Translators' perspectives on machine translation uses and impacts in the Swiss Confederation:

Navigating technological change in an institutional setting

Paolo Canavese

School of Applied Language and
Intercultural Studies
Dublin City University, Dublin, Ireland
paolo.canavese@dcu.ie

Patrick Cadwell

School of Applied Language and Intercultural Studies Dublin City University, Dublin, Ireland patrick.cadwell@dcu.ie

Abstract

New language technologies are driving major changes in the language services of institutions worldwide, including the Swiss Confederation. Based on a definition of change management as a combination of adaptation measures at both the organisation and individual levels, this study used a survey to gather unprecedented quantitative data on the use and qualitative data on the perceptions of machine translation (MT) by federal inhouse translators. The results show that more than half of the respondents use MT regularly and that translators are largely free to use it as they see fit. In terms of perceptions, they mostly anticipate negative evolutions along five dimensions: work processes, translators, translated texts, the future of their language services and job, and the place of translators within their institution and society. Their apprehensions concern MT per se, but even more the way it is seen and used within their organisation. However, positive perspectives regarding efficiency gains or usefulness of MT as a translation aid were also discussed. Building on these human factors is key to successful change management. Academic research has a contribution to make, and the coming together of translation and organisation studies offers promising avenues for further research.

tive Commons 4.0 licence, no derivative works, attribution,

CC-BY-ND.

1 Introduction

Recent, fast-paced technological developments in the language industry, notably the advent of neural machine translation, are imposing structural and organisational changes in the language services of companies and institutions worldwide. For example, the results of the ELIS 2024 survey indicate that more than 70% of translation departments in national and local agencies and almost all translation departments in international public agencies that participated in the survey have implemented or are implementing MT (ELIS, 2024: 37).¹ Not surprisingly, this wave of change has also hit the Swiss Confederation (Nussbaumer, 2020). Because Switzerland is a multilingual country, the federal institutions rely on a network of language services (LS) within the government and Parliament to communicate in the four national languages - German, French, Italian and Romansh – as well as in English. These LS employ a total of 481 staff members, including translators, heads of service, legal drafters, terminologists, language technology specialists, and trainees.²

Initial, structured, large-scale attempts to integrate MT into the work processes of the Swiss Confederation started in 2019, when 130 DeepL Pro licenses were bought and a specific working group was formed to carry out a test phase. The working group produced an extensive report and a set of recommendations, concluding that MT can be a helpful tool, to be used according to the

^{© 2024} The authors. This article is licensed under a Crea-

¹ Although the actual use is lower, at 34% and 38% respectively (ibid.: 38).

² These statistics were provided by Franco Fomasi (Federal Chancellery) in a private communication with the first author. They refer to the year 2022.

principle: "What you need for yourself, you can machine translate, what you need for others, you better give to a professional!" (Arbeitsgruppe Maschinelle Übersetzung, 2019; see also the relevant press release: Federal Council, 2019). Since then, all staff within the Swiss Confederation, including the LS, has had access to DeepL Pro. At the same time, a Centre of Expertise for Language Technologies (CoELT)³ was set up in November 2020. In addition to providing support and training on CAT tools, MT, and other language technologies, it "keeps track of market developments and, with user involvement, initiates evaluation and procurement projects for appropriate technologies" (ibid.) in order to find the solutions that best meet the needs of the federal administration. In December 2023, after an invitation to tender, the Federal Chancellery confirmed that a new contract had been signed with DeepL (see press release, Federal Chancellery, 2023). As the data collected in this study will show (see Section 4.2), MT is used in very different ways within the LS and work processes are still being adapted to maximise its benefits.

While studies exist on the use of MT within Swiss corporate in-house language services (see, e.g., Girletti, 2022, 2024; Battaglia, 2021), no research has yet focused on the specific case of the Swiss Confederation. This is the thematic focus of SWIFT, a year-long research project that aims to explore the profiles and needs of Swiss federal translators in a rapidly changing technological landscape. It is based on a variety of methods, including the analysis of an *ad hoc* corpus of job announcements, a large-scale survey distributed among the LS of the Swiss Confederation and interviews mostly with translators and heads of service.

This paper is part of the SWIFT project and is based on the results of the survey. It aims to shed light, on the one hand, on how MT is currently being used within the LS. On the other hand, it will also attempt to investigate translators' perceptions of the impact of MT on their work. A further broad aim of the project is to produce preliminary findings that can serve as a basis for supporting a successful change management process. We echo here a common view in business and organisation studies of change

³ See

https://www.bk.admin.ch/bk/en/home/bk/organisation-derbundeskanzlei/zentrale-sprachdienste-sektionterminologie.html (last accessed 13.02.2024) management as an umbrella term encompassing a wide range of dimensions where change is necessary for an organisation to adapt and keep pace with external developments and demands (Lauer, 2021, 3-8; Jansson, 2008: 43-46). In line with Kang (2015), a distinction can be made between macro change management, which is defined as a "[p]rocess or initiative for changes of organizational directions, strategies, structures, processes, or capabilities" and micro change management, which deals with "[t]actics or guidelines for managing intervention implementation process and human factors". Therefore, a successful organisational change cannot occur unless it is embraced at individual and team levels (on individual, team and organisation change, see also Cameron and Green, 2020: 11-140). With regards to the specific case of technological change within the LS of the Swiss Confederation, apart from anecdotal reports, such as Mjölsnes's (2021) essay on the threat of MT to Swiss multilingualism from his perspective as a translator at the Federal Chancellery, the point of view of the actors involved has not yet been the subject of academic studies, although it is a crucial element in empowering individuals and organisations to navigate change.

2 Related research

MT and translation technology have been objects of enquiry in institutional translation research for more than a decade. A number of large "translating institutions" (Koskinen, 2008) have been settings for this research, including various bodies of the European Union and United Nations and especially the European Commission's Directorate-General Translation (DG Translation). This is unsurprising considering DG Translation's active role in the development and promotion of its MT system eTranslation within and beyond the Commission (Mavrič, 2023). Recent studies have also started to shed light on the potential usefulness of MT in smaller institutional contexts with "lesser-used language varieties" such as the bilingual German-Italian South Tyrolean administration (De Camillis et al., 2023).

It is worth remembering that in institutional contexts MT may not be deployed as a tool for translators alone and may also function to provide public access or allow gisting by members of the institution's administration (see e.g.

Kluvanec, 2017). In addition, it is important to note that some institutions contract significant amounts of translation to external services (Svoboda and Sosoni, 2023). As a result, MT is usually not examined in isolation in institutional studies and is more frequently seen in its broader environment of other technologies, processes, and workflows. In particular, authors remind us of the importance of teamwork and the cooperation of professionals to produce translations collaboratively in these institutional environments (Ilja, 2023) and describe contexts in which MT co-exists with other tools that offer translation memories, terminology and background research, quality assurance, and style guiding all in one environment (Lafeber, 2023a).

Early studies of institutional MT use examined the social context of the deployment of MT. They discussed the social and economic constraints and explicit investment decisions that led institutions to turn to MT (Rossi, 2017) and examined ways in which the translators' needs, competences, and well-being factored in their (non-)adoption of MT in their work (Cadwell et al., 2016). They considered translators' emotional responses to change and acceptance of new technologies (Koskinen and Ruokonen, 2017) and addressed perceptions of MT and ways in which fear, a sense of threat, and underlying knowledge of MT influenced its perceived usefulness and actual use among institutional translators (Rossi and Chevrot, 2019). Many studies were interested in issues of human agency and empowerment in the deployment and adoption of MT (Ruokonen and Koskinen, 2017; Cadwell et al., 2018; Rossi and Chevrot, 2019), with some recommending the explicit involvement of translators in technological development and change processes (Cadwell et al., 2018; Rossi and Chevrot, 2019).

More recent studies have focused on institutional translators' knowledge, skills, competences, and the training that is needed for them to work effectively in increasingly technologised environments. Broadly, they are concerned with determining an ideal profile for contemporary institutional translators and discovering the place that MT literacy and technological skills occupy in this profile (Lafeber, 2023b). Authors argue that technological innovation and a need to develop new competence profiles is nothing new and is inevitable (Lafeber, 2023b; Svoboda and Sosoni, 2023). However, it is suggested that the evolution of MT from statistical to neural ma-

chine translation has been particularly impactful on the work of translators in large institutions (Prieto Ramos and Guzmán, 2023).

Knowledge, skills, and competences that have been highlighted as particularly important to institutional translators include critical awareness and general MT literacy, the technological competence and thematic knowledge that allow translators to implement MT appropriately, and flexibility and openness to change (Lafeber, 2023b; Prieto Ramos and Guzmán, 2023; Svoboda and Sosoni, 2023). Authors point to changing role descriptions, dedicated training initiatives to prepare staff for greater role of technology, and newly established user groups and institutional structures as evidence for these new demands (Prieto Ramos and Guzmán, 2023; Svoboda and Sosoni, 2023; Ilja, 2023). Several authors also suggest that a necessary institutional and individual response to these new competence requirements is an increasingly important role for continuing professional development among translators in these institutions (Ilja, 2023; Cadwell et al., 2018; Lafeber, 2023a). Furthermore, authors argue that evolutions in technology and competence profiles go hand-inhand with broader translation process and workflow change and must be accounted for (Mavrič, 2023; Svoboda and Sosoni, 2023). Change management at institutions should benefit from careful planning, sensitive communication, and expert guidance (Svoboda and Sosoni, 2023) and could involve a role for academia to support training (Biel and Martín Ruano, 2023). Overall, making sure that institutional translators can improve, adapt, and prepare for new tasks as technologies evolve is key (Ilja, 2023).

3 Methodology

3.1 Research questions

Based on the background outlined in Sections 1 and 2, this paper sets out to answer the following research questions using an online survey methodology:

RQ1: How widespread is the use of MT within the LS of the Swiss Confederation?

RQ2: How do translators perceive the impact of MT on their work?

As no data are yet available on the use of MT within the Swiss Confederation, RQ1 will allow the as-is situation to be documented within the ongoing change process (see Section 1). These

findings will be used as background data to frame users' perception of MT, found through answering RQ2, which may provide relevant insights to sustain a successful change process, both from the translators' and institutions' perspectives.

3.2 Survey description

The questionnaire was distributed in German, French, Italian and English to all language services of the Swiss Confederation using the LimeSurvey platform. It was launched at the beginning of November 2023 and closed two months later. The invitation to take part in the survey was sent out by a gatekeeper at a Swiss federal institution, who used the mailing list of the Interdepartmental Conference of Language Services (CISL) to contact all heads of service (around 40 recipients), asking them to complete the questionnaire and distribute it within their teams. After a month, a reminder was sent in the same way. In the meantime, the authors leveraged their existing links with federal translators to inform them about the survey, e.g. via email or LinkedIn.

A total of 217 full responses were collected, corresponding to a response rate of 45%, and 12 partial responses were retained because they included relevant information on at least one of the topics covered by the questionnaire.

The questionnaire contained a series of open and closed questions relating to:

- (1) general information about the respondent, e.g. unit, target language, position, mainly used as metadata;
- (2) background, profiles and competences;
- (3) tasks performed;
- (4) use and perception of translation technologies;
- (5) pain points encountered in daily practice.

This study was approved by the University of Geneva's Committee for Ethical Research (CUREG-20230717-208-2) and by Dublin City University's Faculty of Humanities & Social Sciences Research Ethics Committee (DCU-FHSS-2024-008).

3.3 Description of data and methods of analvsis

This paper will mainly report on the results of part 4 of the survey, which included a first closed question on the frequency of use of CAT,

MT, project management tools and terminology management systems, followed by a series of open questions. Respondents who never or rarely use CAT tools and MT tools were asked to explain the reason for their choice, while all other respondents were asked what MT tools they use and how they use them. All respondents were asked a final open question about the perceived impact of MT on their work. The first author carried out a qualitative, thematic analysis (Braun and Clarke, 2012) of the responses to this final question using NVivo to organise and structure the analytical process. Analysis resulted in the identification of different areas of impact (themes) and, for each area, a number of specific changes perceived by respondents (codes). A reasonableness check was subsequently carried out by the second author, who checked part of the coded segments against the rules for inclusion of each code.

4 Results

4.1 Participants background

The data collected have a good level of representativeness. Responses were received from all administrative levels of the Swiss Confederation, i.e. from the language services of the Federal Chancellery, Parliament, Federal Departments (or Departments' General Secretariats) as well as Federal Offices and administrative units within the Departments (see Federal Chancellery 2012 on the organisation of the federal LS). Moreover, the distribution of participants by language (German, French, Italian, English and Romansh) reflects the actual linguistic composition of the LS.

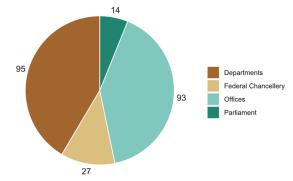


Figure 1: Distribution of participants per unit

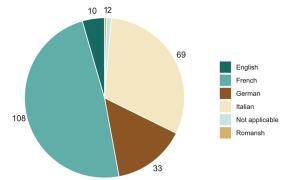


Figure 2: Distribution of participants per language

In terms of employment with the LS, the vast majority of respondents are employed as inhouse translators, followed by heads or viceheads (of LS or of language unit within a LS). As the section on tasks showed, most heads and vice-heads generally have translation and revision tasks in addition to management tasks. This means that they are in a position to give their views both on their own concrete use of MT and on the organisational implications connected to MT. The Federal Chancellery also employs legal drafters, terminologists and technology specialists, who were also invited to take part in the survey, as were trainees in the various LS, in order to ensure the broadest possible variety of views.

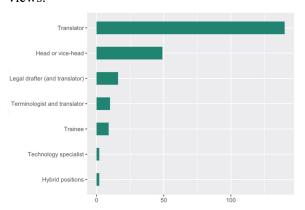


Figure 3: Distribution of participants per position within the LS

4.2 Use of translation technologies and MT

General use of translation technologies

Overall, technology plays an important place within the LS surveyed. In fact, as can be seen in Figure 4, 93.93% of respondents indicated that they use at least one of four broad categories of translation technologies at least a few times a week.

CAT tools are an integral part of the work of federal translators. 80% of respondents indicated

that they use them on a daily basis, and 9.30% a few times a week. Only 3.72% never use them, or use them a few times a year. The reasons for not using CAT tools (N=2) or rarely using them (N=20) are mostly related to ergonomic considerations (which have already been well documented in previous studies, e.g. O'Brien et al. 2017), as well as a general dissatisfaction with the CAT tool currently used. In addition, some respondents mainly perform other tasks, such as legal drafting, and therefore have less opportunity to use them.

MT is the second most frequently used tool, with half of respondents (50.23%) indicating that they use it on a daily basis and 22.33% using it a few times a week. Compared to CAT tools, the percentage of respondents who never use MT or use it only a few times a year is slightly higher (15.81%). These figures are higher than those reported in the ELIS 2024 survey, where only 38% of respondents from language departments within national and international public agencies (ELIS, 2024: 37) reported using MT.

Ways of using MT

All respondents who use MT at least a few times a year were asked a question about how they use it, which was intentionally formulated in a broad way to allow details of individual uses to emerge. The responses (N = 140, 2710 words)revealed a variety of ways in which MT is used, mainly in terms of environment and purpose. For the environment in which MT is used, the most common scenario is direct use within the CAT-tool with a plug-in, confirming the trend of using MT in combination with technologies rather than in isolation (Lafeber, 2023a). In this case, MT is used to get a suggestion if no matches are found in the translation memory. In other cases, the online interface of the MT system is also used, although less frequently. This evaluation of frequency is not only based on the higher proportion of comments in which respondents explain the MT-CAT tool integration scenario; some participants also explicitly stated that they prefer to use it in the CAT tool instead of the online interface.

Regarding the purpose of use, several respondents emphasised that they do not use MT systematically and only do for selected text genres. Some respondents use it only for single sentences, while others use it for full texts.

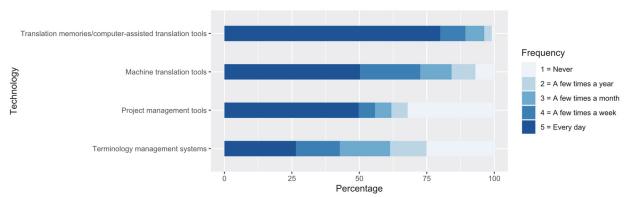


Figure 4: Use of translation technologies.

The use of MT for full texts is often associated with urgent, less important translation jobs ("to process 'throw-away' assignments", R225) in order to increase speed. In addition to being used as a starting point, MT is sometimes also employed after human translation to improve it, for example to look for synonyms or good collocations, as a further suggestion, or to check the completeness of a text. These aspects are closely related to the perceptions of how work processes will change as a result of MT and will be therefore discussed in greater detail in Section 4.3.

Resistance factors

Respondents who never or rarely use MT (N =15 and 37, respectively, for a total of 1030 words) were asked to briefly explain their choice. The most frequently expressed resistance factors (Cadwell et al., 2018) relate to the perceptions of the impact of MT on translated texts and translators, and will be dealt with in more detail in Section 4.3. They concern the low quality and reliability of the output, the lack of time gain associated with PE, as well as reduced satisfaction, increased effort and risk of error when working with MT. Some respondents expressed concerns about confidentiality, but also ethical issues ("I want to deserve my salary", R291),4 described MT as the enemy ("[...] I do not intend to fraternise with the foe", R27),⁵ indicated that they are not allowed to use it within their LS, or simply explained that they do not perceive the need to use it. Finally, some respondents have mainly legal drafting tasks and MT is not suitable for their needs.

4.3 Perceptions of MT impact

After assessing the uses of MT, all participants were asked a broad question about their perception of how MT is impacting or will impact on their work. This single question allowed for the collection of a large amount of data (N = 193, 6173 words), which yielded rich information. Participants' responses indicate five macro-areas of impact, i.e. (i) changes in the work processes within their LS, (ii) changes that directly affect translators, (iii) changes in the linguistic and textual characteristics of the translated texts, (iv) important implications for the future of the LS and the job more generally, and (v) a different position of translators within the institutional network and society.

For each macro area, the responses were grouped into specific changes. Due to the qualitative nature of the analysis, we do not report on the frequency of each code, as frequency is not necessarily an indicator of qualitative significance. Moreover, some codes are closely interrelated and it is not always possible to clearly single them out. Nevertheless, in order to give the reader a sense of the shape of the survey data, rather than make any particular quantitative claims, we use Table 1 to present the macro areas of impact and specific changes in a decreasing order of frequency of mention in questionnaire responses.

In addition, each code was associated with a positive, negative or neutral perception from the respondents' points of view. In general, negative perceptions were expressed more often than positive ones. Moreover, positive perceptions tended to be expressed in a less detailed way. While we discuss positive perceptions in this section, negative perceptions were in the foreground of survey responses.

⁴ Original quote in French: "Je veux mériter mon salaire".

⁵ Original quote in Italian: "[...] non intendo fraternizzare con il nemico."

Macro area	Specific change	Perception (from
of impact	(codes)	the perspective
(themes)		of individuals)
Work	Increased efficiency	Positive
processes	Useful translation aid	Positive
	Increased PE	Mostly neutral
	Centrality of humans	Neutral
	Increased time pres-	Negative
	sure, volumes	
	MT vs. traditional	Neutral/Positive
	translation depending	
	on genre	
	Workflow changes	Neutral/Negative
	Less pressure,	Positive
	reduced volume,	
	more time for im- portant tasks	
	Time loss	Negative
	Increased technical	
	problems	Negative
Translators	Barrier for creativity	Negative
	Concentration,	Negative
	fatigue	
	Need to master new	Neutral
	skills, have a new	
	mindset	
	Intellectual laziness	Negative
	Less satisfaction	Negative
	Temptation to see	Negative
	MT as a shortcut	
	Loss of translation	Negative
	competence, linguistic awareness	
Translated	Less rich language,	Negative
texts	poorer quality	Negative
	More errors	Negative
	Same or higher	Positive
	quality	
	Decreased coherence	Negative
	Different texts	Neutral
Future of LS and job	Staff decrease, poorer	Negative
	conditions	_
	More boring job	Negative
	Death of the	Negative
	profession	
	Need of professional	Neutral/Negative
	retraining	37 . 10-
	New roles, types of translators	Neutral/Negative
	No threat	Nautro1
Translators'	Clients' requests and	Neutral Negative
place within	expectations	rvegauve
institutional	Perception of transla-	Negative
network and	tors from outside	<i>g</i>
society		

Table 1: Macro-areas of impact and specific changes discussed by respondents.

Work processes

The most important area of impact is seen in changes to work processes. This is also the area where the most positive developments are perceived. In line with current uses of MT (see Section 4.2), most of the respondents clearly see an increase in speed, efficiency and productivity, at least for specific text genres, such as simple and non-technical ones (in R201's words, MT is useful "to spare my wrists for very simple texts").6 For more complex texts, such as legislative acts, some respondents expect that traditional translation will continue to be used. Only a minority of respondents highlighted loss of time as a problem associated with the use of MT. In general, MT is seen as a complementary and helpful translation aid, "[i]f used correctly and cum grano salis" (R174). For example, it can be used as a source of inspiration to get new ideas or to understand clumsy wordings in the source text and, more generally, to better understand a poorly written source text. human translators. However. with their knowledge and expertise, should keep a central position in the workflow in order to ensure that quality is maintained:

"It's very useful but the translator has to be in the driver's seat. Staplers, pens, printers and machine translation tools are all useful tools. I decide when to use them and when not to use them". (R51).

As a result of the increasing quality of MT, some participants predict an increase in the importance of PE tasks within their job. While this job evolution is mostly presented in a neutral way, some negative views are expressed about this further technological shift in the workflow, such as the need to deal with time-consuming technical problems. More importantly, a number of respondents anticipate increased volumes and, consequently, higher time pressure and tighter deadlines. At the same time, however, other respondents see this as a potential way of reducing pressure, as some low-risk texts, such as internal communications, will be dealt with directly by clients, leaving the LS with more time to focus on important texts.

Translators

The second most frequently mentioned area of impact concerns the translators themselves, and

⁶ Original quote in French: "pour économiser mes poignets pour des textes très simples".

includes almost exclusively negative perceptions. For some respondents, using MT reduces their creativity and leads them to adopt the machine's style, as they are unable to move away from the machine's suggestion, as stressed by R92:

"given the natural human inclination for the easy way out (in my opinion), it becomes difficult to move away from it once it is displayed (the sentence 'imprisons', so to speak, and hinders the translator's creativity)".

Indeed, for some respondents, MT can lead to a certain intellectual laziness; "we make less of an effort to 'rack our brains" (R270)⁸ and, consequently, a tendency to "think less" spreads. This, combined with stressful situations, can lead to the temptation to see MT as a shortcut and therefore to rely on it too much, with a greater burden on the part of the reviser. Two respondents even see the risk of losing their linguistic awareness and translation competences.

Not only can MT suggestions be a barrier to creativity, but they can also increase the cognitive effort required to post-edit, which was already described as a resistance factor for translators who are not yet using MT (Section 4.2). For some respondents, in fact, a higher level of concentration is needed to identify and correct errors, especially because of the elegant flow of MT suggestions, leading to increased fatigue. This can, ultimately, make the job less satisfying (see Girletti, 2024 on satisfaction related to the use of MT):

"The feeling of 'coming after' a machine is not very gratifying". $(R209)^9$

"I feel like I am serving the system and not the other way around!" $(R90)^{10}$

At the same time, using MT demands to adopt a new mindset and to master new skills. Only by developing an awareness of MT's shortcomings as well as strong PE competences is it possible to use MT effectively. In this respect, the results collected in part 2 of the survey, devoted to profiles and competences, reveals that training to increase MT literacy (Lafeber, 2023b) is currently being offered to federal translators, which in the long term could have a positive impact on their perceptions of MT.

Translated texts

Translated texts are another area of impact with mostly negative views. Overall, once again in line with some of the resistance factors identified in Section 4.2, a number of respondents fear that translations produced using MT will be of poorer quality and reliability also in view of the increasing volume of translations to be produced – and will have a less rich language. In particular, they fear stylistic impoverishment, a simpler language with a less rich and varied vocabulary, and a more standardised and artificial language. They are also concerned about increased (risk of) errors, example undetected mistranslations, terminological inconsistencies, flaws in logical links and, more generally, errors that they perceive would not occur if MT were not used. It can also lead to reduced coherence, which is exacerbated by the combination of MT and CAT tools and the segment-based working method. All in all, respondents who commented on this area of impact expect that translated text based on MT will display differences compared to translations not produced with MT, in line with the hypothesis of "post-editese" which has been extensively researched over the last few years (see, e.g., Castilho et al., 2022; Toral, 2019; Volkart and Bouillon, 2023). Only a few respondents were of the opposite opinion, indicating that using MT does not impact on the final quality, or can even improve it. As stated by R238:

"[...] I achieve a significantly higher linguistic quality than before, the AI gives me good ideas, I have reached a level of text readability and comprehensibility that was previously unthinkable, I have reached a new dimension". 11

⁷ Original quote in French: "eu égard à l'inclination naturelle de l'humain pour la facilité (à mon avis), il devient difficile de s'en détacher une fois qu'elle s'est affichée (la phrase 'enferme', pour ainsi dire, et nuit à la créativité du traducteur)".

⁸ Original quote in French: "on fait moins l'effort de 'se creuser les méninges'".

⁹ Original quote in French: "Ce sentiment de 'passer après' une machine n'est pas très gratifiant".

¹⁰ Original quote in Italian: "Mi sento come se fossi io al servizio del sistema e non il contrario!"

Original quote in Italian: "[...] raggiungo una qualità linguistica nettamente superiore rispetto a prima, l'IA mi dà ottime idee, ho raggiunto un livello di leggibilità e comprensibilità del testo impensato in precedenza, ho raggiunto una nuova dimensione".

Future of LS and job

Perceptions of the future of the language services in particular and of the profession in general are also rather sombre. The most frequently mentioned aspect by respondents concerns the potential reduction in the need for translators due to the increased productivity associated with MT, which could lead to a decrease in staff and possibly a deterioration in working conditions, e.g. in terms of salary. A few respondents go even further and consider that MT will lead to the death of the translation profession, as R291 put it:

"Whatever the thurifers of progress may say, machine translation spells the death of professional translation and the end of humans in communication". 12

For these reasons, some respondents indicated that they were considering a professional retraining, or that at least some translators would have to consider this option. At the same time, a few respondents do not see any threat to their profession. Some of them predict that the profession will change and become more monotonous and boring. Others believe that new roles or types of translators will emerge, such as professionals combining language and technological skills (see, on this, Briva-Iglesias and O'Brien 2022).

Translators' place within the institutional network and society

Finally, a surprisingly recurrent theme concerned the impact of MT on the place of federal translators within their institutional network. Since MT is available to all civil servants within the federal administration, and not only to the LS (see Section 1), translators have noticed changes in the way they interact with internal clients. Instead of using it just for gisting purposes (Kluvanec, 2017), the latter seem to be increasingly using MT themselves, asking the LS for proofreading, sometimes even without providing the source text.

"On a day-to-day basis, however, we also have to contend with authors who increasingly produce their own translations without any knowledge of transla-

¹² Original quote in French: "Quoi qu'en disent les thuriféraires du progrès, la traduction automatique marque la mort de la traduction professionnelle et la fin de l'humain dans la communication".

tion, terminology or post-editing, and in defiance of the guidelines". (R132)¹³

Despite existing guidelines on the use of MT, the risk of unchecked machine-translated texts being published is perceived as real, with potential reputational consequences if the LS partially lose control over the translations produced within their institution. This has also changed clients' expectations in terms of productivity and reasonable deadlines:

"Devaluation of translation by clients. Translators are seen as bilingual secretaries, useful for eliminating the big mistakes that the machine translation tool might make". (R223)¹⁴

This trend was to be expected, given the findings of the ELIS 2024 survey of declining appreciation and unrealistic expectations on the part of internal clients (ELIS, 2024: 24–26). In this respect, there is a clear need to educate clients and inform them on the real potential of MT and its limitations. At the same time, for some respondents, this trend more broadly concerns the image of translators in society. They fear that translators are increasingly seen as dispensable by non-specialists, and that efforts need to be made to justify their role and the added value they can offer.

5 Discussion and conclusions

This paper provides an overview of the use and perception of MT within the LS of the Swiss Confederation. The data on use showed that MT is currently only one of the technologies federal translators resort to in their daily work. Overall, it turns out that each translator is largely free to use, or not use, MT as they see fit. MT seems to be rather seen as a tool, which is used extensively only for urgent, low-risk documents, and as a suggestion in the other cases.

The data on how MT and its impact are perceived within the LS revealed a variety of views and experiences. For example, some respondents anticipate or are experiencing increasing pressure on productivity, while others see MT as a

¹³ Original quote in German: "Im Alltag aber auch Kampf gegen die Autorenschaft, die vermehrt entgegen der Richtlinien ohne Übersetzungs-, Terminologie- oder Post-Editing-Kenntnisse Eigenübersetzungen erstellt".

¹⁴ Original quote in French: "Dépréciation de la traduction par les donneurs d'ouvrage. Les traducteurs/trices sont vu/e/s comme de secrétaires bilingues utiles pour éliminer les grosses fautes que pourrait faire l'outil de traduction automatique".

way of channelling their time and energy into more important tasks. In contrast to the ELIS 2024 survey, in which the number of positive and negative opinions about MT expressed by public and private language departments was virtually equal (ELIS, 2024: 24), respondents to our survey tended to report more frequently and in greater detail on their negative perspectives, fears, resistance factors or unmet needs, which can provide rich insights into what can be done to promote successful change. This study, of course, only provides a snapshot of the current use and perceptions of MT. Tracking these aspects over time may prove useful to shed light on the evolving role of MT and related needs perceived by federal translators.

As emphasised in the introduction, focusing on human factors is key to steering any organisational change process, thus leveraging the positive views of the actors involved and taking measures to mitigate the negative ones. On the one hand, this makes it possible to design functional work processes in which technology is at the service of the translators. On the other hand, it ensures that individuals find meaning and satisfaction in their work and are therefore willing to embrace the necessary change (Herold et al., 2007).

In this respect, two key elements that emerge from the literature, i.e. training (Lafeber, 2023b; Svoboda and Sosoni, 2023) and the involvement of translators in change processes (Cadwell et al., 2018; Rossi and Chevrot, 2019), seem to be a reality in the surveyed context. Continuing professional development provides translators with the competences needed to successfully use new technologies and develop a critical awareness of them (Ilia 2023). The survey data suggest that such training is currently being offered. This finding is in line with the results of the ELIS 2024 survey, where technology emerges as the most frequent training topic in language departments of both public agencies and private companies (ELIS, 2024, 48). This trend can only be encouraged. Along the same lines, the mission of the recently established CoELT to select new technologies by involving users in the evaluation process is undoubtedly very positive.

However, promoting change at the individual level is only one side of the coin and needs to go hand in hand with organisational and strategic change (see e.g. Cameron and Green, 2020). Some of the problems identified by respondents

do not concern MT *per se*, but rather the way it is integrated, seen and used in the institutional network. This concerns, in particular, issues of volumes and deadlines, as well as the needs to raise awareness among text authors of the work carried out by the LS and the added value they can bring, so as to strengthen the spirit of partnership. This is one of the aspects that are currently being explored in more detail in the SWIFT project thorough in-depth interviews with representatives of various federal LS.

Dialogue between universities and institutions can certainly contribute to effective change. In addition to cooperation in the training of translators (Biel and Ruano, 2023), institutions can benefit from research projects that use different research methods and disciplinary lenses. For example, further explorations of theories and approaches to change management may be a promising avenue for further research. The foundations have been laid for collaboration and cross-fertilisation of ideas between organisation studies and translation studies (Westney et al., 2022). Not only translation studies can support the current linguistic turn in organisational studies (Piekkari et al., 2020), but they can also find in organisation studies a source of rich approaches to contextualise micro-aspects of investigation concerning translation (Tietze et al., 2022). In this light, studying the role of new language technologies from an organisational perspective can ultimately enable institutions to keep pace with technological developments and leverage them to fulfil their mission (as laid down in article 7 of the Languages Act)¹⁵ of providing citizens with high-quality multilingual texts.

Acknowledgements and data availability statement: this research was funded by the Swiss National Science Foundation (SNSF) through the Postdoc.Mobility funding mechanism (grant number P500PH_217700). The full questionnaire and responses will be made available in open access at the end of the project.

. .

¹⁵ See Federal Act on the National Languages and Understanding between the Linguistic Communities of 5 October 2007, status as of 1 January 2017 (CC *441.1*, https://www.fedlex.admin.ch/eli/cc/2009/821/en, last accessed 13.05.2024).

References

- Arbeitsgruppe Maschinelle Übersetzung. 2019. Bericht DeepL-Test. Auswertung der Testergebnisse und Empfehlungen der Arbeitsgruppe "Maschinelle Übersetzung" z. H. der KOSD. https://www.newsd.admin.ch/newsd/message/attachments/59735.pdf (last accessed 07.03.2024)
- Battaglia, Mauro. 2021. *Implementing neural machine translation at la Mobilière*. MA thesis, University of Geneva. https://archiveouverte.unige.ch/unige:160784 (last accessed 07.03.2024)
- Biel, Łucja, and M. Rosario Martín Ruano. 2023. How International Organizations Collaborate with Universities in Training Translators. In Tomáš Svoboda, Łucja Biel, and Vilelmini Sosoni, eds., *Institutional Translator Training*, 151–169. New York/Abingdon: Routledge. doi: 10.4324/9781003225249-11
- Braun, Virginia, and Victoria Clarke. 2012. Thematic Analysis. In Harris Cooper, Marc N. Coutanche, Linda M. McMullen, Abigail T. Panter, David Rindskopf and Kenneth J. Sher, eds., *APA Handbook of Research Methods in Psychology, volume.* 2: Research Designs: Quantitative, Qualitative, Neuropsychological, and Biological. Washington: Psychological Association, 57–71.
- Briva-Iglesias, Vicent, and Sharon O'Brien. 2022. The Language Engineer: A Transversal, Emerging Role for the Automation Age. *Quaderns de Filologia: Estudis Lingüístics*, XXVII:17–48. doi: 10.7203/QF.27.24622.
- Cadwell, Patrick, Sharon O'Brien, and Carlos S. C. Texeira. 2018. Resistance and Accommodation: Factors for the (non-)Adoption of Machine Translation among Professional Translators. *Perspectives: Studies in Translatology*, 26:301–321. doi: 10.1080/0907676X.2017.1337210.
- Cadwell, Patrick, Sheila Castilho, Sharon O'Brien, and Linda Mitchell. 2016. Human Factors in Machine Translation and Post-Editing among Institutional Translators. *Translation Spaces*, 5(2):222–243. doi 10.1075/ts.5.2.04cad
- Cameron, Esther, and Mike Green. 2020. Making Sense of Change Management. A Complete Guide to the Models, Tools and Techniques of Organizational Change. 5th ed. London/New York: Kogan Page.
- Castilho, Sheila, and Natália Resende. 2022. Post-Editese in Literary Translations. *Information*, 13(2). doi: 10.3390/info13020066.
- De Camillis, Flavia, Egon W. Stemle, Elena Chiocchetti, and Francesco Fernicola. 2023. The MT@BZ Corpus: Machine Translation & Legal Language. 24th Annual Conference of the Europe-

- an Association for Machine Translation, Tampere, Finland, 171–180. https://aclanthology.org/2023.eamt-1.17 (last accessed 07.03.2024)
- ELIS. 2024. European Language Industry Survey 2024. Trends, Expectations and Concerns of the European Language Industry. https://elissurvey.org/wp-content/uploads/2024/03/ELIS-2024-Report.pdf (last accessed 01.05.2024)
- Federal Chancellery Central Language Services. 2012. The Language Services of the Federal Administration. Bern: Federal Chancellery. https://www.bk.admin.ch/dam/bk/en/dokumente/spra-chdienste/flyer_sprachdienstebverw.pdf.download.pdf/flyer_language_servicesfedadm.pdf (last accessed 07.03.2024)
- Federal Chancellry. 2023. La Chancellerie fédérale acquiert le système de traduction automatique DeepL Pro pour l'administration fédérale. https://www.bk.admin.ch/bk/fr/home/documentati on/communiques.msg-id-99327.html (last accessed 07.03.2024)
- Federal Council. 2019. L'administration fédérale achète un logiciel de traduction automatique. https://www.admin.ch/gov/fr/accueil/documentation/communiques.msg-id-77610.html (last accessed 14.02.2024)
- Girletti, Sabrina. 2022. Working with Pre-translated Texts: Preliminary Findings from a Survey on Post-editing and Revision Practices in Swiss Corporate In-house Language Services. 23rd Annual Conference of the European Association for Machine Translation, Ghent, Belgium, 271–280. https://aclanthology.org/2022.eamt-1.30 (last accessed 07.03.2024)
- Girletti, Sabrina. 2024. Working with Pre-translated Texts: Investigating Machine Translation Postediting and Human Translation Revision at Swiss Corporate In-house Language Services. PhD thesis, University of Geneva.
- Herold, David M., Donald B. Fedor, and Steven D. Caldwell. 2007. Beyond Change Management: A Multilevel Investigation of Contextual and Personal Influences on Employees' Commitment to Change. *Journal of Applied Psychology*, 92(4):942–951. doi: 10.1037/0021-9010.92.4.942.
- Ilja, Merit-Ene. 2023. Translation-related CPD at the European Commission. In Tomáš Svoboda, Łucja Biel, and Vilelmini Sosoni, eds., *Institutional Translator Training*, 216–225. New York/Abingdon: Routledge. doi: 10.4324/9781003225249-17
- Jansson, Jan-Erland. 2008. The Importance of Change Management in Reforming Customs.

- World Customs Journal, 2(2):41–52. https://worldcustomsjournal.org/Archives/Volume %203%2C%20Number%201%20(Apr%202009)/05%20Jansson.pdf (last accessed 07.03.2024)
- Kang, Sung Pil. 2015. Change Management: Term Confusion and New Classifications. Performance *Improvement*, 54(3):26–32. doi: 10.1002/pfi.21466.
- Kluvanec, Daniel. 2017. From Machine Translation at the European Commission to European Language Resource Coordination (ELRC). *EULITA:* #TranslatingEurope Workshop, Vienna, Austria. http://eulita.eu/wp/772-2/ (last accessed 07.03.2024)
- Koskinen, Kaisa, and Minna Ruokonen. 2017. Love Letters or Hate Mail? Translators' Technology Acceptance in the Light of their Emotional Narratives. In Kenny Dorothy, ed., *Human Issues in Translation Technology*, 8–24. London; Routledge.
- Koskinen, Kaisa. 2008. *Translating Institutions: An Ethnographic Study of EU Translation*. Manchester: St. Jerome.
- Lafeber, Anne. 2023a. Translator Training at United Nations Headquarters, New York. In Tomáš Svoboda, Łucja Biel, and Vilelmini Sosoni, eds., *Institutional Translator Training*, 234–243. New York/Abingdon: Routledge. doi: 10.4324/9781003225249-19
- Lafeber, Anne. 2023b. Skills and Knowledge Required of Translators in Institutional Settings. In Tomáš Svoboda, Łucja Biel, and Vilelmini Sosoni, eds., *Institutional Translator Training*, 20–48.
 New York/Abingdon: Routledge. doi: 10.4324/9781003225249-4
- Lauer, Thomas. 2021. Change Management. Fundamentals and Success Factors. Berlin: Springer. doi: 10.1007/978-3-662-62187-5
- Mavrič, Valter. 2023. Translation-related CPD at the European Parliament. In Tomáš Svoboda, Łucja Biel, and Vilelmini Sosoni, eds., *Institutional Translator Training*, 202–215. New York/Abingdon: Routledge. doi: 10.4324/9781003225249-16
- Mjölsnes, Ettore. 2021. Plurilinguismo istituzionale e traduzione automatica. Verso lingue ufficiali mute? *LeGes*, 32(2). https://leges.weblaw.ch/fr/legesissues/2021/2/pluri linguismo-istit_6010a9892a.html (last accessed 07.03.2024)
- Nussbaumer, Markus. 2020. Maschinelle Übersetzung. Eine Revolution (nicht nur) für die Sprachdienste der Bundesverwaltung? LeGes, 31(3). https://leges.weblaw.ch/legesissues/2020/3/maschi

- nelle-ubersetz_f92b5ffeea.html (last accessed 07.03.2024)
- O'Brien, Sharon, Maureen Ehrensberger-Dow, Marcel Hasler, and Megan Connolly. 2017. Irritating CAT Tool Features that Matter to Translators. *Hermes. Journal of Language and Communication in Business*, 56:145–162. doi: 10.7146/hjlcb.v0i56.97229.
- Piekkari, Rebecca, Susanne Tietze, and Kaisa Koskinen. 2019. Metaphorical and Interlingual Translation in Moving Organizational Practices Across Languages. *Organization Studies*, 41(9):1311–1332. doi: 10.1177/0170840619885415.
- Prieto Ramos, Fernando and Diego Guzmán. 2023. Institutional Translation Profiles. A Comparative Analysis of Descriptors and Requirements. In Tomáš Svoboda, Łucja Biel, and Vilelmini Sosoni, eds., *Institutional Translator Training*, 49–72. New York/Abingdon: Routledge. doi: 10.4324/9781003225249-5
- Rossi, Caroline, and Jean-Pierre Chevrot. 2019. Uses and Perceptions of Machine Translation at the European Commission. *The Journal of Specialised Translation*, 31:177–200. https://jostrans.soap2.ch/issue31/art_rossi.php (last accessed 07.03.2024)
- Rossi, Caroline. 2017. Introducing Statistical Machine Translation in Translator Training: From Uses and Perceptions to Course Design and Back Again. *Revista Tradumàtica. Tecnologies de la Traducció*, 15:48–62. doi: 10.5565/rev/tradumatica.195
- Ruokonen, Minna, and Kaisa Koskinen. 2017. Dancing with Technology: Translators' Narratives on the Dance of Human and Machinic Agency in Translation Work. *The Translator*, 23(3):310–323, doi: 10.1080/13556509.2017.1301846
- Svoboda, Tomáš, and Vilelmini Sosoni. 2023. Institutional Translator Training in Language and Translation Technologies. In Tomáš Svoboda, Łucja Biel, and Vilelmini Sosoni, eds., *Institutional Translator Training*, 73–91. New York/Abingdon: Routledge. doi: 10.4324/9781003225249-6
- Tietze, Susanne, Kaisa Koskinen, and Rebecca Piekkari. 2022. Translation Approaches within Organization Studies. In Kobus Marais, ed., *Translation Beyond Translation Studies*, 119–142. London: Bloomsbury Academic. https://shura.shu.ac.uk/30155/ (last accessed 07.03.2024)
- Toral, Antonio 2019. Post-editese: An Exacerbated Translationese. *Machine Translation Summit XVII: Research Track*, Dublin, Ireland, 273–281.

https://aclanthology.org/W19-6627 (last accessed 07.03.2024)

Volkart, Lise, and Pierrette Bouillon. 2023. Are Post-Editese Features Really Universal? *Human-Informed Translation and Interpreting Technology*, Naples, Italy, 294–304. https://archiveouverte.unige.ch/unige:171776 (last accessed 07.03.2024) Westney, D. Eleanor, Rebecca Piekkari, Kaisa Koskinen, and Susanne Tietze. 2022. Crossing Borders and Boundaries: Translation Ecosystems in International Business. *International Business Review*, 31(5). doi: 10.1016/j.ibusrev.2022.102030.