

Rethinking Sustainability Research in Translation and Interpreting Studies in the Roaring 2020s

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Abstract: This article examines sustainability in the language industry, particularly in the light of recent advancements in generative AI. It critically analyses how the rise of generative AI has exacerbated existing challenges across three key dimensions (economic, psychological and ecological). The analysis shows that there is a relatively narrow focus on unsustainable practices within current discourse. Instead of providing professionals with the tools to navigate change, much of the debate is characterised by either narratives of decline or uncritical optimism, both of which contribute to the disempowerment of language professionals. The article concludes by advocating for a re-evaluation of professional values and calling on researchers and practitioners to pursue a more engaged, activist-oriented approach to building practices that prioritise sustainability. It points out that sustainability is not merely an engaging research theme or a sectoral trend. It is, or ought to be, a strategic imperative in academic discourse.

Keywords: ecological sustainability, psychological sustainability, environmental sustainability, ergonomics

1. Introduction

In recent years, conversations about sustainability have moved far beyond their traditional focus on the environment and corporate responsibility (see Panigrahi et al. 2019; Upadhyay et al. 2021; Tang et al. 2022). Today, sustainability is high on the agenda across a wide range of professions. The ushering in of computerisation and automation, including the recent surge in generative artificial intelligence (GenAI), has played a central role in the sudden popularity of the term across domains.

Within the language industry itself, the sector's susceptibility to technological change has long been noted in practice as well as in research. Perhaps it can even be assumed that the effects of computerisation in the language industry foreshadow developments on the labour market in general. Past discussions in the industry often revolved around adaptability, efficiency and the evolving nature of language ser-

vices (Olohan 2011; Risku, 2014; Massey et al. 2023a; parallel discussions are now unfolding in a broader context: Ridsdale et al. 2015; Long and Magerko 2020; Ng et al. 2021). Currently, however, language professionals are finding themselves in the midst of an unprecedented shift, raising questions about the remaining “added” value of human expertise (Massey and Ehrensberger-Dow 2017; Massey et al. 2023b; Penet 2024). Lately, there has been an increasing number of discussions, reports and conference panels exploring all things “sustainable”, with two well-attended panels and a round-table discussion at the EST Conference and the 8th IATIS Conference on sustainable translation in the age of knowledge extraction, generation and recreation as illustrative examples.

But even though sustainability feels like a new buzzword, it is something many scholars in Translation and Interpreting Studies (TIS) and practitioners in the language industry have been thinking about for quite a while, without making use of the term itself. Issues like fair pay (Baumgarten and Cornella-Detrell 2017; Olohan 2017; Sadek 2018; Courtney and Phelan 2019; Moorkens 2020), mental health (Ehrensberger-Dow et al. 2016; Peñalver and Santamaria-Urbieta 2020; Hubscher-Davidson 2022) and adapting to new tech (Angelone et al. 2019; Massey et al. 2023b) have long been on the radar.

What has actually changed is that GenAI has made language professionals and scholars more acutely aware of the dangers of unsustainable practices. This paper takes a closer look at what sustainability means today for the language profession, taking stock of a number of central concepts in sustainability research, and inviting scholars, especially those with a more activist orientation, to move beyond armchair philosophy or detached empirical analysis.

2. Spearheading sustainability research

As noted, long before sustainability became a ubiquitous concept, many scholars in TIS were already thinking seriously about what it means to build a profession that is attuned to present needs, without compromising those of our future selves and future generations of language professionals (WCED 1987; Gursoy and Cai 2024). Early conversations may not have used the term “sustainability”, but they certainly dealt with its core questions: how can translators and interpreters work well, stay well and keep doing what they do in the long run?

One of the earliest and most consistent areas of attention was ergonomics (see Ehrensberger-Dow 2017, 2020; Ehrensberger-Dow and Hunziker Heeb 2025). Research in this domain was spearheaded by Elisabeth Lavault-Olléon (2011; 2016), who rolled out the first initiatives to conduct research on ergonomics at the University of Grenoble; Sharon O’Brien (2012; Moorkens and O’Brien 2013), who, with her colleagues at Dublin City University, was the first to tap into translation as a form of

human-computer interaction (HCI); and Maureen Ehrensberger-Dow (Ehrensberger-Dow et al. 2016), who, with her team at Zurich University of Applied Sciences (ZHAW), took on the challenge of understanding the everyday realities of freelance and LSP translation: they covered everything from mental fatigue to screen layout to the invisible toll of multitasking.

Awareness of the susceptibility of translation to automation trickled down to ergonomic research with the rise of machine translation post-editing (MTPE) (see Olohan 2011). Ever since the launch of Google's statistical machine translation (SMT) model, the translation industry has seen a steady uptake in MTPE workflows. Early studies of MTPE tasks revealed that translators often found the activity tedious, describing the experience as one of constantly correcting "stupid" errors, errors that humans simply did not make (spelling errors, awkward grammar) and that required repetitive, mechanical fixes (O'Brien 2012; Cadwell et al. 2016). With the arrival of neural machine translation (NMT), some of these issues changed, but new ones emerged. While the quality of output had improved and surface-level fluency increased significantly, research found that post-editing NMT output was more cognitively demanding (see Nitzke and Hansen-Schirra 2021). The fluency of NMT often lulled translators into a false sense of correctness, making it harder to detect subtle yet serious errors. Paradoxically, translators had to correct fewer surface mistakes, but they were required to pay closer attention to catch more insidious problems, thus increasing MTPE effort rather than decreasing it (Terribile 2024). These insights underscore one key point: progress in language technology does not automatically go hand in hand with progress in working conditions.

Among the wealth of research conducted in the domain of ergonomics, the ErgoTrans Project (2013–2015), led by the ZHAW team, stands out as a real benchmark, offering one of the most comprehensive approaches to understanding language professionals' well-being (Ehrensberger-Dow and Massey 2014; Ehrensberger-Dow 2015). These efforts went beyond surface-level concerns to address the full range of physical, cognitive and environmental demands placed on language professionals, while also considering how digital tools and workplace design could be harnessed to create more supportive, sustainable working conditions. While not explicitly framed in terms of "sustainability", these studies clearly laid an essential foundation for today's broader conversations.

Around the same time ergonomic research was gaining traction in TIS, others outside of academia were already thinking even more pragmatically and holistically. One particularly forward-looking initiative emerged from within the language industry itself. In 2013, the Hungarian Translation Industry Cooperation Agreement (*Fordítóipari együttműködési megállapodás*, see MFTE et al. 2023¹) was launched on the back of a long and fruitful collaboration among a broad coalition of stakehold-

¹ The updated version can be found on the Proford website (in English): https://proford.hu/wp-content/uploads/2025/06/Translation_alairt.pdf

ers from the industry. The memorandum was not a narrow response to new tools or the physical and cognitive strain put on language service providers, but formulated as a call for fair and durable conditions for translators, interpreters and LSPs alike. Long before “sustainability” was on everyone’s lips, this initiative made the case for economic stability, ethical use of data and technology, and long-term viability of the profession through shared beliefs and goals.

The Hungarian memorandum had ripple effects throughout the European continent. In 2018, while serving on the board of the Dutch *Tolk- en Vertaalcongres* (Translation and Interpreting Congress), the author had the pleasure of welcoming Miklós Bán, one of the driving forces behind the Hungarian initiative. His presence sparked meaningful conversations that would eventually lead to a Dutch covenant on sustainability in translation. That covenant was signed at the following *Tolk- en Vertaalcongres*, a few years later (VVIN et al. 2022).²

These early efforts—from ergonomic research projects to policy meetings and roundtables in the industry—should be considered more than historical footnotes. They are part of the profession’s living memory: they shape how we think about the future of the profession, reminding us that if we aim to build sustainable practices for language professionals today, we are doing so on foundations laid by those who had recognised the need long before it became widely acknowledged.

3. Enter GenAI

As we move further into the “roaring” 2020s, the language industry is undergoing significant transformation. The rapid spread and wide availability of tools based on large language models (LLMs) has pushed the topic of sustainability to the forefront. What used to be a peripheral concern has now become a central topic in conversations about the future of the language profession.

When casting a quick look at what has already been published on the topic, a striking pattern becomes apparent: the discourse around GenAI and sustainability is sharply divided. On the one hand, industry analysts seem to speak in optimistic terms, predicting steady growth, improved efficiency and rising demand for language services (Nimdzi 2024; CSA 2024; Steurs 2024). According to this upbeat view, the industry is seen by some as entering a new phase of opportunity and expansion. This outlook aligns with the long-standing belief that the industry will continue to adapt to changing technological landscapes.

² Mainstreaming sustainability proved far from straightforward: ahead of the 2021 conference, proposals to centre it were met with hesitation. Ultimately, the conference adopted the theme “Fair Play,” a safer and more familiar framing. Nonetheless, the momentum towards deeper engagement with sustainability was unmistakable.

On the other hand, there is evidence of growing concern about what the so-called AI revolution means for human translators and interpreters: job losses, shifting roles and growing precarity (e.g. Olohan 2017; Moorkens 2017, 2022; Ruokonen and Mäkisalo 2018; Kenny et al. 2020; Firat 2021; Moorkens and Rocchi 2021; Ruokonen and Svahn 2022; Carreira 2023; Firat et al. 2024; Van Egdom 2024). The concern is not merely that these tools will change how translators work (as technology has done in the past), but that LLMs may eventually displace significant parts of the profession altogether.

There is, of course, some validity to both perspectives, yet neither fully capture the complexities involved. The arrival of GenAI has certainly intensified the sustainability debate, but it has also narrowed its scope. What we are witnessing is not simply a clash of predictions, but, in some respects, a simple divergence in values. The current discussion tends to pit optimism against alarmism, sidelining the more textured accounts that could help us come to terms with the true stakes. The absence of solid evidence-based reflection is perhaps to be expected: scholarly research often lags behind technological innovation and it requires time and effort to gather and analyse the data needed to assess the true capacity of GenAI. In the meantime, public and even academic discourse is largely driven by anecdotal or short-term findings, offering little methodological rigour and contributing further to the polarisation.

What remains insufficiently explored are the many nuances situated between these polarised perspectives. Many of the earlier contributions in the field are limited in scope and often fail to fully delineate the interrelated economic, psychological and ecological dimensions at stake. This contribution takes a step back to critically engage with these dimensions. To help structure this broader reflection, we briefly return to the Brundtland Report's foundational definition of sustainable development: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (WCED 1987: 43) This widely cited definition laid the groundwork for what would later be conceptualised through the interlocking concerns of environmental, social and economic viability. A practice is considered sustainable when it is not only viable (economic + environmental), but also equitable (social + economic) and bearable (social + environmental) (ibid.). This tripartite lens helps us to understand sustainability as a balancing act, one that must encompass material conditions, human well-being and ecological limits. Rather than proposing ready-made solutions, the aim here is to open up new avenues for reflection, grounded in methodologically sound inquiry and oriented towards the future of the field.

4. Economic sustainability

The arrival of GenAI in the translation and interpreting professions has ushered in not only new tools, but also profound changes in how economic value is distributed and

perceived, both within and outside the industry. While claims of increased productivity and reduced turnaround times continue to dominate industry discourse, these are often framed within familiar tech rhetorics that present language technology as a means of removing the drudgery of routine tasks (see Van Egdom et al. 2020; Massey et al. 2023a). The promise is one of streamlined workflows and increased output, with expectations of either stabilisation in the economic value of translation or a modest decline offset by productivity gains (Moorkens 2017, 2020). Despite this optimistic framing, concern has been mounting about the long-term implications for translators' livelihoods.

Several recurring challenges have emerged regarding the economic value of translation. Chief among them are wage stagnation, gradually intensifying pricing pressures—especially for freelancers—and the incremental but persistent shift towards efficiency-driven metrics that prioritise speed over quality (Kenny et al. 2020; Moorkens 2022; Lambert and Walker 2022; Hanson et al. 2025; Firat and Şahin 2025). What much of the language technology discourse has failed to acknowledge is the complex issue of commodification (Petrovic 2019; Petrovic and Yazan 2021): while automation may indeed enhance productivity in certain contexts, it also tends to reinforce the perception that translation can be partly automated, thereby dampening its perceived value. These trends have, over time, deepened the divide between well-compensated, high-end human translation and low-paid MTPE (or “bulk” translation work) (Van Egdom 2025). This reflects a shift towards disinvestment in human translation, a systemic development in which translation is increasingly viewed as a cost to be minimised rather than a form of specialised expertise. AI seems to have accelerated this process of economic devaluation, intensifying already existing pressures and further eroding the perceived worth of human linguistic labour (see ELIS 2025; Sakamoto et al. 2024, 2025). The economic consequences are not incidental; they are indicative of a larger shift in how linguistic labour is commodified and evaluated (“everyone/anything can *do* language”).

Although there is now a growing body of research documenting these developments, much of the discussion remains confined to quantifiable effects—income trends, job-loss projections and automation rates. Translators are increasingly caught in what can be described as a structural double bind: they are expected to uphold high standards of quality, even as they are required to work under conditions of reduced rates and compressed deadlines. This tension is further exacerbated by the way translation work is increasingly embedded in “expert-in-the-loop” or “human-in-the-loop” systems, where the translator's contribution often becomes obfuscated, their efforts hidden from view. These frameworks tend to present human intervention as auxiliary, thus making the translator's labour less visible and, by extension, less valued. This shift invites a broader reflection on what counts as value in translation today, and how such value is recognised—or overlooked—in an increasingly automated environment. While current studies offer invaluable descriptions of how the professional field is evolving, they also run the risk of reinforcing certain dominant value frame-

works. By predominantly tracing and measuring shifts, research may inadvertently solidify prevailing assumptions of value rather than critically examining or challenging them. What seems to fall by the wayside in inquiries into the economic sustainability of language services are thus deeper explorations of concrete mechanisms of rate negotiation, the perception and reality of power dynamics between clients and language professionals—be they freelance translators/interpreters or LSPs—and the strategies available to language professionals to assert their true value. This also means that sustainability research should perhaps step up its efforts to “deconstruct” the human-in-the-loop rhetorics and propose effective strategies that will help language professionals take control.

In other words, to counter the prevailing “race-to-the-bottom” narrative, there is a need not just to highlight the issue itself, but also to foreground those professional practices that resist commodification. This includes emphasising translators' roles as skilled experts rather than interchangeable service providers, and creating and upholding working conditions that reflect this status. This shift in attention may require a redefinition of sustainability itself in terms of agency, authorship and autonomy. Economic sustainability, in this sense, is not merely a matter of surviving technological disruption (as seems to be the case now); it is about ensuring that language professionals retain the ability to shape their roles and set the terms of the work they take pride in. Such an approach demands a fundamental revaluation of what constitutes expertise and value in this day and age (see also Petrovic 2019).

5. Psychological sustainability

Language professions are undergoing not only structural and economic change, but also a shift in how translators relate to their work and to their professional (and even personal) identity. While the economic challenges facing the translation and interpreting professions are increasingly well documented, the psychological implications must be considered as closely intertwined, rather than as a separate domain (Moorkens 2020; Lambert and Walker 2024). Financial insecurity, devaluation of labour and shifting professional identities are not only economic in nature, but they also have profound emotional and cognitive consequences (see also Van Egdom 2024; Sakamoto et al. 2024, 2025). While often sidelined in discussions focused on productivity and efficiency, the human cost—manifesting in stress, loss of purpose and emotional exhaustion—cannot be ignored (see Hubscher-Davidson 2020; Hubscher-Davidson and Lehr 2021; Hubscher-Davidson and Panichelli-Batalla 2025).

Concerns about the mental and cognitive aspects of translation and interpreting are not entirely new. They have been part of ergonomic research for some time, especially in studies focusing on cognitive load, attention and work pace (Ehrensberger-Dow et al. 2016; Ehrensberger-Dow and Hunziker-Heeb 2025). However,

with the increased integration of GenAI into translation workflows, these concerns have become significantly more pronounced, shifting from a primary focus on optimising workflows towards broader questions of professional well-being, including emotional engagement, a sense of purpose and fulfilment (Bednárová-Gibová and Madoš 2019; Bednárová-Gibová 2020).

Both cognitive and emotional strain is increasingly reported across the sector, particularly among those working in high-tech environments. Over time, this strain often manifests as mental fatigue, as the cumulative pressures of digital workflows and the constant emphasis on productivity take their toll (see Bednárová-Gibová and Madoš 2019; Moorkens 2020; Hubscher-Davidson and Lehr 2021; Lambert and Walker 2024):

- repetitive correction tasks (post-editing and other forms of synthetic text editing);
- compressed deadlines;
- constant turnaround from one project to the next;
- limited room for personal engagement with the text or topic;
- ever-present demands for efficiency

Together, these conditions contribute to cognitive strain and emotional wear. As a result, many professionals describe a diminished sense of creative ownership, as their work increasingly centres on supervising and amending machine-generated output (see also O'Brien 2012). This shift in task profile does not only erode job satisfaction, it also touches the core of the professional identity of translators and their ilk. When expertise is undervalued and translators feel more like “fixer-uppers” than authors, the psychological sustainability of the language professional begins to falter (Van Egdom 2024).

At the same time, a more diffuse form of professional disenchantment is emerging, a form closely tied to the economic devaluation discussed earlier. In speed-oriented workflows, human insight is routinely sidelined in favour of models built around availability, cost-efficiency and fit-for-purpose logics (Firat and Şahin 2025). As a result, the translator's work becomes not only commodified, but also harder to see, easier to dismiss and increasingly conflated with cheap machine labour. This contributes to a form of emotional undervaluation, in which language professionals sense a growing disconnect between the expertise they bring to the table and the symbolic and material recognition they receive in return. Whereas in the past, linguistic expertise was relatively high in demand and rewarded accordingly, the current trend sees translation work increasingly outsourced to those who are simply willing to do the job (or “the dirty work”, see Van Egdom 2024; Sakamoto et al. 2025).

To date, much of the research on psychological sustainability has focused on immediate stressors, and the type of work in relation to job fulfilment. Still, longitudinal and fine-grained analyses remain limited. We still know too little about

how these pressures accumulate over time or how they affect career longevity and well-being (Lambert and Walker 2024; Sakamoto et al. 2025). Moreover, demographic and professional differences play a crucial role. Evidence from other fields points towards an uneven distribution of adaptability across demographic groups. Younger professionals are likely to adapt more easily to new tools and workflows. At the same time, highly specialised translators have also been reported to feel less replaceable. These patterns suggest that psychological sustainability is not evenly distributed but is shaped by factors such as age, expertise, language pair and personality type (Van Egdom 2025).

Another underexplored area is the role of professional communities in mitigating psychological strain. Psychological sustainability is often framed as an individual concern (coping mechanisms, resilience and adaptability, see Hubscher-Davidson 2020), but as language professionals find themselves caught in the wayward play of technological change, a sense of isolation and detachment is also looming large. This isolation can feed into feelings of professional inferiority and diminished fulfilment. Professional communities, both formal and informal, can serve as a counterbalance. Networks of colleagues offer more than just camaraderie: they enable the exchange of coping strategies, peer learning and collective reassurance. Importantly, such communities help professionals reframe their work in terms of shared expertise and mutual recognition. By creating a sense of belonging and reasserting the value of their contributions, these networks (ideally) play a critical role in helping language professionals overcome challenges of technological change with more confidence and less emotional toll.

Future research might ask: what psychological and professional profiles seem to be most resilient in this context? What strategies do language professionals who report fewer concerns adopt in their daily practice? And how can professional communities be leveraged more systematically to support not just well-being, but also agency and self-worth without undermining the competition element?

Finally, the conversation on psychological sustainability must take a critical look at human–computer interaction. While most research has focused on optimising interfaces for efficiency, less attention has been paid to how these tools might actually support translator well-being. Perhaps it is time to ask: what would “humane” language technology look like in this context? What forms of GenAI integration would not only make workflows faster but also bring a smile to translators' faces? Research in HCI has suggested that digital tools hold enormous potential to support user satisfaction, creativity and even well-being (Van Egdom 2022). Sadly, current language technologies often appear to function more as a restrictive straitjacket, limiting rather than enhancing or augmenting the translator's experience.

Addressing these questions requires rethinking the conditions under which people can thrive in their work, not just endure it. Psychological sustainability should thus be a central criterion in shaping the future of the profession.

6. Ecological sustainability

Whereas the former two pillars are typically perceived in anthropocentric terms—that is, centred on the effects of (un)sustainable practices on economic security, human welfare and well-being—ecological sustainability may seem more detached from these concerns, at least at first glance. After all, ecological sustainability is commonly defined as the protection and preservation of the diversity and functioning of natural ecosystems. It is also associated with maintaining the climate system’s capacity for self-regulation and with recognising that stable environmental conditions are foundational to all life on Earth (WCED 1987). Yet even these definitions, although framed in terms of environmental preservation, reveal an underlying anthropocentric orientation.

This tension becomes particularly relevant in our current epoch, the so-called “Anthropocene”, which is marked by the extent to which human activity shapes and alters the biosphere (Crutzen and Stoermer 2000). It is within this broader ecological and ethical context that the urgency of ecologically sustainable practices becomes most apparent. For decades, the environmental toll of human activity (including the overexploitation of resources and the ensuing environmental degradation) has been central to global concerns. Not coincidentally, the increasing ecological footprint of human activity has gone hand in hand with technological progress—some have even proposed the term “*Technocene*” to describe the current era (Lemmens and Hui 2017)—as each new wave of innovation brings with it greater demands on resources and environmental pressures (Sloterdijk 2017).

In response to these developments, a range of initiatives has emerged in recent years: some aim to limit or reduce digital technologies, others focus on how technology can be put to use to serve sustainability goals, for instance through “green computing” and responsible innovation. Within language technology, however, ecological sustainability has not appeared particularly high on the academic agenda (see Cronin 2020). Not even with the advent of cloud computing did this issue attract much attention: most of the debate revolved around notions of “fair” and “efficient” use, but few papers addressed the responsible use of CAT tools or MT engines from an ecological perspective. This began to change with the rise of LLMs (e.g. De Vries 2023; Moniz and Escartin 2023).

When looking at the data, the growing concern is unsurprising. The ecological cost of GenAI has become increasingly visible in recent years, particularly as awareness grows around the energy and resource demands of large-scale model training and deployment. These costs are threefold: energy use, carbon emissions and water consumption (CAAD 2024).

The energy required to train models, such as GPT-3, GPT-4 (and GPT-5), developed by OpenAI, is considerable: training GPT-3 alone is estimated to have consumed as much electricity as 120 average US households use in an entire year, while preliminary estimates suggest that GPT-4 may have used up to 40 times more (Van

Egdom and Hartkamp 2023). But, as Jegham et al. (2025) pointed out, energy use does not end there: according to them, the real sustainability challenge lies in the inference costs, as inference now already counts for as much as 90% of a model's total lifecycle energy use. This intensive electricity usage contributes directly to a substantial carbon footprint. In parallel, the water footprint is equally pressing (Li et al. 2023). Data centres consume vast amounts of (fresh) water to cool the systems during both training and inference stages—a concern that becomes more acute as many of these centres are situated in already drought-prone regions.

While the findings above may appear somewhat abstract, their practical implications become clearer when translated into everyday use cases. A single text prompt to a LLM has been estimated to consume five to ten times more energy than a conventional web search, depending on the query. Crucially, even as models become more efficient at the level of both training and individual queries, the Jevons paradox suggests that such efficiency gains are likely to intensify rather than diminish environmental strain, as lower costs and faster performance stimulate exponential growth in usage (Polimeni and Polimeni 2006). These dynamics underscore the urgency of systemic sustainability measures, ranging from carbon- and water-conscious model design to incentives for low-impact computation and robust standards for transparent reporting of energy and resource consumption (Li et al. 2023; Jegham et al. 2025).

The relevance of these environmental issues is only growing, as we are witnessing the emergence of yet a new era, what has been recently dubbed the “Slopocene”: a phase of the Anthropocene or Technocene marked by the digital proliferation of low-quality, mass-generated AI content, commonly referred to as “AI slop” (Binns 2025). Again, estimates vary (partly because it is difficult to distinguish with certainty between what constitutes synthetic and authentic content), but most projections agree on the exponential growth of synthetic data online (e.g. Gartner 2024; McKinsey 2025). In this environment, translation and other multilingual practices play a preponderant role: they not only scale synthetic content across linguistic markets, but also lend it a veneer of credibility and accessibility, enabling its circulation well beyond its original context. The language industry may just be a critical vector in the expansion of these unsustainable digital production cycles.

While the broader debate on GenAI and sustainability is gaining traction, it has largely centred on the general environmental impact of digital infrastructures, but only marginal attention is being paid to how these developments intersect with translation technologies and practices. We simply lack figures detailing the ecological impact of translation practices, ranging from conventional workflows to modern AI-driven processes, and from professional to paraprofessional and even non-professional uses. This lack of empirical data makes it difficult to assess how translation practices can contribute to or mitigate environmental harm.

Likewise, the language industry continues to lag behind other sectors in developing standards, regulations or accountability frameworks for ecologically sustainable

AI-driven practices (Banipal et al. 2023; European Parliament and European Council [AI Act] 2024). Other industries are already exploring frameworks for green computing, sustainable digital infrastructure, suggesting that such efforts are both necessary and feasible (PwC 2025; ISO/IEC 38507 2022). Why, then, is there so little systematic investigation into regulatory measures, technological innovations or industry-wide commitments that aim to reduce the ecological footprint of language technology in the language industry? Sustainable AI implementation should not be treated as a peripheral concern: it must become a core criterion in how the language industry evaluates and adopts new technologies. Addressing these blind spots is a *conditio sine qua non* for the ethical and long-term viability of our profession (WCED 1987).

7. Conclusion

This contribution has sought to demonstrate that current academic and industry discourse on sustainability in the language professions—while valuable in many respects—often remains partial and, at times, counterproductive from a socio-professional point of view. Rather than equipping professionals with the conceptual and practical tools to deal with change, much of the conversation reinforces narratives of decline or, conversely, indulges in a form of uncritical optimism that seems far removed from the material conditions of professional practice, both ultimately leading to the disempowerment of those who have long formed the beating heart of the language profession.

A key insight that emerges from our threefold analysis of sustainability across economic, psychological and ecological dimensions is that the translation and interpreting professions are not so much endangered by AI or automation (alone), but by how these technologies are perceived and represented—and along with them, the social status of the profession. The pure “notion” of replaceability, more than its actual occurrence, has become a powerful force, shaping institutional responses and individual attitudes. In this regard, it is the author’s belief that both academia and the language industry bear a shared responsibility. While neither has explicitly endorsed the narrative of replaceability, both have, in different ways, contributed to it.

Industry reports and technological white papers often paint overly optimistic scenarios, focusing almost exclusively on forecasted productivity gains (measured in turnaround times) and profitability (reflected in market growth and share), with little regard for the realities of day-to-day professional practice. These documents frequently lack empirical grounding—more often than not they are propped up by meagre evidence of the actual gains and growth as experienced in the field. Meanwhile, scholarly perspectives have tended to skew in the opposite direction: characterised by bleak, descriptive accounts of disruption and disempowerment, with minimal attention paid to practical opportunities, innovation or professional agency. The result

is a discursive dance between hype, driven by the marketing machinery of Big Tech, and defeatism, which often manifests in the form of simple quantitative data illustrating downward trends in the industry. This awkward dance urgently needs to be interrupted through balanced, forward-looking and actionable research that neither succumbs to exaggerated optimism nor resigns itself to narratives of decline.

While unsettling in many ways, the narrative of disempowerment need not be accepted at face value. When critically examined, it reveals key pressure points and levers for change. Naming what is wrong need not be an exercise in pessimism, as long as it is conceived of as a first and necessary step towards reclaiming the conversation. The accounts can be transformed into a call to action: to challenge the norms and assumptions that shape professional identities, to push back against one-dimensional framings, and to collectively forge more inclusive and forward-looking alternatives.

This requires more than critique. It requires us to channel scholarly attention into generating tools, language and spaces that support professional resilience. It means taking seriously the task of coalition-building between scholars, professionals and institutional stakeholders who are invested in co-designing a more equitable and sustainable future.

In order to become aware of these dynamics, it is important to recognise several overlapping tendencies that feed into the current skewed framings:

- ***A narrow research focus:*** the academic conversation on sustainability often concentrates on documenting risks, losses and disruptions. Less attention is being paid to adaptive strategies or evidence-based solutions.
- ***An overemphasis on AI:*** while GenAI undoubtedly influences workflows and role definitions, broader economic, political and structural factors are at play—rising inflation, shifting investment climates, geopolitical instability. Yet these remain largely underexplored in both scholarly and professional accounts, which in turn contributes to overstating the impact of GenAI by isolating it from these broader, intersecting forces.
- ***Speculative media and institutional discourse:*** the AI debate is frequently shaped by future-oriented speculation. As Schwabe and Castellaci (2020) observe, media narratives tend to emphasise the most dramatic or threatening aspects of automation—often because such stories are more attention-grabbing for general audiences. While these portrayals are clearly exaggerated, they still manage to shape individual expectations and professional mindsets, and the ensuing fear of replacement by machines, even if unfounded or premature, can lead to stress, anxiety and demotivation in the present. In this way, alarmist narratives risk becoming self-fulfilling, reinforcing rather than resolving the professional precarity they describe.

Against this backdrop, economic, psychological and ecologic sustainability must be reclaimed as both analytical and practical horizons. Sustainability is not merely

a research theme or a sectoral trend. It is, or ought to be, a strategic imperative in academic discourse. Rather than reproducing logics of decline, sustainability scholarship should strive to articulate the conditions under which professional life in translation and interpreting remains viable. This entails more than just diagnosis. Sustainability is not a buzzword, but, as noted, a call to action. The time has come to stop asking whether the language profession is “under threat” and to start exploring how sustainable language services can be imagined, enacted and institutionally supported. The seeds of that future are already visible in sparse efforts that are already being made in TIS, but they need to be cultivated with intention and enduring dedication.

Disclosure on the use of GenAI tools

GenAI was used in the preparation of this work only for editing, restructuring and formatting purposes, using a pre-written text forming the basis of a paper presented at the 2025 TransELTE Conference in Budapest. The content is the result of the author’s independent work.

In preparing this work, 26 requests to ChatGPT were submitted. The average CO₂ emissions of OpenAI models have not been made public. Independent estimates suggest that a single interaction may cause CO₂ emissions of between 2.5 g and 23.75 g, depending on assumptions about energy use and electricity sources. Based on this, the use corresponds to a likely carbon footprint in the low hundreds of grams of CO₂ (approximately 108 g CO₂).

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