

From Text to Context: Cognitive–Metacognitive Engagements in Post-Editing as a Site of Cultural Meaning

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ABSTRACT

This study investigates how cognitive and metacognitive engagements in post-editing serve as a site for cultural meaning-making and social transformation within English–Indonesian translation practices. Using a qualitative design grounded in Think-Aloud Protocols (TAP), an experienced English teacher performed post-editing tasks on Google-translated texts in both language directions. The verbal data were transcribed, coded, and analyzed through Congjun's (2015) taxonomy of cognitive strategies and Wenden's (1991) framework of metacognitive regulation. Findings reveal that post-editing involves more than technical correction; it constitutes a reflective act where translators negotiate linguistic, cultural, and ideological meanings. Cognitive operations such as revising, elaborating, clarifying, and retrieving interact dynamically with metacognitive processes of planning, monitoring, and evaluating to reshape not only textual form but also cross-cultural interpretation. The participant's ability to mediate between linguistic accuracy and cultural appropriateness illustrates translation as a socially situated practice embedded in contextual knowledge and value systems. This research underscores post-editing as a critical locus where cognition, culture, and technology intersect, redefining how translators participate in contemporary meaning-making. Pedagogically, the study advocates for translation education that cultivates cultural reflexivity and metacognitive awareness, empowering translators to act as mindful agents of social and intercultural change.

Keywords: Post-Editing, Cognitive Process, Metacognitive Awareness, Cultural Meaning, Social Change, Translation, Think-Aloud Protocol.

INTRODUCTION

The current practice of translation is experiencing a significant paradigm shift due to the widespread adoption of Machine Translation (MT) systems, which have established post-editing (PE) as an essential and common task (O'Brien, 2012). Traditional definitions view translation as the linguistic and cognitive activity of rendering meaning from one language to another (Pym, 2017). Recent perspectives further extend this understanding by conceptualizing translation as a multidimensional practice that entails not only interlingual transfer but also interpretation, negotiation, and meaning construction within diverse communicative ecologies (Gambier, 2023).

This theoretical progression underscores that translation is simultaneously linguistic, cognitive, and socio-cultural, functioning as a dynamic process of mediation rather than a static act of language replacement. In today's

translation landscape, the translator who now often takes on the role of post-editor does more than simply correct words or grammar. Their main task is to make the text feel alive and meaningful across cultures. They ensure that every sentence sounds natural, fits the social context, and carries the same emotional and cultural weight as the original. In this sense, translation becomes less about replacing words and more about rebuilding meaning so that it speaks clearly and sincerely to readers in both languages. In the era of machine translation, post-editing remains essential not only to correct language errors but also to address deficits in cultural awareness, semantic nuance, and ideological load because state-of-the-art MT systems struggle to grasp deeper contextual and cross-cultural meanings.

As a result, evolves in the era of machine translation, it is no longer perceived as a purely technical correction activity but rather as a cognitively demanding task that requires translators to engage deeply with both the source and target cultures. Studies employing the Think-Aloud Protocol (TAP) method have shown that post-editors constantly monitor, evaluate, and regulate their mental operations during the process (Jakobsen, 2003). This phase involves not only linguistic and technical skills but also higher-order cognitive and metacognitive processes, such as planning, self-reflection, and decision-making, which enable the translator to manage complex cross-cultural meaning construction (Hvelplund, 2019). empowers the post-editor to manage their cognitive processes such as revising and elaborating to reconcile the disparity between the machine's literal output and the socio-cultural demands of the translated text.

Existing research on the translation process has extensively employed Think-Aloud Protocols (TAP) to identify the cognitive strategies utilized in human translation, referencing frameworks such as Congjun's (2015) taxonomy of cognitive strategies and Wenden's ((1991) odel of metacognitive regulation laid the foundation for understanding self-monitoring and control in learning tasks, later models (Schraw & Dennison, 1994) have refined these concepts for translation studies, emphasizing the translator's ability to plan, evaluate, and regulate decision-making during post-editing. These models have clarified the continual cycles of planning, monitoring, and evaluating (metacognition), in conjunction with revision, elaboration, and retrieval (cognition), that translators employ to address linguistic challenges (Pym, 2017). These studies have substantially advanced the understanding of translation as a cognitive process; however, their applicability to the specific context of post-editing remains under research. There is a significant gap in comprehending how the rapid, yet frequently culturally insufficient output of machine translation necessitates the post-editor to engage in heightened metacognitive awareness and a deeper level of cultural reflexivity to ensure that the translated text is not only linguistically accurate but also culturally appropriate and socially pertinent (Indra Syahdewa & Zulhendry, 2024). The challenge presented by MT is not merely linguistic error but the risk of eliminating meaning from its social and cultural context. The challenge presented by MT is not merely linguistic error but the risk of eliminating meaning from its social and cultural context.

This study argues that the metacognitive and cognitive interplay in post editing constitutes a significant arena for cultural meaning-making and social transformation. The fast and de-contextualized nature of MT output necessitates that the post-editor function as a deliberate agent, continuously planning, monitoring, and assessing (Anita L. Wenden, 1991) the alignment of the machine's draft with the norms and expectations of the target culture. This process exceeds mere linguistic fluency; it requires the utilization of contextual, comprehensive, and specialized knowledge to transform the textual form and, more significantly, to affect cross-cultural interpretation. The ongoing generation of inadequate translations, notwithstanding improved linguistic competence (Kroll & Stewart, 1994), highlights the significance of cultural reflexivity.

This study fills this gap by examining the cognitive and metacognitive processes utilized by an experienced English teacher during English-Indonesian post-editing tasks. Thus, this study employs Congjun's (2015) taxonomy of cognitive strategies and Wenden's (1991) framework of metacognitive regulation to investigate the post-editing tasks executed by an experienced English teacher in the context of English and Indonesian. The study aims to elucidate how cognitive and metacognitive engagements facilitate the negotiation of cultural and linguistic differences by focusing on this dynamic translation pair, which involves significant cultural and linguistic differences.

Theretical Framework

The Translation Process as Cross-Cultural Mediation

Recent studies argue that a quality translation must go beyond linguistic accuracy and adopt a culturally sensitive approach that evokes a similar response in the target readership, effectively “mirroring the spirit and manner” of the original in a new context (Almijrab, 2025). Translation is not a single act of replacing words; it unfolds as a gradual process that moves through several intertwined phases understanding meaning, transferring ideas, and expressing them again in a new cultural form. In each phase, translators do more than decode language; they interpret intention, emotion, and context, seeking to make the message feel natural and meaningful to another audience. When this process takes place in post-editing, the task becomes even more demanding. The translator

must engage critically with the machine's output, revisiting the choices made by the algorithm and reshaping them so the final text still carries the author's tone, purpose, and cultural subtlety. Seen this way, translation is not only linguistic work but a form of social and cultural mediation, where every decision carries ethical weight and reflects the translator's accountability to both the message and the readers (Munday, 2016).

The essential act of translation, even in the era of technology, is grounded in the conveyance of meaning across linguistic borders. Nida (as referenced in Hatim & Mason (1990)) posits that an effective translation must not merely "make sense" but also "replicate the same type of reaction" and "reflect the original's essence and style." This requirement elevates translation from mere code-switching to the domain of cultural and emotional equivalence. Tou's proposed process model (TEFLIN, 1989)—comprising meaning analysis, discovery, transfer, and re-expression—implicitly incorporates this cultural necessity. The emergence of Machine Translation (MT) requires a re-evaluation of this process. Post-editing (PE) was first described in early translation research as the final stage in the development of machine translation systems. Over time, however, its scope has expanded far beyond that initial view. Today, post-editing is understood as a multidimensional process that integrates technical accuracy, temporal efficiency, and cognitive effort, positioning the translator as both a linguistic expert and a critical mediator of machine-generated content (Daems & Macken, 2020; Hans P. Krings, 2001; O'Brien, 2012). Rather than being a mechanical correction task, PE has become a reflective and adaptive activity where human editors engage deeply with meaning, style, and cultural context to achieve translation quality that feels both natural and human.

This study primarily examines cognitive effort, which includes the mental processes necessary to alter the machine's output. We contend that this cognitive endeavour is essentially a process of cultural mediation, as the machine's principal deficiency frequently resides not in grammar, but in producing texts that are culturally suitable and contextually nuanced (Mesa-Lao, 2013).

Post-Editing as A Cognitive-Cultural Effort

The post-editing process is distinguished from traditional translation by its particular needs. The post editing was initially conceptualized by Reifler (1952) as the concluding phase of MT development. Subsequently, Hans P. Krings (2001) classified the endeavors associated with PE into three categories: cognitive, temporal, and technical. The cognitive effort, which incorporates the mental processes necessary to convert raw MT output into a publishable text, is the primary focus of this study. In the context of this research, post editing is interpreted as a reflective intervention in which the translator confronts the MT's culturally neutral output and injects the requisite contextual and cultural information. This perspective transcends the conventional definition of Post Editing as a mere technical correction (Mesa-Lao, 2013) to establish it as a critical location for the construction of cross-cultural meaning.

Cognitive Strategy for Cultural Meaning Making

Cognitive strategies are tools that help the post-editor "organize, change, and create information" (McCrindle & Christensen, 1995). We use Congjun's (2015) taxonomy as a way to look at the specific behaviors that provide the MT text cultural meaning. The key categories are outlined below:

Table 1. Cognitive strategy during post-editing tasks

<i>Congjun (2015) Cognitive Task</i>	<i>Description in Translation/PE</i>	<i>Application to Cultural Meaning</i>
<i>Coming up with ideas</i>	Repeating, Inferencing, Lead-in to understand the MT source.	Understanding the implied cultural context that the MT may have missed.
<i>Revising</i>	Making changes in plan and the written text.	The actual implementation of cultural correction and adapting the output to local idioms and sociolinguistic requirements.
<i>Elaborating</i>	Expanding upon and clarifying concepts.	Inserting contextual depth to prevent cultural ambiguity or misinterpretation left by the MT's literalism.
<i>Retrieving</i>	Accessing information from memory, specifically <i>writing or cultural term</i> .	The active search for and insertion of cultural specificities, local knowledge, or politically sensitive terms (the hallmark of human PE).
<i>Rehearsing & Summarizing</i>	Trying out ideas, disposing of confusions, and synthesizing what has been read.	Confirming that the final text is culturally coherent, achieving the natural and easy form of expression required by Nida.

Dáz Rodríguez (2014) and Cook (2008) emphasize that these cognitive and metacognitive processes work in tandem. This dynamic engagement is what turns the post-editor from a basic technician into a skilled cultural

writer (G. Parodi, 2003). It gives them the power to actively negotiate and reinterpret meanings that help bring about social and intercultural transformation.

Metacognitive Regulation as Cultural Reflexivity

Metacognitive processes are mental processes that regulate and direct cognitive activity, establishing an individual's self-awareness and task management (Wiles, 1997; Schmidt, 2001). We employ Wenden's (1991) framework, which defines metacognitive strategies as mental acts that control learning and directly influence project execution. The three major categories—Planning, Monitoring, and Evaluating—are adapted as processes of cultural reflexivity during post editing: **Planning** involves establishing targets and recognizing issues prior to editing. In post editing, this involves pre-screening the MT text for potential cultural problems or socio-pragmatic errors, followed by connecting the output with the intended cultural objective. **Monitoring** includes continuous evaluation and validation of the editing process, including the detection of any issues. This is the continuous evaluation of whether the revised content aligns with the expectations and nuances of the target culture. **Evaluating**: The last phase of revision and editing, based on a comprehensive analysis of the written material, prior objectives, and expected concepts. The post-editor deliberately reevaluates the text to ensure it aligns with social and cultural standards, affirming its suitability as a means of communication and potentially, social transformation (Parodi, 2003).

METHOD

Design

This study adopts a qualitative case study design to explore complex cognitive phenomena in depth within a specific context (Creswell, 2018). Since the aim is to examine and understand the participant's mental processes both cognitive and metacognitive during a detailed task, the case study approach is best suited to this purpose. It emphasizes rich insight and contextual understanding rather than statistical generalization. The core data collection method used is the Think-Aloud Protocol (TAP), which allows the participant to verbalize their thought processes, making their internal cognitive steps visible during the post-editing process.

Participant

Purposive sampling was used in the selection process, with an emphasis on an expert informant to ensure the quality and depth of the data. The single participant, Amelia (Pseudonym), is an English teacher with more than seven years of senior high school teaching experience. The decision to use a single participant is a deliberate methodological choice typical to Think-Aloud Protocol (TAP) investigations, which prioritize capturing the detailed cognitive pathway of a complex instance (Merriam, 2009). Amelia's considerable professional experience as an English instructor equips her with the subject knowledge and linguistic skills required to describe the nuanced cognitive and metacognitive issues experienced during machine translation post-editing.

Instrument

The primary instrument for this study is the Think-Aloud Protocol (TAP), which is carried out through a series of post-editing tasks. The participant was given two separate post-editing tasks using machine-translated texts created by Google Translate: one from English to Indonesian and one from Indonesian to English. The data collection process consisted as follows: Audio-Video Recording: The entire post-editing activity was recorded using a screen-capturing tool (Zoom Conference App), which captured the visual output, cursor movements, and verbalizations of the participants during the TAP activity. Think-Aloud Protocol (TAP): Participant was encouraged to articulate every thought, strategy, choice, and cognitive process that occurred in her minds while doing post-editing activities. This gives direct, immediate knowledge about her cognitive and metacognitive activity Indonesian to English

Data Analysis

The data were analyzed through a structured process that included transcription, coding, and validation, with a focus on understanding the participant's cognitive processes. The audio-visual recordings were first transcribed verbatim to ensure that every detail of the participant's verbal expressions was accurately captured. After transcription, the content was analyzed using a recognized coding framework for identifying cognitive and metacognitive processes in translation and editing studies (as described by Krings, 1986, or similar models). To ensure the reliability and credibility of the analysis, a peer debriefing session was carried out. An independent expert in qualitative coding reviewed both the coded transcripts and the coding framework, checking that the participant's

comments had been accurately interpreted and categorized into the appropriate cognitive and metacognitive codes. This process helped confirm the consistency and trustworthiness of the findings.

FINDING

How cognitive and metacognitive engagements facilitated the negotiation of cultural and linguistic differences in translation tasks

The observed actions demonstrate that post-editing is more than just a technical repair; it is a multifaceted process of cultural mediation and reflective involvement. The table outlined below shows the post-editor actively using cognitive processes to convert the machine's literal, often culturally neutral, output into a culturally acceptable and contextually nuanced text.

Table 1. Cognitive Strategies A Translator Utilized

STRATEGY (CONJUN, 2015)	E-I TASK	I-E TASK	ANALYSIS & CULTURAL NEGOTIATION
GENERATING IDEAS	Searching for nuanced meaning: "...memandang e...dunia, memandang dunia"	Restructuring the idea for clarity: "Kalau kata aku sih begini... Another...ee... central issue from constructivism is identity an interest.. gitu"	Cultural Implication: This is the initial effort to uncover the implied cultural context missed by the MT, moving beyond literal translation to conceptual framing.
REVISING	Replacing a poor equivalent: "eh jangan mengacu deh biar bagus, kalimatnya aku ganti jadi mengarah aja"	Correcting grammatical errors that could distort meaning: "jadi For constructivist researchers are important for identify eeh salah to identify, yang bener.."	Linguistic & Socio-Linguistic Implementation: Represents the actual implementation of cultural and linguistic correction (e.g., choosing a sociolinguistically suitable Indonesian term like <i>mengarah</i> instead of <i>mengacu</i>).
ELABORATING	Inserting contextual depth (parenthetical explanation): "struktur material dalam kurung...(struktur ideasional)...Penting untuk...e..."	Inserting necessary context to connect actions with identity: "terus It needs to be noted that the actions,, of suatu negara a state harus..must be in harmony with its identity.. gitu deh kayaknya jadi lebih Panjang kalimatnya"	Contextual Depth: This is crucial for preventing cultural ambiguity or misinterpretation by adding context to the machine's literal output, a key element of cultural mediation.
RETRIEVAL	Searching memory for the right meaning/collocation: "aku Taunya view itu pandangan tapi mana, tau ada arti yang lain ya enengok, menggambarkan mm"	Using specific terminology (<i>small country</i> instead of generic <i>state</i>): "terus.. oh bisa juga ini small country, kan negara ya berarti boleh pakai"	Cultural Specificity: Involves the active search for and insertion of cultural specificities and contextually appropriate terms [cite: 60]. The I-E example shows an immediate awareness of the

	<i>apa ya .. ee.. yaudah pandangan aja deh ""</i>	<i>country jadi kesininya This small country is arguably more focused on its survival.""</i>	political nuance between "state" and "country."
CLARIFICATION	Defining a concept to check its linguistic representation: <i>"tapi kalau konstruksi harus ada bentuknya gitu ya susunan , berarti ini susunan sosial ""</i>	Choosing a pragmatically appropriate verb: <i>"udah invite aja ya .. masa memancing ?? udh invite aja deh .. jadi invite questions regarding the validity of,identity""</i>	Conceptual & Pragmatic Alignment: A process of testing the alignment between the underlying concept (<i>susunan sosial</i>) and its linguistic form, which is essential for ensuring the text is culturally and socially relevant.

The results of this study show that, during post-editing between English and Indonesian, the participant applied a wide range of cognitive strategies, including generating ideas, revising, elaborating, clarifying, drawing on prior knowledge, rehearsing, and summarizing. These mental efforts were supported by strong metacognitive skills, as the participant routinely engaged in planning, monitoring, and evaluating while translating. Notably, the participant demonstrated flexibility, adapting strategies based on each task's complexity. For more difficult aspects, she engaged in extra clarification and reflection, while familiar or less challenging sections were handled with established patterns or routines. Throughout, both the coding and peer validation processes matched well with cognitive strategy taxonomy Congjun's (2015) and Wenden's (1991) framework for metacognitive regulation, helping ensure the reliability of the findings. It was also clear that the participant's professional judgement played a key role, particularly when interpreting nuanced cultural or contextual elements that standard digital resources or dictionaries might overlook.

The participant's approach to translation was marked by a conscious effort to create cultural meaning, following Congjun's (2015) framework for cognitive strategies. The process often begins with *Generating Ideas*, immediately seeking the implied cultural context that the MT missed. For the E-I task, the PE moves past the literal rendering of "view" to find a more nuanced Indonesian conceptualization: *"kalau menurut aku disini jadinya , me..me... memandang e...dunia, memandang dunia ""*. Similarly, in the I-E task, the PE uses *Generating Ideas* to frame the core conceptual issue clearly: *"kalau kata aku sih begini... Another...ee... central issue from constructivism is identity an interest.. gitu"* This is supported by *Retrieval*, the active search for cultural specificities, local knowledge, or politically sensitive terms—a hallmark of human post-editing. The PE demonstrates awareness of political and contextual nuance when distinguishing between generic "state" and the more specific "small country". This ensures the output is culturally and contextually suitable. Once the idea is generated, the PE engages in *Revising* and *Clarification* to refine the meaning for the target culture. Revision represents the *actual implementation of cultural correction* and adapting the output to local idioms and sociolinguistic requirements. For the E-I task, the PE rejected a grammatically correct but poor choice (*mengacu*) in favor of a more natural one (*mengarah*), prioritizing fluency and tone: *"eh jangan mengacu deh biar bagus, kalimatnya aku ganti jadi mengarah aja"*. The strategy of *Clarification* involves the PE establishing the underlying concept before finalizing the linguistic form. For instance, determining that "konstruksi" must refer to a physical arrangement ("*susunan sosial*") to maintain conceptual fidelity. This continuous self-checking ensures the translation not only "makes sense" but also "mirrors the original's spirit and manner. The next pastter is *elaborating*. It is the cognitive strategy most directly responsible for overcoming the MT. By expanding upon and clarifying concepts, the PE inserts contextual depth to prevent cultural ambiguity or misinterpretation. In the E-I task, the PE manually added an explanation in parentheses, transforming a phrase into a clearer concept: *"struktur material dalam kurung...(struktur ideasional)..."*. Similarly, in the I-E task, elaboration was used to explain the *relationship* between a state's identity and its actions, creating a longer, more coherent, and contextually complete sentence. These ongoing cycles of thought and adjustment helped transform the output from machine translation into text that truly bridges cultural and linguistic boundaries.

Table 2. Metacognitive Regulation to ensure cultural reflexivity

STRATEGY (WENDEN, 1991)	E-I TASK (SOURCE: 3)	I-E TASK (SOURCE: 5, 6)	ANALYSIS NEGOTIATION & DIFFERENCES OF
PLANNING	Setting the immediate translation path: <i>"Pertama aku coba yang menterjemahkan, ee.... from English to Indonesia dulu ya.."</i>	Preparing for the task: <i>"oke..let me try, nomor satu"</i>	Pre-Screening for Cultural Risk: In post-editing, planning involves pre-screening the MT output for potential cultural problems or socio-pragmatic errors before the deep cognitive work begins.
MONITORING	Checking for immediate errors or gaps: <i>"aku baca ulang dulu ya.. takut ada yang salah"</i>	Expressing the difficulty of the task while reviewing: <i>"oke mba ini udah.. tapi dari indo ke inggris agak susah y amba.. tapi aku coba review dulu ya baca ulang lagi dari, atas"</i>	Continuous Cultural Evaluation: This is the continuous assessment of whether the revised content aligns with the expectations and nuances of the target culture . The post-editor is aware of the <i>difficulty</i> (and thus the risk of cultural error) in the I-E task.
EVALUATING	Final check of quality and authority: <i>"oleh author.. berarti pelaku gitu? hmm.... yaudah pelaku aja deh"; "ini sudah selesai aku review..."</i>	Expressing dissatisfaction and making a final change based on fluency/impact: <i>"itu yang kalimat pertama aku ubah deh mba, kurang srek dibacanya jadi is another central, issue"; "yang statenya aku ganti, country aja deh behehe oke mba, din ini"</i>	Affirming Social/Cultural Standards: This final phase ensures the text aligns with social and cultural standards . The use of <i>"kurang srek dibacanya"</i> (it doesn't feel right when read) is a metacognitive judgement rooted in the target culture's natural expression (achieving Nida's required "same kind of reaction")

The cognitive efforts outlined above are not random; they are guided by the PE's metacognitive processes the "cognition about cognition" that enable the PE to reconcile the machine's literal output with socio-cultural expectations. Prior to editing, *planning* involves establishing basic goals and identifying problems. "Pertama aku coba yang menterjemahkan, ee.... from English to Indonesia dulu ya.." is how the PE explicitly defines the work parameters. This is an important phase in the MT post-editing process: identifying the order of intervention and pre-screening the MT text for possible cultural issues or socio-pragmatic mistakes. While, at the *monitoring* stage, this aspect refers to continuous cultural alignment. The PE frequently emphasizes the necessity to re-read and review the draft: *"aku baca ulang dulu ya.. takut ada yang salah"*. The PE displays metacognitive awareness of the intrinsic difficulty of the I-E task ("agak susah y amba"). This exhibits cultural reflexivity—the constant review of whether the changed content matches the expectations and nuances of the target culture. Meantime, at the level of *evaluating*, The PE becomes a a conscious re-evaluator of the text to verify that it is consistent with social and cultural standards. The excerpts show the PE making judgments based on target-text appropriateness and cultural acceptability. This evaluation, towards the text being done, is used to *affirm social and cultural standards*, as evidenced by the aforementioned evaluation cases of a semantic check: *"oleh author.. berarti pelaku gitu? hmm.... yaudah pelaku aja deh"* and a final, subjective judgment based on feeling: *"itu yang kalimat pertama aku ubah deh mba, kurang srek dibacanya jadi is another central, issue"*

DISCUSSION

This study presents a comprehensive and careful analysis of the impact of cognitive and metacognitive strategies on the post-editing process within the framework of English-Indonesian translation, particularly in light of the problems presented by machine translation. Utilizing prior frameworks, including Congjun's taxonomy for cognitive strategies and Wenden's model of metacognitive regulation, the analysis underscores the post-editor's active function as a cultural mediator rather than merely a linguistic technician. This is in line with what Hatim and Munday (2004) and Bell (2001) assert about translation being a complicated process that not only changes the structure of the language but also gets intimately involved with cultural meaning and context. This research

supports previous studies indicating that translators engage in continuous cycles of planning, monitoring, revising, and elaborating, so enhancing both the correctness and cultural accuracy of the final text.

This study explores deeper into the rapid and frequently de-contextualized output of machine translation, highlighting the increased necessity for cultural reflexivity, an aspect that earlier research, primarily centered on human translation or fundamental linguistic mistakes, has not sufficiently addressed. This study's uniqueness is its direct examination of post-editing with machine-generated drafts, showing that cognitive strategies like generating nuanced ideas, adding contextual depth, and seeking culturally specific terminology are vital for dealing with the challenges of automated translation. The metacognitive processes of planning, monitoring, and assessing are adaptive actions designed to protect social and cultural norms, rather than just procedural activities.

Previous studies by Mesa-Lao (2013), and Parodi (2003) focused on translation and social context; however, this study uniquely investigates the intensified interaction between cognition and metacognition required for effective post-editing in the age of machine translation. It shows that good post-editing is in fact a kind of cultural mediation which requires more cultural and contextual knowledge than just fixing grammar mistakes. This research simultaneously expands and contests prior ideas, demonstrating that real-world post-editing is not merely a technical fix, but a cognitively intensive and culturally intricate process vital for producing translations that genuinely resonate across both languages and cultures.

CONCLUSION

In conclusion, the research we conducted illustrates that the post-editing process for English Indonesian translation, particularly in the era of machine translation, goes beyond mere technical or language tasks; it is fundamentally a cognitive and metacognitive undertaking profoundly influenced by cultural mediation. The results show that post-editors actively come up with ideas, revise them, add to them, and make them clearer to fill in the cultural and contextual gaps that automated systems leave behind. The participant does this by using a complex mix of cognitive and metacognitive strategies, as described by Congjun (2015) and Wenden (1991). These cycles of intentional decision-making and contemplation help guarantee that translations are not only precise but also culturally significant and socially pertinent.

This study emphasizes the significance of cultural reflexivity in translation and post-editing, contrasting with previous research that focused mainly on linguistic accuracy. It demonstrates that the most impactful translation results arise from a translator's capacity to navigate cultural divides and reinterpret meaning in socially relevant contexts. Future study should examine the dynamics of cognitive and metacognitive processes across various post-editing contexts, considering different language pairs and levels of translation ability. It is essential to provide educational frameworks and professional training modules that promote the development of cultural sensitivity and metacognitive regulation among students, particularly those who take English and translation studies, equipping them for the growing complexities of machine-assisted translation. Ultimately, by recognizing and encouraging such abilities, the field may better help translators be creative and culturally representatives. This will make sure that technology helps, not hinders, good cross-cultural communication.

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