

The role of philosophy in translators' response to automation

Eno Ubong Ekpo
Charles University
enoubongekpo@gmail.com

Abstract

Through the ages philosophy has been used as a tool for the understanding of all that pertains to life and how things *hang together*. Technology, a salient part of human life in the 21st century, has not been left out of these philosophical postulations. From the inception of the philosophy of technology two centuries ago philosophers have focused largely on defining the meaning of technology as well as its influence on society and culture. This outlook is called the humanities' philosophy of technology. This paper is an attempt to analyse the role of philosophy in the response of translators to automation or technology in their career as well as its role in translator education. The humanities' philosophy of technology is analysed here by comparing three schools of thought concerned with it: Rapp's socio-physical impact approach, Wartofsky's particularistic and social impact approach as well as Mitcham's humanities' approach.

Ekpo, Eno Ubong. 2025. The role of philosophy in translators' response to automation. In: *Bridge: Trends and Traditions in Translation and Interpreting Studies*. Vol. 6, No. 1: pp. 8-28.

1. Introduction

In today's world, technological advancements, particularly in artificial intelligence (AI), have significantly transformed the translation industry, leading to increased automation and altering the traditional roles of human translators (Wang 2024). As technological innovation continues to reshape the language services industry, translators are increasingly required to acquire new competencies—most notably, skills in post-editing machine-generated translations—to remain competitive and professionally relevant. Recent research highlights that the adoption of such skills is not merely a technical adjustment but also a cognitive and ethical negotiation shaped by translators' attitudes toward automation, their perceived autonomy, and broader labour dynamics (Alvarez et al. 2020; Guerberof 2013).

The accelerating integration of neural machine translation (NMT) into professional workflows demands a deeper understanding of how translators conceptualize their changing roles. Responses range from enthusiastic adoption to strategic ambivalence or outright resistance, often influenced by factors such as domain expertise, client expectations, remuneration structures, and cultural attitudes toward technology (Cadwell et al. 2018). In this regard, philosophical inquiry, particularly within the philosophy of technology—provides valuable frameworks for interpreting these responses. Philosophers such as Don Ihde and Peter-Paul Verbeek argue that technological artefacts are not neutral tools but mediators of human experience and social practices. Translators' reactions to automation, therefore, are not merely functional responses to a changing labour environment but reflections of deeper ontological and ethical concerns about the delegation of meaning-making to machines, the erosion of professional identity, and the asymmetrical power structures embedded in technological design (Verbeek 2011, Ihde 2020).

Understanding translators' responses thus requires an interdisciplinary approach that draws from both empirical data and philosophical reflection on the co-shaping of humans and technology.

To this end, three schools of thought in the philosophy of technology will be examined in this article — Rapp's socio-physical impact approach, Wartofsky's particularistic and social impact approach, and Mitcham's humanities approach. Their perspectives will be juxtaposed. By analysing these philosophical approaches, it is hoped that a better understanding may be gained about the role that philosophy can play in shaping the response of translators to automation and understand how the humanities' philosophy of technology may be used to elicit the positive response of translators to technology for their own professional growth through the kind of education that they receive. Before providing a philosophical perspective, a modest introduction of the subject matter - Automation, is provided in this section.

The method of inquiry for this article is philosophical. The article draws on secondary data sources and philosophical reasoning methods to attempt providing answers to the issues in this work. The answers provided are by no means absolute but rather present an opening for further speculation on the influence of philosophy on the salient issue of this age in the field of translation studies: Translation automation and its acceptance by the translation industry with direct reference to human translators. The article begins with a general introduction to the subject of automation and the responses of the human workforce to it in general and then narrows down to the translator's position, before proceeding to elucidate on the philosophical focus of the article. The discussion section is followed by concluding statements.

1.1. The industrial revolution: historical genesis of automation and worker displacement

The World Economic Forum (2020) defines automation as the "use of technology to perform tasks that would otherwise require human intelligence and effort." Importantly, this definition captures the blurred boundary between tool and agent.

The modern discourse on automation cannot be meaningfully engaged without first acknowledging its historical antecedent: the Industrial Revolution. Spanning the late 18th to early 19th centuries, the Industrial Revolution marked the first epochal transformation of human labor through the large-scale deployment of mechanized technologies. Inventions such as the spinning jenny, the steam engine, and power looms redefined productivity and radically altered the organization of work. This shift, however, was not met with unambiguous enthusiasm.

The industrial period introduced a profound reconfiguration of labor: artisanal production gave way to factory work, and the role of human agency was recast from that of a skilled craftsperson to an operator of machines. As historians such as E. P. Thompson (1963) have documented, this was accompanied by an acute sense of alienation, deskilling, and disempowerment among workers. The Luddite movement, which emerged in England between 1811 and 1816, is emblematic of early resistance to automation. Far from being anti-technology in a simplistic sense, the Luddites targeted machines perceived to undermine fair labor practices and erode economic security. Their actions represented a political protest against the imposition of automation without consent or compensation (Sale 1995, Allen 2017).

The reaction of 19th-century workers to mechanization mirrors many aspects of contemporary responses to AI and automation in knowledge-based industries. Although today's translators are not smashing neural networks with digital hammers, their forums, publications, and professional networks are increasingly filled with expressions of uncertainty, discontent,

and precarity. The transition from typewriters to computers, and later to Computer-Assisted Translation (CAT) tools, was largely embraced because these tools augmented human productivity. However, the arrival of neural machine translation (NMT), which seeks to perform the core function of translation without human involvement, has engendered fears, not unlike those witnessed during the Industrial Revolution.

1.2. Automation in the translation industry

The translation industry has undergone multiple phases of technological transformation, each stage redefining the translator's role, workflow, and perceived value within society. Automation in translation did not emerge abruptly with neural machine translation (NMT) or artificial intelligence (AI); rather, it has evolved incrementally across decades, often in parallel with broader technological revolutions. Understanding this progression offers crucial insight into the current landscape of automation anxiety within the profession.

1. Early Mechanization: From Manual Labor to Electronic Aids (Pre-1980s)

Prior to the advent of digital technologies, translation was a manual, intellectual craft grounded in bilingual fluency, cultural literacy, and subject-matter expertise. The first attempts at automating translation emerged during the Cold War era, primarily driven by geopolitical and military imperatives. In the 1950s and 1960s, early machine translation (MT) systems were developed, most notably by IBM and Georgetown University, with the goal of rapidly translating Russian scientific and technical texts into English. However, these early systems—predominantly rule-based and syntactically rigid—produced unsatisfactory results, leading to the 1966 ALPAC Report, which declared MT largely ineffective and discouraged further federal funding in the United States (Hutchins 2000).

While this setback stalled progress in machine translation, it indirectly spurred interest in tools that would assist, rather than replace, human translators.

2. The Rise of Computer-Assisted Translation (1980s–2000s)

The 1980s and 1990s witnessed the emergence and commercial adoption of Computer-Assisted Translation (CAT) tools. Unlike MT, which aimed to generate translations automatically, CAT tools functioned as productivity aids, allowing translators to leverage databases of previously translated text (translation memory), glossaries, and concordance tools. Landmark software like Trados and Déjà Vu gained widespread popularity during this era, providing tangible benefits in consistency and speed, especially for large-scale localization projects.

This period is often characterized by translator acceptance and even enthusiasm. Automation, in this context, was not viewed as a threat but as an ally—a co-pilot rather than a competitor. Empirical studies from the time

suggest that translators appreciated the increased control of these tools provided, which aligned with professional values such as precision and repeatability (O'Brien 2012).

3. The Advent of Statistical and Neural Machine Translation (2000s–2015)

The early 21st century ushered in statistical machine translation (SMT), followed by neural machine translation (NMT) around 2015. SMT systems, such as those developed by Google Translate in the late 2000s, employed probabilistic models to generate translations based on bilingual corpora. While more flexible than their rule-based predecessors, SMT outputs were still limited in fluency and contextual understanding.

The real paradigm shift occurred with the advent of neural networks and deep learning models. NMT systems, beginning with Google's GNMT in 2016, offered unprecedented improvements in fluency, naturalness, and semantic cohesion (Wu et al. 2016). These systems, trained on vast multilingual datasets, began to approximate human-like output, sparking renewed debates on the future of professional translation.

4. Contemporary Era (2016–Present): Hybrid Models and Post-Editing Workflows

Today, the translation industry is characterized by hybrid workflows that blend MT output with human post-editing. While this integration has led to gains in speed and cost-efficiency, it has also triggered significant shifts in the translator's role and identity. Post-editing requires a different cognitive mode than original translation—focusing on correction, judgment, and optimization rather than creation. This shift is not merely technical; it implicates the epistemological and affective dimensions of translation work (Hutchins, 2014).

Translation agencies and localization departments increasingly adopt a "machine-first" model, where human translators are brought in primarily to refine automated output, which has now led to concerns about deskilling, devaluation of linguistic expertise, and the commodification of human insight.

1.3. Automation anxiety in the translation industry

Like the Luddites during the industrial revolution, many translators today voice concerns not merely about the new technological tools themselves but about the socio-economic context in which these tools are introduced. Studies by Alvarez et al.(2020) and Guerberof (2013), show that translators perceive automation as a force being imposed upon them by corporate stakeholders—clients, tech companies, and platform economies—who prioritize cost reduction over linguistic quality or professional dignity. Translators fear being reduced to post-editors of poor MT output, akin to factory-line workers polishing flawed machine products.

This anxiety is not unfounded: platforms such as DeepL, Amazon Translate, and Google Translate are now integrated into major content workflows across legal, medical, and technical domains. Some clients now expect machine-first translations as default, with minimal human intervention—often accompanied by downward pressure on rates and deadlines (Cadwell et al. 2018).

Although there have been arguments that automation is not monolithic in its impact. Especially because research underscores the emergence of “hybrid translation workflows,” wherein human post-editing of MT output yields higher quality at reduced cost with the view that rather than rendering the human translator obsolete, these workflows reposition them as quality controllers, ethical gatekeepers, and linguistic mediators (Constantin et al. 2024; Chen 2024). The reality from the 2025 ELIS survey results shows that automation has transitioned from mere assistance to potential substitution.

Generally, attitudes toward automation vary widely depending on demographic factors, professional experience, and specialization (ELIS 2024). Veteran translators in niche domains with high contextual complexity tend to feel more secure, while early-career professionals or those working in high-volume, low-margin sectors express greater concern.

Automation anxiety is not uniform across industry. Some translators have already successfully repositioned themselves as post-editors, language technologists, or consultants who specialize in evaluating and adapting MT output. These professionals often report higher job satisfaction and agency in negotiating their evolving roles (Constantin et al. 2024, Chen 2024).

Automation anxiety in this context manifests along several lines:

- **Economic Anxiety:** Concerns over job displacement, rate erosion, and the threat of being replaced by cheaper machine-generated solutions.
- **Cognitive and Ethical Anxiety:** Fears that post-editing reduces creative and intellectual engagement, turning translators into linguistic janitors or passive correctors of algorithmic artefacts.
- **Identity Anxiety:** A sense that automation delegitimizes the translator's role as an autonomous cultural mediator, reducing it to a technical adjunct.

So, in contrast to the 19th century, where worker resistance often took the form of physical sabotage or political revolt, today's translator community exhibits a fragmented and ambivalent response. While some professionals resist automation outright, others adopt a pragmatic stance, using NMT systems to increase efficiency or transition into hybrid roles such as post-editors, localization consultants, or MT evaluators (Sakamoto 2019). This bifurcation in response is arguably shaped by differences in professional identity, digital literacy, and socio-economic positioning (Anzolin 2021).

Moreover, the digital economy has redefined the parameters of resistance. The decentralized, freelance nature of contemporary translation work, mediated through global platforms such as ProZ.com and Upwork, limits the potential for collective bargaining and coordinated dissent. This stands in contrast to the physical and communal workspace of 19th-century factories, which enabled more visible forms of collective resistance.

While mechanization during the Industrial Revolution primarily affected manual and repetitive tasks, today's automation increasingly penetrates the cognitive and creative spheres. The automation of linguistic tasks challenges deeper assumptions about human uniqueness, intellect, and cultural interpretation—domains once considered inimitable by machines (Svoboda 2014, 2017). This intensifies the existential dimension of automation anxiety among translators and other language professionals.

Summarily, viewing automation anxiety through the reductive lens of obsolescence may not make the situation better. Rather, the situation calls for adaptive strategies, ethical regulation, and a reinvigoration of humanistic values in technological design in the translation industry.

Philosophically, the focus should not be whether machines will replace human translators, but whether the translators will redefine their relationship to machines in ways that preserve autonomy, purpose, and justice.

2. The humanities' philosophy of technology

The humanities' philosophy of technology is a combination of varying perspectives regarding the consequences of technology for humankind. This section presents the philosophical postulations by Rapp, Wartofsky and Mitcham on the subject of technology, as it concerns man generally and in particular, the translator as a social being.

2.1. Rapp's socio-physical impact approach

The interdependent relationship that exists between humans, technology, and the physical world is the foundation of this school of thought (Rapp 1989). The major argument in this holistic approach submits that technological action is always tied to specific social structures as well as economic processes within the context of man as acting subject (Rapp 1974). For instance, the utilisation of natural resources is only possible to the extent that raw materials, tools, energy — which are the necessary material means — and intellectual knowledge (including artisan rules of experience and/or science) are available (Rapp 1974).

Rapp notes that man is both the creator and creature of technology, and a reciprocal relationship exists between the two (Rapp 1989). This relationship can be broken down into two components: "the generation of technology by man and the forming of man by technology "(which he has

generated himself)" (Rapp 1981, 80). Thus, a balanced judgement requires that the two components or aspects are taken into consideration since they are not separable in essence — only in concept.

In another dimension, humans create their environment in ever new and changing forms with the aid of technological activity and artefact executing this technological activity, in addition to life in the 'second nature' thereby created, applies its own reactive force on humans (Rapp 1989). Therefore, one of the key questions regarding this process is how its impact is distinguishable from other intellectual, cultural, and social factors.

In the case of translation technologies (assistive as in CAT tools and outright MT), it is important to consider the social and physical context in which the software will be used, including the language and culture of the users. From the perspective of man as an acting subject, translators are part of the social structures that are affected by technological change. The introduction of automation technology changes the nature of translation work, and it requires translators to adapt to new ways of working. Translation software has the potential to impact the way in which people communicate and interact with each other and because of this, it is important to understand this impact to ensure that the software is developed and used in a way that is beneficial to society (Cadwell et al. 2018, Van der Meer & Ren 2023). Since man is both the creator and creature of technology, Rapp's approach emphasises the need to consider these factors when developing and implementing technology, which is MT systems in this case.

2.2. Wartofsky's particularistic and social impact approach

Wartofsky's particularistic approach examines specific technological episodes or events and the philosophical questions that arise from them (Wartofsky 1979). The idea is to understand why certain technologies gained or lost prominence during a particular period and what factors contributed to the change. It also investigates the changes in attitudes towards technology over time and the reasons for such changes. The ultimate goal of examining specific instances of technological development, episodes or events is to provide a clear perspective of its gains for the user, which in this case is the translator (Wartofsky 1979).

This approach also views technological development as a social process and explores the ways in which technology is controlled and monitored. It asks questions such as; who controls technological development? and for what purposes is it developed? It considers the broader implications of technological development, particularly in terms of its impact on society and the environment (Tiju 2017). In the end, what began as a particularistic approach broadens its spectrum to cover social impact.

A key issue in this approach is the non-clarification regarding – whether technological development is primarily determined by its context, such as social and cultural factors, or whether technology determines the social context, including its systems of norms and values. This debate between technological determinism and social shaping of technology is an ongoing discussion in the philosophy of technology. The particularistic and social impact approaches both contribute to this debate on the relationship between technology and society.

Adapting this school of thought to the context of translators' response to automation would involve analysing the specific or reasons why translators have responded to automation in certain ways, such as resistance, acceptance, or adaptation. It would also involve investigating the philosophical questions that arise from these responses, such as the impact of automation on the quality of translation and the role of translators in the age of automation.

2.3. Mitcham's humanities approach

In this approach, the humanities' philosophy of technology is defined as "the attempt of religion, poetry, and philosophy to bring non- or trans-technological perspectives to bear on interpreting the meaning of technology" (Mitcham 1994, 38). The framework examines the broad and inter-related categories of technology as object, technology as activity, technology as volition, and technology as knowledge. These four modes of technology not only overlap but also interact. Technology viewed as an object includes categories such as clothing, utensils, structures, apparatus, utilities, tools, machines, and automata which are created from technological activity (McLain et al. 2019). There is an epistemological exploration of technology as knowledge (object) constructing a taxonomy of increasingly conceptual distinctions, which are "sensorimotor skills, technical maxims, descriptive laws, and technological theories" (Mitcham 1994, 78).

Technology as activity is the factor that unites knowledge and volition which bring about the production of technological objects. In simple language, technology is an activity because humans use it to produce or achieve their goals. This process of production is technological activity. An additional dimension to technology as activity is the distinction that exists between servile/useful and liberal/fine arts — whose names reflect the historic and cultural bias, which elevates the fine (or useless) arts (Mitcham & Schatzberg 1994). Defined as tools in the ideation as well as realisation process or even the outcomes themselves.

Technological objects can also have an impact on technological activity (McLain et al. 2019). In technology as volition, the discourse turns towards self-will, the mind, motivation, and intent. The choice to adopt or not to adopt, to use a form of technology or choose the extent or limits of

its usage is in itself a definition of technology. These four modes of technology overlap and also interact with one other (Franssen et al. 2013, McLain et al. 2019).

3. Discussion on the three schools of thought

The major dichotomy between the three schools of thought is between two factions; those who approach the philosophy of technology as a single (particular- Wartofsky) phenomenon; and those who view it as multifaceted phenomenon, having several other sides that are interdependent on one another. Within the context of Mitcham's humanities approach, there is a complex interplay between technology and human society, which may be understood by examining the underlying values, assumptions, and cultural contexts that shape technological development and use. In the case of translators and automation, philosophy can play a crucial role in helping translators understand the ethical, social, and cultural implications of the increasing use of machine translation technologies. For example, philosophy can help translators critically reflect on questions such as:

- What is the role of language in human communication, and how does machine translation affect this role?
- What are the ethical implications of relying on machine translation to communicate with people from diverse cultures and linguistic backgrounds?
- How does machine translation impact the labour market for human translators, and what are the social and economic consequences of this impact?
- What are the cultural implications of using machine translation to communicate with people from diverse cultures, and how can we ensure that machine translation does not perpetuate cultural biases or stereotypes?

By engaging in philosophical reflection on these and other questions, translators may develop a deeper understanding of the complex issues surrounding the use of machine translation technologies, and they can make more informed decisions about how to respond to these technologies in their work. For example, translators may choose to specialise in areas where machine translation is less effective or may focus on developing skills that cannot be replicated by machines, such as cultural expertise or creative writing. Additionally, translators may use their understanding of the ethical, social, and cultural implications of machine translation to advocate policies that ensure the responsible and equitable use of these technologies in society.

While Rapp's philosophy emphasises the need to consider the social and physical context in which technology is developed and used,

Wartofsky's particularistic philosophy is concerned with examining specific technological episodes or events and the philosophical questions that arise from them. The social impact approach focuses on the relationship between technology and social, economic, and political structures and explores the ways in which technology is controlled and monitored and its broader implications for society and the environment. Finally, Mitcham's humanities approach considers technology as part of human culture and history and is concerned with the larger questions related to the meaning and purpose of human existence. It takes a broader view and considers technology as part of human culture and history. It is also concerned with larger philosophical questions related to the meaning and purpose of human existence, including the role of technology in shaping human values, identity, and culture.

3.1. Reconsidering the symbiosis: man, technology, and the illusion of control

Philosophical discourses on the nature of technology have long oscillated between two poles: that of human dominance over technological artefacts, and that of human subservience to them. A foundational assertion in this dialogue posits that *technology was made for man*, not the reverse. This anthropocentric viewpoint, seemingly intuitive and rational, is deeply embedded in the classical humanist tradition. The human being is cast as the sovereign artificer—technology, merely the extension of human will, ingenuity, and purpose. However, upon deeper scrutiny, a pertinent question arises; how true is this conclusion? Is there really a near-symbiotic relationship between man and technology? How unassailable is this premise? Can the notion that technology remains subservient to humanity withstand the test of lived realities, particularly in the modern, digitized workplace? Why then do some humans view modern technology introduced into their workplace as a rival rather than an opportunity, an advantage or at best a companion? Rapp's philosophy of technology speaks of man as the creator and the creature of technology. A point that indicates that *manmade* technology and technology has now made man. Technology may only be active to the extent that man's social and economic structures allow it. If this is true, why then does it seem like technology is in fact the agent in control throughout the world? All three approaches to the philosophy of technology seem to insist that technology is only a tool which may not be used if man gives no room for its use.

Rapp's dialectical view of technology provides a compelling entry point into this debate. Rapp (1981) contends that humans are not only *the creators* of technology but also *its creatures*. This formulation upends the simplistic creator-creation binary. It articulates a feedback loop in which human beings construct technological systems, but are subsequently shaped, constrained, and even reconstituted by them. In this view, the

human subject is no longer the autonomous architect but rather a participant in a co-evolutionary dynamic—technology is both a product and a producer of humanity. The implication here is profound: technology does not merely extend human capacity; it redefines what it means to be human.

If, as Rapp suggests, technology's activity is contingent upon the social and economic structures within which it is embedded, a critical paradox emerges. For how do we reconcile this conditional activation with the empirical observation that technology often appears to wield autonomous power, dictating human behavior, labor markets, and even ethical norms? Langdon Winner (1986) famously asked, "Do artifacts have politics?" His answer affirmed that they do—not because they possess intentionality, but because their design, implementation, and distribution reflect and reinforce power structures.

Further answers to these philosophical quizzes may lie in the following proposition: It seems that in the world of man as an agent or creator of technology, there are two factions. Let us consider, then, a bifurcation within the category of "man" as an agent or creator of technology. **an upper faction**—comprised of technocrats, capital owners, designers, and policymakers—who wield technological power; and **a lower faction**, constituted by the broader populace, particularly workers and end-users, who encounter technology as a fait accompli. The upper faction and the lower. The upper faction wields the authority to seemingly impose technological ideas, creations and advancements on the lower faction to whatever extent it pleases. This reasoning stems from the realisation that if indeed technology is only a tool, and man is also the creator of it, then man ought not to regard it as a disadvantage. From the review of the reaction of workers in industries to automation, these technologies were received mostly with apprehension and fear. Could this mean that the upper faction of men derive the most benefits from technology, as they are the main proponents of its creation? - while the lower faction seem to have it imposed on them and continuously reel in the perplexity of this imposition until they manage to make some sense of it or resign to fate and simply accept it?

Can we say that we have arrived at a compelling hypothesis, where perhaps the illusion of technology's autonomy arises not from its intrinsic capabilities, but from the asymmetric distribution of power among those who develop, deploy, and are subjected to it? In this light, the human-technology relationship must be refracted through the lens of socio-political stratification.

The upper faction possesses the material and epistemic resources to innovate and direct technological change. For them, technology is often a vehicle of profit, convenience, or prestige. In contrast, the lower faction experiences technology as externally imposed, and often disruptive to established ways of life and labor.

This asymmetry clarifies why many workers, particularly in automated industries, experience new technologies not as allies or augmentations, but as adversaries. Despite the rhetoric of "technological advancement" and "digital transformation," the empirical reality is that automation frequently displaces labor, reconfigures job descriptions, and introduces surveillance and deskilling into the workplace (Srnicek & Williams 2015). The widespread apprehension and resistance to automation in various industries—from manufacturing to translation—are not irrational technophobia; they are symptomatic of a deeper structural disenfranchisement.

What appears, then, is a double alienation: first, an alienation from the means of production, as Marx would have it, and second, an alienation from the technological instruments that increasingly govern those means. This dual alienation underscores the psychological and existential dislocation experienced by workers who find themselves redefined not merely as employees but as variables in a techno-economic equation devised by others.

Returning to our earlier question: if technology is merely a tool, why is it feared? The answer lies in recognizing that tools, in the abstract, are neutral; but tools embedded within systems of inequality are not. When a spade becomes a symbol of empowerment for one man and a symbol of disenfranchisement for another, it ceases to be neutral. It becomes a site of conflict. As Feenberg (1991) and Franssen et al. (2013); argue, technology is never value-free; it is always embedded in a "technical code" shaped by dominant interests and ideologies.

Therefore, the fear and resistance that many workers express in response to new technologies are not misunderstandings of the tool, but intuitive recognitions of the power dynamics encoded within it. They sense, perhaps rightly, that the so-called progress is being enacted *upon* them rather than *with* them.

In summation, the philosophy of technology must move beyond simplistic affirmations of human centrality. It must reckon with the realities of technological agency, not in the metaphysical sense, but as a distributed outcome of human institutions, political economies, and power relations. The proposition that technology is only a tool collapses under the weight of contemporary evidence and philosophical scrutiny. As Heidegger (1977) and Coeckelbergh (2020) cautioned, the danger lies not in technology itself but in the *enframing* of human life into mere resourcefulness, where man is reduced to a standing-reserve.

Thus, it is not merely the tools we create that matter, but the worlds they build—and for whom they build them. The philosophical task is to question not only the nature of technology but also the nature of the human that technology presupposes and reconfigures.

When viewed from the foregoing perspective, perhaps it may become easier to accept the role of technology in shaping our values, identity, and

existence. In general, we would perhaps understand how it shapes the purpose of human existence. With regards to the translation industry, translators may be presented with this reasoning from the perspective of asking the "hows", for instance, how does technology help translators to attain their purpose? How does it add to the values and identity of the translator? How does it promote the translator's existence in their career?

These are pertinent questions to which answers must be found in the mind of the translator. Philosophising on these questions may produce clear answers that will enable translators to activate the desire to bond with the technologies prescribed for their use. They may even advance towards creative collaborations and experiences that will promote their career to infinite heights. Perhaps translator education may serve to clarify these questions, expand on them or create a robust pedagogical curriculum that analyses these questions intricately in order for translators to attain full comprehension.

4. Translator training with a philosophical undertone

Translator education recently has focused on bombarding translators with tech-related education and competences, while mostly leaving out the salient philosophical aspect of this education, which could form a strong basis for translators to accept, use and benefit from the offerings of the technology era.

Going by the famous quote by Guehenno;

"The first duty of man is to say, No" (Wennemann 1990).

It is part of human nature to be defensive or resistant to any change or diversion from the usual. This is even more so when the object of intrusion and its purpose is not understood. The initial response would mostly be a defensive "No", until more knowledge is received about such innovation and it begins to seem less intrusive. Teaching translation students to use assistive and translation technologies or language technologies in general is no doubt a necessity. However, the impact of this education will not be far reaching if the philosophical clarifications about the need for these technologies in their career is not expounded on. It is important for translators to be taken through a course in the philosophy of technologies, where they will have the liberty of raising pertinent questions concerning technology in their career. They need to philosophise on the actual gains of these technologies and attain a level of confidence regarding the premise that it is ultimately for their own benefit.

Adopting this initial precaution will lay a firm foundation for translators to fully harness the offerings of technology for growth in their career. This will also divert focus from the hushed speculations, and dismissive research statements that portray the translator as not willing to accept technological advances in their field. Translators need to have the opportunity to attend academic education that gives voice to the questions

which will clarify all the doubts they may entertain regarding technology in their field. This is the reason why philosophy must be an integral component in every field, in this case the field of translation studies.

As it obtains that change is the only constant phenomenon, humans must encounter it throughout their lifetime. Accepting change, however, is another matter which must be approached with a concise methodology, which in most cases, is a clear definition of the advantages it brings.

5. Conclusion

The role of philosophy in the response of translators to automation is an important topic requiring careful consideration of the broader social and cultural context in which technology will benefit the translator. The three schools of thought discussed in this paper — Rapp's socio-physical impact approach, Wartofsky's particularistic and social impact approach, and Mitcham's humanities approach — provide intelligent perspectives on the role of philosophy in understanding and responding to automation. The translator may benefit from these philosophies to retain their relevance in the technological age.

However, going by the famous words by Socrates that "An unexamined life is not worth living", it is important for the translator to examine or first seek clear answers to the questions regarding the long-term advantages of technology to their career. The onus falls on not only translators but also their teachers to clarify these questions for future growth. Courses in translation studies may consider including a broad spectrum of the philosophy of technology, expounded fully to educate the translator and provide the answers that they seek regarding the long-term advantages of technologies, rather than simply teaching them to adopt the technologies with no philosophical basis to hold the lessons.

This way, translators may establish themselves as experts in their chosen field, build trust with their clients, and contribute to the broader goals of effective cross-cultural communication and understanding for the ultimate benefit of humanity.

Declaration of Interest

Within the domain of translation technology, there lies a significant difference between technologies that aid and improve human translators versus those made to replace them. This contrast is crucial because of its effects on the future of translation work and its wider social consequences. By declaring my interest, I am signaling a dedication to exploring the complex overlap of language, technology, and human control, with the goal of creating a harmonious and forward-moving environment for translation methods.

Acknowledgment

I am deeply grateful to my supervisors PhDr. Bc. Tomáš Svoboda, Ph.D and Mgr. Tereza Matějčková, Ph.D for their priceless advice and constant encouragement as we navigate the complex world of translation technologies. Moreover, I am thankful to the academic world for creating a setting that is perfect for having important debates on this topic. This recognition is a tribute to the collaborative attitude that propels the quest for significant research and conversation about the changing role of technology in translation.

References:

Allen, Robert C. 2017. *The Industrial Revolution: A Very Short Introduction*. Oxford: Oxford University Press. <https://doi.org/10.1093/actrade/9780198706786.001.0001>.

Anzolin, Guendalina. 2021. *Automation and its Employment Effects: A Literature Review of Automotive and Garment Sectors*. Seville: European Commission. <https://joint-research-centre.ec.europa.eu/system/files/2021-11/jrc126870.pdf>.

Alvarez Vidal, Sergi, Oliver, Antoni and Badia, Toni. 2020. Post-editing for professional translators: Cheer or Fear? In: *Revista Tradumàtica*. (18): pp. 49-69. <https://doi.org/10.5565/rev/tradumatica.275>.

Benjamin, Ruha (ed.). 2019. *Race After Technology. Abolitionist Tools for the New Jim Code*. Hoboken: Wiley. <https://www.perlego.com/book/1536396/race-after-technology-abolitionist-tools-for-the-new-jim-code-pdf>.

Brynjolfsson, Erik and McAfee, Andrew. 2017. *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. New York and London: W. W. Norton & Company.

Cadwell, Patrick, O'Brien, Sharon and Teixeira, Carlos S. C. 2018. Resistance and accommodation: Factors for the (non-) adoption of machine translation among professional translators. In: *Perspectives: Studies in Translation Theory and Practice*. 26(3): pp. 301–321. <https://doi.org/10.1080/0907676X.2017.1337210>.

Coeckelbergh, Mark. 2020. *Introduction to Philosophy of Technology*. New York: Oxford University Press. https://www.researchgate.net/publication/340535562_Introduction_to_Philosophy_of_Technology.

Chen, Melvin. 2024. Trust, understanding, and machine translation: the task of translation and the responsibility of the translator. In: *AI & Society*. 39(5): pp. 2307-2319. <https://doi.org/10.1007/s00146-023-01681-6>.

Constantin, Felicia; Pop, Anamaria-Mirabela and Sim, Monica-Ariana. 2024. Human Intelligence and Artificial Intelligence in Professional Translations — Redesigning the Translator Profession. In: Kavoura, A. et al. (eds.). 2024. *Strategic Innovative Marketing and Tourism (ICSIMAT 2023)*, Springer Proceedings in Business and Economics. pp. 239-247. https://doi.org/10.1007/978-3-031-51038-0_27.

Doherty, Stephen. 2016. The Impact of Translation Technologies on the Process and Product of Translation. In: *International Journal of Communication*. 10: pp. 947-969.

Elis. 2023. *European Language Industry Survey 2023*. <https://elis-survey.org/wp-content/uploads/2023/03/ELIS-2023-report.pdf>.

Elis. 2024. *European Language Industry Survey 2024*. <https://elis-survey.org/wp-content/uploads/2024/03/ELIS-2024-Report.pdf>.

Elis. 2025. *European Language Industry Survey 2025*. https://elis-survey.org/wp-content/uploads/2025/03/ELIS-2025_Report.pdf.

Eubanks, Virginia. 2018. *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor*. New York: Picador, St. Martin's Press.

Feenberg, Andrew. 1991. *Critical Theory of Technology*. New York: Oxford University Press.

Franssen, Maarten; Lokhorst, Gert-Jan and van de Poel, Ibo. 2013. Philosophy of Technology. In: Zalta, Edward N. and Nodelman, Uri (eds.). 2013. *The Stanford Encyclopedia of Philosophy*. <https://plato.stanford.edu/archives/win2013/entries/technology/>.

Sury, R. J. 1981. A review of: "Automation, Production Systems, and Computer-aided Manufacturing." by Groover, Mikell P. 1980. Prentice-Hall, Inc. In: *International Journal of Production Research*, 19(2), p. 221. <https://www.tandfonline.com/doi/full/10.1080/00207548108956644?src=recsys>.

Guerberof Arenas, A. 2013. What do professional translators think about post-editing? In: *The Journal of Specialised Translation*. 2013(19): pp. 75-95. <https://aclanthology.org/www.mt-archive.info/10/JOST-2013-Guerberof.pdf>.

Heidegger, Martin. 1977. *The Question Concerning Technology and Other Essays*. New York: Harper & Row.

Herbig, Nico; Pal, Santanu; van Genabith, Josef and Krüger, Antonio. 2019. *Integrating Artificial and Human Intelligence for Efficient Translation*. <https://arxiv.org/abs/1903.02978>.

Hutchins, W. J. 2014. The History of Machine Translation in a Nutshell. In W. Daelemans (ed.). 2014. *Proceedings of the Joint MT Summit & AMTA Workshop on Machine Translation* (pp. 13–49). Association for Computational Linguistics. <https://aclanthology.org/www.mt-archive.info/10/Hutchins-2014.pdf>.

Ihde, Don. 2020. *Husserl's Missing Technologies*. Fordham University Press.

Koponen, Maarit. 2016. Is Machine Translation Post-editing Worth the Effort? In: *Journal of Specialised Translation*. 25: pp. 131-148. <https://doi.org/10.26034/cm.jostrans.2016.303>.

McKinsey Global Institute. 2017. *Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation*. <https://www.scribd.com/document/366052644/Jobs-Lost-Jobs-Gained-Report-December-2017>.

McLain, Matt; Bell, Dawne; Wooff, David and Morrison-Love, David. 2019. How Technology Makes us Human: Cultural and historical roots for design and technology education. In: *The Curriculum Journal*. 30(4): pp. 464-483. <https://doi.org/10.1080/09585176.2019.1649163>.

Mitcham, Carl. 1994. *Thinking Through Technology: The Path Between Engineering and Philosophy*. Chicago and London: University of Chicago Press.

Mitcham, Carl and Schatzberg, Erik. 2009. Defining Technology and the Engineering Sciences. In: *Philosophy of Technology and Engineering Sciences*. pp. 27-63.

O'Brien, Sharon. 2012. Translation as Human–Computer Interaction. In: *Translation Spaces*. 1(1): pp. 101-122.

O'Hagan, Minako. 2013. The Impact of New Technologies on Translation Studies: A technological Turn? In: Millán, Carmen and Bartrina, Francesca (eds.). 2013. *The Routledge Handbook of Translation Studies*. London & New York: Routledge. pp. 503-518.

Pitman, Jeff. 2021. Google Translate: One Billion Installs, One Billion Stories. In: *The Keyword*. <https://blog.google/products/translate/one-billion-installs/>.

Rapp, Friedrich. 1971. Die Technik in Wissenschaftstheoretischer Sicht. In: Lenk, Hans (ed.). 1971. *Neue Aspekte der Wissenschaftstheorie*. pp. 179-185. Discussion of the prospects for constructing a philosophy of technology analogous to the philosophy of science.

Rapp, Friedrich. 1974. *Contributions to a Philosophy of Technology*. Dordrecht/Boston: D. Reidel Publishing Company.

Rapp, Friedrich. 1981. *Analytical Philosophy of Technology*. Dordrecht/Boston: D. Reidel Publishing Company.

Rapp, Friedrich. 1989. Introduction: General perspectives on the complexity of philosophy of technology. In: Durbin, Paul T. (ed.). 1989. *Philosophy of Technology: Practical, Historical and Other Dimensions*. Dordrecht: Kluwer. pp. ix-xxiv.

Rothwell, Andrew and Svoboda, Tomáš. 2019. Tracking Translator Training in Tools and Technologies: Findings of the EMT Survey 2017. In: *Journal of Specialised Translation*. (32): pp. 26-60.

Sakamoto, Akiko. 2019. Why do many translators resist post-editing? A sociological analysis using Bourdieu's concepts In: *The Journal of Specialised Translation*, (34): pp. 201-2016. https://pure.port.ac.uk/ws/portalfiles/portal/13162370/art_sakamoto.pdf.

Sale, Kirkpatrick. 1995. *Rebels Against the Future: The Luddites and Their War on the Industrial Revolution*. Addison-Wesley Publishing Company.

Sellars, Wilfrid. 1962. Philosophy and the Scientific Image of Man. In: Colodny, Robert (ed.). 1962. *Frontiers of Science and Philosophy*. Pittsburgh: University of Pittsburgh Press.

Srnicek, Nick and Williams, Alex. 2015. *Inventing the Future: Postcapitalism and a World Without Work*. London and New York: Verso.

Susskind, Daniel. 2020. *A World Without Work: Technology, Automation, and How We Should Respond*. New York: Metropolitan Books.

Svoboda, Tomáš. 2014. Man and Machine: Translation in the Era of Augmented Reality. In: *Man vs. Machine?: Proceedings of the XXth FIT*

World Congress. Berlin: BDÜ Weiterbildungs- und Fachverlagsgesellschaft mbH. pp. 93-99.

Svoboda, Tomáš. 2017. No linguistic borders ahead? Looking beyond the knocked-down language barrier. In: *TranscUlturAl: A Journal of Translation and Cultural Studies*. 9(2): pp. 86-108.

Svoboda, Tomáš. 2018. The State of the (trade and) Art in Translation: PEMT Automation, MT and The Future. In: European Parliament (ed.). 2018. *Translation services in the digital world. A sneak peak into the (near) future*. pp. 106-119. https://www.researchgate.net/publication/329034328_The_state_of_the_trade_and_art_in_translation_PEMT_automation_MT_and_the_future. Accessed on: 18 May 2023.

Tiju, Matthew Thomas. 2017. *An Investigation of the Integration of Science, Mathematics and Technology within a Technological Design Context* [PhD thesis]. Hamilton: The University of Waikato.

Thompson, Edward Palmer. 1963. *The Making of the English Working Class*. London: Victor Gollancz Ltd.

Verbeek, Peter-Paul. 2011. *Moralizing Technology: Understanding and Designing the Morality of Things*. Chicago: University of Chicago Press.

Wang, Yixin. 2024. The Impact of Technology on Human Translators and Translation Quality: A Study on Machine Translation and Computer-Assisted Translation Tools. In: *English Linguistics Research*. 13(1): pp. 19-30. <https://doi.org/10.5430/elr.v13n1p19>.

Wartofsky, Marx William. 1979. Philosophy of technology. In: Asquith, Peter D. and Kyburg, Henry Ely (eds.). *Current Research in Philosophy of Science*. East Lansing: Philosophy of Science Association. pp. 171-184.

Wennemann, Daryl J. 1990. An Interpretation of Jacques Ellul's Dialectical Method. In: Durbin, Paul T. (ed.). 1990. *Broad and Narrow Interpretations of the Philosophy of Technology*. Dordrecht: Springer Dordrecht. pp. 181-192. https://link.springer.com/chapter/10.1007/978-94-009-0557-3_13.

Winner, Langdon. 1986. *The Whale and the Reactor: A Search for Limits in an Age of High Technology*. Chicago and London: University of Chicago Press.

World Economic Forum. 2020. *The Future of Jobs Report*. https://www3.weforum.org/docs/WEF_Future_of_Jobs_2020.pdf.

Wu, Yonghui et al. 2016. *Google's Neural Machine Translation System: Bridging the Gap between Human and Machine Translation*.
<https://doi.org/10.48550/arXiv.1609.08144>.

Zuboff, Shoshana. 2019. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. New York: PublicAffairs.