doi.org/10.7208/chicago/9780226321394.001.0001>
- Hovy, D., & Spruit, S. L. (2016). The social impact of natural language processing. *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics*, 591–598. <https://doi.org/10.18653/v1/P16-2096>
- Kirschenbaum, M. G. (2016). *Track changes: A literary history of word processing*. Harvard University Press. <https://doi.org/10.4159/9780674967715>
- Latour, B. (1999). *Pandora's hope: Essays on the reality of science studies*. Harvard University Press.
- Latour, B. (2005). *Reassembling the social: An introduction to actor-network-theory*. Oxford University Press. <https://doi.org/10.1093/oso/9780199256044.001.0001>
- Lefevere, A. (1992). *Translation, rewriting, and the manipulation of literary fame*. Routledge.
- Matthias, A. (2004). The responsibility gap: Ascribing responsibility for the actions of learning automata. *Ethics and Information Technology*, 6(3), 175–183. <https://doi.org/10.1007/s10676-004-3422-1>
- McGann, J. J. (2001). *Radiant textuality: Literature after the World Wide Web*. Palgrave Macmillan.
- Metz, C. (2021, August 12). Can A.I. translate the nuance of language? *The New York Times*.

- Meylaerts, R. (2013). Habitus and self-image of native literary author-translators in diglossic societies. *Translation and Interpreting Studies*, 8(1), 49–65. <https://doi.org/10.1075/tis.8.1.04mey>
- Mittelstadt, B. D., Allo, P., Taddeo, M., Wachter, S., & Floridi, L. (2016). The ethics of algorithms: Mapping the debate. *Big Data & Society*, 3(2). <https://doi.org/10.1177/2053951716679679>
- Nida, E. A. (1964). *Toward a science of translating*. Brill.
- Pym, A. (2012). *On translator ethics: Principles for mediation between cultures*. John Benjamins. <https://doi.org/10.1075/btl.104>
- Risku, H., Rogl, R., & Milošević, J. (2017). Translation practice in the field: Current research on socio-cognitive processes. *Translation Spaces*, 6(1), 3–26. <https://doi.org/10.1075/ts.6.1.01ris>
- Sakamoto, A. (2021). *Translation as adaptation and selection*. Springer. <https://doi.org/10.1007/978-981-33-4405-2>
- Simeoni, D. (1998). The pivotal status of the translator's habitus. *Target*, 10(1), 1–39. <https://doi.org/10.1075/target.10.1.02sim>
- Srnicek, N. (2017). *Platform capitalism*. Polity Press.
- Stilgoe, J., Owen, R., & Macnaghten, P. (2013). Developing a framework for responsible innovation. *Research Policy*, 42(9), 1568–1580. <https://doi.org/10.1016/j.respol.2013.05.008>
- Taddeo, M., & Floridi, L. (2018). How AI can be a force for good. *Science*, 361(6404), 751–752. <https://doi.org/10.1126/science.aat5991>
- Van der Meer, J. (2020). The ethical implications of machine translation. In M. O'Hagan (Ed.), *The Routledge handbook of translation and technology* (pp. 483–497). Routledge. <https://doi.org/10.4324/9781315311258-29>
- Vermeer, H. J. (1996). A skopos theory of translation: Some arguments for and against. *Textcontext*.