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# HOW CAN AI TRANSLATE?

## BOOK OF ABSTRACTS



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*TALL: a Shiny app of Text Analysis for All. A new tool for linguists and translators.*

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# *Plenaries*



## *Braving a New World: Audiovisual Translation in the Era of Artificial Intelligence*

**Jorge Díaz-Cintas**

Centre for Translation Studies (CenTraS), University College London

The growing demand for multimedia content across global audiences, amplified by the advent of digital platforms and streaming services, requires efficient translation solutions to cater to diverse linguistic and cultural communities. Although technology has traditionally played a pivotal role in the field of audiovisual translation (AVT), be it in subtitling, dubbing or access services, new developments in artificial intelligence (AI) have started to reshape some AVT practices. In my talk, I will present an overview of the most recent developments taking place in the field of AVT, including the impact that translating from lesser used languages is having on workflows, and will conclude with a discussion on some of the cutting-edge AI solutions that are making inroads into the media localisation space.

**Jorge Díaz Cintas** is Professor of Translation and founding director (2013-2016) of the Centre for Translation Studies (CenTraS) at University College London. He is the author of numerous articles, special issues and books on audiovisual translation, including *Subtitling: Concepts and Practices* (with Aline Remael, 2021). Jorge is a frequent speaker at international conferences and events, and has offered consultant services to the European Parliament, European Commission, NATO, OOONA, Deluxe and Netflix, among others. He is the Chief Editor of the series *New Trends in Translation Studies* and the recipient of the Jan Ivarsson Award (ESIST, 2014) and the Xènia Martínez Award (ATRAE, 2015) for invaluable services to the field of audiovisual translation.

## *He said, She said, AI said: Insights into Discourse, Politics and Misogyny*

### **Giuseppe Balirano**

University of Naples L'Orientale

This talk explores the connection between hate speech and the hurdles women face in politics, focusing on how hate discourses can contribute to the marginalisation of women in politics (Krook, 2019, 2020, 2022). In this sense, the concept of ‘linguistic misogyny’ (Cameron, 2020) is employed to emphasise how diamesic variation can nurture harmful discourses impacting women’s lives. Indeed, from social media to everyday conversations, women in politics grapple with gender-based (cyber)violence (Esposito and Zollo, 2021; Esposito, 2022; Balirano, 2023), which poses a threat and a profound challenge. Therefore, this talk adopts a critical lens from Social Media Critical Discourse Studies (SM-CDS; KhosraviNik, 2018; Balirano and Hughes, 2023) to understand and unravel recent digital misogyny. Some reflections are also offered on how AI-generated texts, by feeding on discourses that linguistically privilege the ‘Manthropocene’, can perpetuate semiotic misrepresentations against women (Shrestha and Das, 2022; O’Connor and Liu, 2023). This issue is further exacerbated in translated texts, as highlighted by Prates *et al.* (2020), where gender-inclusive strategies are often eschewed in favour of reinforcing societal biases and inequalities. Therefore, AI-generated texts are strongly biased towards male defaults, calling for the need for discursive practices that challenge ingrained prejudices, ultimately recommending further collaboration between scholars from the worlds of technology, gender studies and public policy to explore algorithmic accountability.

### **References**

- Balirano, G. 2023. On the Margins of the Manthropocene: Semiotic Violence against Women in Politics as a form of Diamesic Creativity. *Margins Marges Margini* 1 (1): 56–78.
- Balirano, G., and Hughes, B. 2023. “The Rainbow Conspiracy: A Corpus-Based Social Media Analysis of Anti-LGBTIQ+ Rhetoric in Digital Landscapes”. In S. Maci, M. Demata, P. Seargent, and M. McGlashan (Eds), *The Routledge Handbook of Discourse and Disinformation*, pp. 306–324. London and New York: Routledge.
- Cameron, D. 2020. “Language, Sexism and Misogyny: The Reception of Women’s Political Speech”. In G. Giusti and G. Iannàccaro (Eds), *Language, Gender and Hate Speech: A Multidisciplinary Approach*, pp. 22–35. Venice: Fondazione Università Ca’ Foscari.
- Esposito, E. 2022. The Visual Semiotics of Digital Misogyny: Female Leaders in the Viewfinder. *Feminist Media Studies* 23 (8): 3815–3831. DOI: 10.1080/14680777.2022.2139279
- Esposito, E., and Zollo, S. A. 2021. ‘How Dare You Call Her a Pig, I Know Several Pigs Who Would Be Upset If They Knew’: A Multimodal Critical Discursive Approach to Online Misogyny against UK MPs on YouTube. *Journal of Language Aggression and Conflict* 9 (1): 47–75.
- KhosraviNik, M. 2018. “Social Media Critical Discourse Studies (SM-CDS)”. In J. Flowerdew and J. E. Richardson (Eds), *Handbook of Critical Discourse Analysis*, pp. 583–596. London and New York: Routledge.
- Krook, M. L. 2019. Global Feminist Collaborations and the Concept of Violence against Women in Politics. *Journal of International Affairs* 72 (2): 77–94.
- Krook, M. L. 2020. *Violence Against Women in Politics*. New York, NY: Oxford University Press.
- Krook, M. L. 2022. Semiotic Violence against Women: Theorizing Harms against Female Politicians. *Signs: Journal of Women in Culture and Society* 47 (2): 371–397.
- O’Connor, S., and Liu, H. 2023. Gender Bias Perpetuation and Mitigation in AI Technologies: Challenges and Opportunities. *AI & Society: Knowledge, Culture and Communication*: 1–13. DOI: 10.1007/s00146-023-01675-4.
- Prates, M.O., Avelar, P.H., and Lamb, L.C. 2020. Assessing Gender Bias in Machine Translation: A Case Study with Google Translate. *Neural Computing and Applications* 32: 6363–6381. DOI:



10.1007/s00521-019-04144-6.

Shrestha, S., and Das, S. 2022. Exploring Gender Biases in ML and AI Academic Research through Systematic Literature Review. *Frontiers in Artificial Intelligence* 5: 1–17. DOI: 10.3389/frai.2022.76838.

**Giuseppe Balirano**, PhD in English Linguistics, is Professor of English Linguistics and Translation at the University of Naples L’Orientale, where he is also the current Director of the University Language Centre (CLAOR) and Rector’s Delegate for Lifelong Learning, E-learning and Multimedia Enhancement. He is the President of the Italian Association for the Study of English (AIA). He is also the Director of the monitoring group on hate speech online at the University of Naples L’Orientale and Principal Investigator (PI) of the PRIN 2022 Project admitted for national funding titled “ECHOES. English studies to Contrast Hate Online and Enhance Solidarity”. He is the BeTwiXt series director, publishing original monographs in the field of linguistics and communication studies. His research interests and publications lie in the fields of multimodal critical discourse studies, humour, masculinity and queer studies, the discursive representation of organised crime and audio-visual translation. His most recent publications include: *The Rainbow Conspiracy: A Corpus-Based Social Media Analysis of Anti-LGBTIQ+ Rhetoric in Digital Landscapes* (2023, with B. Hughes); *Re-Defining Gender, Sexuality, and Discourse in the Global Rise of Right-Wing Extremism* (2021, co-edited with R. Borba); *Homing in on Hate: Critical Discourse Studies of Hate Speech, Discrimination and Inequality in the Digital Age* (2020, co-edited with B. Hughes); *Food Across Cultures: Linguistic Insights in Transcultural Tastes* (2019, co-edited with S. Guzzo); *Queering Masculinities in Language and Culture* (2018, co-edited with P. Baker); *Gardaí & Badfellas: The Discursive Construction of Organised Crime in the Irish Media* (2017); *Humosexually Speaking: Laughter and the Intersections of Gender* (2016, co-edited with D. Chiaro); *Languaging Diversity* (2015, co-edited with M.C. Nisco); and *Masculinity and Representation: A Multimodal Critical Approach to Male Identity Constructions* (2014).



*Dear ChatGPT, please translate*

**David Katan**

University of Salento

We will begin with a short overview of how the translation market is reacting with alarm to the AI phenomenon to then investigate the actual strengths and weaknesses of ChatGPT when it comes to translating languaculture-bound texts. The approach will be informed by the Iceberg Model of culture, which suggests that the most discussed culture-bound issues are 'technical' culturemes, and in reality only affect the tip of the iceberg.

The real questions regarding the trustworthiness or 'perplexity' of AI regard those more hidden parts of the iceberg, those related to audience 'effect' and 'affect'. Though levels of perplexity are changing rapidly, some generalization can be regarding the extent that the translation industry should, indeed, be alarmed.

### References

- ELIS Research (2024) *European Language Industry Survey 2024* <https://elis-survey.org/wp-content/uploads/2024/03/ELIS-2024-Report.pdf>
- Guerreiro, N. M., Duarte M. A., Waldendorf, J., Haddow, B., Birch, A., Colombo, P., & Martins, A. (2023) *Hallucinations in Large Multilingual Translation Models, Transactions of the Association for Computational Linguistics*, 1500-1517.
- Katan, D. (2023) "Tools for transforming translators into homo narrans or 'what machines can't do'" *IATIS Yearbook 2022: The Human Translator in the 2020s*. Gary Massey, Elsa Huertas Barros & David Katan (eds). London: Routledge, pp. 74-90.
- Katan, D., & Taibi, M. (2021) *Translating Cultures: An introduction for translators, interpreters and mediators*. 3rd ed. London: Routledge.
- Mattioda, M., Molino, A., Cinato, L. (2023) *L'intelligenza artificiale per la traduzione: orizzonti, pratiche e percorsi formativi*. Torino: Universtia di Torino
- Jiao, W., Wang, W., Huang, J., Wang, X., & Tu, Z. (2023) *Is ChatGPT A Good Translator? Yes With GPT-4 As The Engine*, url={<https://api.semanticscholar.org/CorpusID:257631519>}

**David Katan** is professor of English and Translation at the University of Salento (Lecce), specializing in intercultural communication, transcreation in AVT and tourism translation. Publications include *Translating Cultures* (3rd edition with Mustapha Taibi), contributions for the Routledge Encyclopaedias of Translation, Translation and Conflict, and Translation and Globalisation; the Benjamins Handbook of Translation Studies and for the Wiley-Blackwell Encyclopedia of Applied Linguistics, and recently co-authored a volume on "The Human Translator" (2023) for Routledge. He is editor-in-chief of *Cultus: the Journal for Intercultural Mediation and Communication*.

He has been keynote speaker for a variety of international conferences in Italy, Australia, Columbia, The Netherlands, Iraq and South Africa; and is currently Visiting Researcher at the University of South Africa.



## *Translation at the speed of light as opposed to what it means to be human*

### **Delia Chiaro**

Alma Mater Studiorum University of Bologna

Language is a manifestation of human intelligence. We are human because we use language. Advancements in artificial intelligence (which, by the way, is neither artificial nor intelligent) and machine translation are tantalizingly efficient and precise, but how do they sit with the notion that colorless green ideas sleep furiously? In other words, do machines have the nuanced understanding of human beings?

We are living in a world where English, the dominant language, is often acquired without a contextual grasp of what traditionally goes by the name of culture. This has resulted in a multicultural global mashup in which whacky English reigns supreme. Rather like the language produced by machines, this mishmash while being formally perfect, may often be lacking in cultural empathy.

This talk will explore the notion of how AI and this new English, both of which are devoid of cultural roots, are to all effects doppelgangers.

**Delia Chiaro's** academic career has spanned over forty years, in half of which she has held the position of Professor of English Language and Translation at the University of Bologna's prestigious Department of Interpreting and Translation.

Delia was part of the first group of scholars in Europe, led by the late Rosa Maria Bollettieri Bosinelli in the mid-1990s, to begin carrying out research within the field of audio-visual translation. Since then, she has run three EU funded summer schools on the subject involving experts and students from seven European institutions – Belgium, France, Germany, Spain, Portugal, Scotland and England as well as directing a successful master's program on Screen Translation. She has organised dozens of conferences, is author of numerous books and over 100 articles and book chapters, She has been invited speaker at conferences and universities all over the world and has, in fact just returned from a series of conferences in Australia. In 2014, she presented her work on dubbing as a Keynote speaker at the European Commission in both Brussels and Luxembourg as part of "Library Days" events aimed to celebrate the semester of Italian Presidency of the EU. Internationally, she is best known for her work on humour for which he has been interviewed by the BBC, The Economist, RISS (Radio Svizzera), Radio Sydney and the journal Mind. At present she is a Principal Investigator in two European projects on humour in the public sphere.

Her forthcoming book, entitled *Comedy in Political Language: How Politicians Use Humour*, will be published by Cambridge University Press later this year and 2025 will see the publication of another book *Dishing the Dirt; Food, Language and Laughter* co-authored with Debra Aarons, published with Taylor and Francis USA.

Delia has served as President of the International Society of Humor Studies (2016-17), an Editorial Board member for *HUMOR: International Journal of Humor Research* and an Affiliated Researcher with the Centre for Comedy Studies Research, Brunel University UK (CCSR).

Beyond academia, her hobbies include knitting, making cakes, socialising and socialism.

# *The transient language of teen TV series and its translation*

## **Irene Ranzato**

Sapienza University of Rome

This presentation focuses on the language of teen series, highlighting some of the main conundrums that both translators and scholars need to consider when dealing with this particular genre of television shows.

The difficulty in analysing and translating teen language lies in the fact that, if well represented, teenagers on screen speak the words of their respective time(s) and teen language is, almost by definition, fleeting, volatile and easily outdated (Eckert 1989, 2003; Kerswill et al. 2007; Mendoza-Denton 2008; Stenström et al. 2002; and Tagliamonte 2016).

After an introduction on the natural and fictional dialogue of teenage speech communities, I will offer an overview of the most interesting and popular teen series in the history of television, which have either been studied or deserve to be studied by linguists and audiovisual translation scholars. In its second part, relevant translation hurdles are considered through the perspective of three TV series from different decades: *Happy Days* (episodes from 1974), *Dawson's Creek* (episodes from 1998-99) and *Skins* (episodes from 2007). The usually rich landscape of cultural references, the distinctive nature of each of these fictional speech communities, issues relative to the specificities of the translation process and, especially, the recognised caducity and transitoriness of youth speech are some of the aspects which are put forward and discussed.

**Irene Ranzato** holds a PhD in Translation Studies from Imperial College London and is associate professor of English language and translation at Sapienza University of Rome (Italy). She is Honorary Research Associate at University College London. Her research interests focus on audiovisual and intersemiotic translation, on the dialectal and social varieties of English and on the intersections between language and ideologies in the analysis of fictional dialogue. Among her publications: the books *Translating Culture Specific References - The Case of Dubbing* (Routledge, 2016) and *Queen's English?: Gli accenti dell'Inghilterra* (Bulzoni, 2017). She co-edited *Linguistic and Cultural Representation in Audiovisual Translation* (Routledge 2018), *Reassessing Dubbing: Historical Approaches and Current Trends* (Benjamins, 2019) and *The Dialects of British English in Fictional Texts* (Routledge 2021) as well as edited collections for the journals *Perspectives*, *Altre Modernità* and *Cultus*. She is the vice-coordinator of the PhD course in Studies in English Literatures, Language and Translation at Sapienza and is currently co-editing *English Classics in Audiovisual Translation* for Routledge and *The Palgrave Handbook of Multilingualism and Language Varieties on Screen*.

### **References**

- Eckert, P. (1989) *Jocks and Burnouts: Social Categories and Identity in the High School*. New York: Teachers College Press.
- Eckert, P. (2003) 'Language and gender in adolescence', in J. Holmes and M. Meyerhoff (eds) *The Handbook of Language and Gender*. Malden, MA: Blackwell Publishing, pp. 381-400.
- Kerswill, P., Cheshire, J., Fox, S. and Torgensen, E. (2007) 'Linguistic innovators: the English of adolescents in London', in *Full Research Report ESRC End of Award Report*, RES-000-23-0680. Swindon: ESRC.
- Mendoza-Denton, N. (2008) *Homegirls: Language and Cultural Practice among Latina Youth Gangs*. Malden, MA: Blackwell Publishing.
- Stenström, A.-B., Andersen, G. and Hasund, I.K. (2002) *Trends in Teenage Talk*. Amsterdam: Benjamins.



Tagliamonte, S.A. (2016) *Teen Talk: The Language of Adolescents*. Cambridge: Cambridge University Press.



UNIVERSITÀ degli STUDI di NAPOLI FEDERICO II



# *Conference Abstracts*

## *AI and (Specialised) Translation*

**Stefania M. Maci**

University of Bergamo

The spread of AI applications has triggered scientific, philosophical, political, social, ethical and legal debates about the pros and cons of AI for humanity. On the one hand, AI is seen as complementary to the human mind, (Hughes 2023). On the other hand, AI is assumed to pose an existential risk to humanity. Both sides agree that AI must be enabled to provide the right assistance to humans by being properly trained and regulated to ensure coexistence between humans and this new revolutionary entity (cf. also the European Commission’s Coordinated plan on Artificial Intelligence 2019 and 2021). To be operational, AI uses large language models (LLMs) to execute instructions. LLMs are mathematical models that calculate either the probability that a sequence of words  $W_1$  to  $W_n$  can occur together in a sentence (Manning and Schütze 1999; Jurafsky and Martin 2000), or the similarity between word sequences (Bengio et al. 2003), thanks to statistics such as likelihood. Language modelling is primarily associated with Natural Language Processing (NLP), which has recently been revolutionised by a new LLM architecture called Transformer. This is a type of deep learning modelling architecture that uses multiple layers of nodes or “neurons” (McCulloch and Pitt 1943) to learn complex patterns and relationships from data.

Transformer was first introduced by Vaswani et al. (2017) for machine translation. In the case of translation, the Transformer takes as input the sequence  $W_n$  (such as “I like my place because it is cosy”) in the encoder and the already translated sequence  $W_{n-1}$  (“adoro la mia casa perché è”) in the decoder to output the word (“cosy”) that has the highest probability of being correct in the target language (i.e. “accogliente”).

With the advent of AI conversational interfaces and chatbots, the debate has mainly focused on the ‘ability’ of AI to translate an infinite variety of texts, including specialised texts. Recent developments in AI have shown that effective chatbots can be built on the basis of an LLM that has been trained with vast amounts of human language, mainly from books and the internet. Their main function is to assist users in generating coherent, contextually relevant and informative text by understanding and predicting words, sentences and even paragraphs. Hence, the aim of this paper is to investigate how chatbots “translate” texts. Specifically, I will try to identify similarities and differences between different chatbots. In doing so, I will also examine the extent to which the translations produced by chatbots may differ from the professional patterns of human translations.

### **References**

- Bengio, Yoshua, Ducharme, Réjean, Vincent, Pascal, and Jauvin, Christian. (2003). A neural probabilistic language model. *Journal of machine learning research* 3: 1137-1155.
- EU Parliament, (2018, 2021) *Coordinated Plan on Artificial Intelligence*. Available at: <https://digital-strategy.ec.europa.eu/en/policies/plan-ai>;  
<https://digital-strategy.ec.europa.eu/en/library/coordinated-plan-artificial-intelligence-2021-review> (15<sup>th</sup> March 2024)
- Hughes, Alex (2023). Why AI will ultimately lose the war of creativity with humanity. *BBC Science Focus*, <https://www.sciencefocus.com/future-technology/ai-art-creativity-war> (15<sup>th</sup> March 2024)



Jurafsky, Daniel and Martin, James H. (2000). *Speech and Language Processing: An Introduction to Natural Language Processing, Computational Linguistics, and Speech Recognition*. Prentice Hall PTR, USA. Available at: <https://web.stanford.edu/~jurafsky/slp3/>

Manning, Chris D., and Schütze, Hinrich (1999). *Foundations of statistical natural language processing*. MIT press

McCulloch, Warren S., and Pitts, Walter. (1943) "A logical calculus of the ideas immanent in nervous activity," *Bulletin of Mathematical Biophysics*, 5(1-2), 115-133.

Vaswani, Ashish, Shazeer, Noam, Parmar, Niki, Uszkoreit, Jakob, Jones, Llion, Gomez, Aidan N., Kaiser, Łukasz, Polosukhin, Illia (2017). Attention is all you need. In *Proceedings of the 31st International Conference on Neural Information Processing Systems (NIPS'17)*. Curran Associates Inc., Red Hook, NY, USA, 6000–6010.

## *How can AI translate specialized and non-specialized magazine articles?*

**Linda Rossato**

**Giuseppe De Bonis**

Ca' Foscari, University of Venice

For centuries, human translation has been the only means of interlingual communication. However, in the digital age, computer-aided translation (CAT) tools such as translation memories (TM) and machine translation (MT) have brought both opportunities and challenges, leading to an increased collaboration between human and machine input in the translation industry. The use of readily available automated translation platforms, based on Artificial Intelligence (AI), has accelerated this collaboration exponentially. While the benefits of using AI technology, which can process vast amounts of data instantly, are self-evident and can be summarised in a few key words - time and cost efficiency, global reach, and real-time communication between speakers of different languages at the click of a mouse - its drawbacks are more complex to pinpoint.

The use of easily accessible automatic translation tools raises technical and ethical issues regarding the accuracy of machine-translated texts and the potential for unfair competition between humans and machines in translation processes. Currently, human-machine collaboration is necessary, but the increasing reliance on machines leaves less and less room for human intervention.

This study presents a comparative analysis of a consistent number of articles translated into Italian and published in various specialized and non-specialized magazines over a year. The published translations are compared with machine-translated versions of the source texts produced by two different AI machine translation tools, namely DeepL and Google Translate. The analysed translated articles were sourced from Italian popular magazines such as *Internazionale* and *Abitare*, as well as the Italian version of the international *National Geographic*.

This paper examines the importance of human translators' adaptation strategies in accurately conveying the scientific content of popular science articles into the target language while also making culture-bound aspects of the language accessible to the target readers. This paper argues that the highest quality translations in dealing with hybrid text genres, such as popular science journalistic articles, are achieved through the optimal combination of human translation and artificial intelligence.



# *Is AI Drawing the Line? Recombining Human and Artificial Skills for Intersemiotic Transcreation. A Test on Text-to-Image Generators*

## **Francesco Meledandri**

University of Bari “Aldo Moro”

Within the realm of the Digital Revolution, advances in Artificial Intelligence (AI) have surely represented a breakthrough on a global scale. While far off from its peak though with a limitless potential of development (Grace et al., 2024), AI has quietly permeated our lives for some years, redefining the scope of human-computer interaction (Grudin, 2009; Harper, 2019) and questioning the role of new, overriding artificial tasks in everyday activities. The improvement AI has shown in the last couple of years, boosted by the development of LLMs (Large Language Models) developed by huge stakeholders such as OpenAI, Microsoft and Google (Dao, 2023), led to a new frontier in the use of data used to train such models. Generative AI (GenAI) – which “focuses on developing algorithms and models capable of generating synthetic data that closely resemble real-world data” (Bandi, 2023, p.1) – raises ethical issues concerning the notion of truth (Tredinnick & Laybats, 2023); yet, it has the potential to create any contents via human-induced prompts. The most accessible and ready-to-use technology is text-to-text GenAI (such as ChatGPT), but other services based on other input-output systems aim at covering the widest range of human-like forms of language interactions. In this sense, AI-based image generators are a case in point. Trained on large datasets of existing images, such services are able to create realistic representations from scratch, based on a simple textual prompt. This means that a proper form of intersemiotic translation is envisaged (Jakobson, 1959, p.261), a process that may imply a resemanticisation of a source message into new meanings and related interpretations (Dusi, 2015). Against this background, this presentation aims at making the most of the potential offered by AI tools, following a precise rationale based on the combination with human skills in prompting effective messages in an interlingual perspective. If GenAI is able to replace humans in this (re)creation process, then, human capabilities could take advantage of this technology to conceive creative messages – a sort of translation of translated images – which need to be used when transcreation is to be preferred over “simple” translation (Díaz-Millón, 2021). In more practical terms, a case study would test the effectiveness of AI image generators (such as Dall-E and Midjourney) to create messages that fit the communicative needs of another language (i.e. English >> Italian) for creative purposes, such as marketing or even educational scenarios (Yu & Guo 2023), proving that natural and artificial intelligences need to be intertwined wisely to enhance state-of-the-art productivity in the field of translation.

### **References**

- Bandi, A., Adapa P.V.S.R., & Kuchi Y.E.V.P.K. (2023). The Power of Generative AI: A Review of Requirements, Models, Input–Output Formats, Evaluation Metrics, and Challenges. *Future Internet, Volume 15, Issue 8*. DOI: 10.3390/fi15080260
- Dao X.Q. (2023). Performance Comparison of Large Language Models on VNHSGE English Dataset: OpenAI ChatGPT, Microsoft Bing Chat, and Google Bard. *arXiv:2307.02288*. DOI: <https://doi.org/10.48550/arXiv.2307.02288>
- Díaz-Millón, M., & Olvera-Lobo, M.D. (2023). Towards a definition of transcreation: a systematic literature review. *Perspectives, Volume 31, Issue 2*, pp. 347-364.
- Dusi, N. (2015). Intersemiotic translation: Theories, problems, analysis. *Semiotica, Volume 2015, no. 206*, pp. 181-205.



Grace, K. *et al.* (2024). Thousands of AI Authors on the Future of AI. *Preprint*. Retrieved from [https://aiimpacts.org/wpcontent/uploads/2023/04/Thousands\\_of\\_AI\\_authors\\_on\\_the\\_future\\_of\\_AI.pdf](https://aiimpacts.org/wpcontent/uploads/2023/04/Thousands_of_AI_authors_on_the_future_of_AI.pdf)

Grudin, J. (2009). AI and HCI: Two Fields Divided by a Common Focus. *AI Magazine, Volume 30, Issue 4*, pp. 48-57.

Harper, R.H.R. (2019). The Role of HCI in the Age of AI. *International Journal of Human-Computer Interaction, Volume 35, Issue 15*, pp. 1331-1444. DOI: 10.1080/10447318.2019.1631527

Jakobson, R. (1959). On linguistic aspects of translation. In R., Brower (Ed.). *On translation*, pp. 232–239. Cambridge, MA: Harvard University Press.

Tredinnick, L., & Laybats, C. (2023). The dangers of generative artificial intelligence. *Business Information Review, Volume 40, Issue 2*, pp. 46-48.

Yu, H., & Guo, Y. (2023) Generative artificial intelligence empowers educational reform: current status, issues, and prospects. *Frontiers Education, 8:1183162*. DOI: 10.3389/feduc.2023.1183162

## “Weisung, Meirei, Ayimonkos, Directive?”: The Challenge of Dubbing and Subtitling AI Robot Voices

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The interplay between sight and sound is one of the biggest concerns in audiovisual translation. Unlike dubbing, and subtitling for Deaf viewers, commercial subtitling does not allow for a representation of para-verbal means of speech. As aptly demonstrated by Smith (2007), and Bosseaux (2008), voice plays a very significant role in the semiotic fabric of films in terms of performance and characterization. This paper takes as its starting point the cognitive function of voice in robot movies in order to advance a new reading of dubbing and subtitling robot voices, one which sees the para-verbal manifestations of speech as an audiovisual category which is able to manifest the interconnection between human mind and robotic work.

Such an animated movie as *Wall-E* (2008) not only envisions its own detailed blueprints of robotic sounds and voices, but is also an audiovisual product examining the human-machine cooperation. Robots exhibit an appearance of free will and emotions similar to humans which are expressed with body language and robotic sounds. I intend to track through these references and look at the issues – the role of dubbing in the preservation of AI specificity, subtitling strategies for rendering para-verbal means of robotic speech, etc – which they raise.

But my central purpose will be to re-read the aforementioned animated movie from a cognitive perspective by employing such conceptual tools as figure/ground alignment, deictic shift theory, cognitive construction, and parabolic projection in order to demonstrate that human beings and AI robots can cooperate to produce a successful audiovisual product. Through *Wall-E*, whose voice was provided by Ben Burtt, sound designer, mixer, editor who created such memorable sound effects as the droids and other non-human creatures in the *Star Wars* movies, I suggest audiovisual translation may be considered as a paramount example of human-AI interaction.

### References

- Bosseaux, Ch. (2008). Buffy the Vampire Slayer Characterization in the Musical Episode of the TV Series. *The Translator* 14(2), 343-72.
- Fleeger, J. (2019). When Robots Speak on Screen. Imagining the Cinemechanical Ideal. In Nina Eidsheim, and Katherine Meizel (eds), *The Oxford Handbook of Voice Studies*. Oxford: Oxford University Press, 419-436.
- Herman, D. (2009). Cognitive Approaches to Narrative Analysis. In Geert Brone and Jeroen Vandaele (eds), *Cognitive Poetics: Goals, Gains, and Gaps*. Berlin and New York: Mouton de Gruyter, 79-118.
- Langacker, W. (1987). *Foundations of Cognitive Grammar*, Stanford, CA: Stanford University Press.
- Smith, S. (2007). Voices in Film. In John Gibbs and Douglas Pye (eds), *Close-Up 02*, London and New York: Wallflower Press, 159-238.
- Stockwell, P. (2002). *Cognitive Poetics. An Introduction*. London and New York: Routledge.
- Talmy, L. (2000). *Toward a Cognitive Semantics*. Cambridge, MA and London: MIT Press.
- Vandaele, J. (2012). What Meets the Eye: Cognitive Narratology for Audio Description. *Perspectives: Studies in Translatology* 20(1), 87-102.

## *Automatic generated interlingual subtitling and the need for human intervention*

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Automatic speech recognition technologies (ASR) are “language-specific computer programmes that convert spoken input into written text in the language of the original speech” (Ciobanu and Secară (2019: 92). ASR technologies are widespread in terms of applications, and their use increases accessibility in several fields. Introduced in 2009 and further improved in the following years, YouTube’s auto-captioning technology, built on Google’s speech recognition technology, allows users to automatically provide subtitles for the videos they upload on the platform (Harrenstien, 2009). Since their early beginnings, speech recognition technologies have improved remarkably. Nevertheless, they still face several challenges. Indeed, various factors can concur to inaccuracy in ASR outputs. As claimed by Ciobanu and Secară (2019: 98), the main challenges faced by ASR technologies are related to linguistic issues, such as the disambiguation of homophones, the lack of recognition of named entities (people, institutions, brands), the specificities of spoken language (among which different accents or pronunciations), as well as the tendency to produce pauses, hesitations, or false starts, which can potentially impact the accuracy of automatic subtitles. This obviously has an impact on another form of subtitling, namely automatic interlingual subtitling. As Karakanta, Negri and Turki (2020: 63) observe, the significant rise in the number of films, documentaries, and videos available online “has led to a growing need for Machine Translation (MT) of subtitles in various applications”. In fact, Multimodal MT technology has been integrated into various platforms, including YouTube. The purpose is to supply auto-generated interlingual subtitles in instances where official ones are unavailable. However, just as interlingual subtitles are not always accurate and reliable, the same can be said about automatic interlingual subtitles. This presentation will present the results of a practice-based study conducted with a group of students of the MA degree programme in Foreign Languages for International Communication of the University of Turin, involving the analysis of YouTube’s automatic generated interlingual subtitles and their flaws, and the subsequent need for human intervention in a post-editing phase.

### **References**

- Ciobanu, D., & Secară, A. (2019). Speech recognition and synthesis technologies in the translation workflow. In O’Hagan M. (Ed.), *The Routledge Handbook of Translation and Technology*, London: Routledge. Book, 91-106.
- Harrenstien, K. (2009, November 19). “Automatic captions in YouTube” [Blog post]. Retrieved from <https://googleblog.blogspot.com/2009/11/automatic-captions-in-youtube.html>.
- Karakanta, A., Negri, M., and Turki, M. (2020). Towards Automatic Subtitling: Assessing the Quality of Old and New Resources. *Italian Journal of Computational Linguistics*, Volume 6, Number 1, 63-76.

## *Queer languages in subtitling and translation: issues of automation and representativity*

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In the twentieth century, Polari was considered by English homosexual men as the language through which they could freely express their queerness and sexual preferences without the fear of being charged with a crime if police officers or passers-by overheard their unlawful conversations (see Baker 2002a; 2002b). The popularisation of Polari through the Julian and Sandy sketches (ibid.) and a reduced need to hide own's homosexuality as a result of sociopolitical breakthroughs led last century's speakers to a disinterest towards this creative antilanguage (see Halliday 1978). Nevertheless, more recent studies on camp languages have recorded the constant interest of queer speaking communities for creative linguistic mechanisms to express their identities and reclaim negatively connoted concepts (see Johnsen, 2008; Ranzato, 2012). As part of a broader PhD research project, the present study aims to investigate the representation of Modern English Queer Slang in audiovisual products and its linguistic and cultural adaptation to the Italian context.

Since technological advancements have made the translation process and product change and adapt to contemporary globalised and consumeristic needs (see Munday 2016), the present research aims to verify the ability of automated closed captioning and machine translation to represent and properly adapt Modern English Queer Slang in subtitling. Finding its theoretical grounds in the domains of audiovisual translation (AVT) and queer translation (see Harvey 1998/2012) and employing Vinay and Darbelnet (1958/1995) and Pedersen's (2005) methodologies, the current study employs the official English and Italian subtitles provided for the TV show RuPaul's Drag Race UK Season 3 as main corpus of analysis for lexicological and translation intents.

The goal of this research is twofold. On the one hand, it aims to verify the linguistic and cultural appropriateness of subtitles created through automated processes in transcribing and translating slang languages. On the other, it seeks to reflect on the consequences that the obtained results may have for the representation and identification practices of speaking communities that are still marginalised in contemporary societies. By conceiving audiovisual products as heavily contributing to the contemporary zeitgeist, this research also seeks to stress the importance of proper subtitles for sociopolitical representation.

### **References**

- Baker, P. (2002a.) *Polari. The lost language of gay men*. Taylor & Francis Routledge. London and New York.
- Baker, P. (2002b.) *Fantabulosa: A Dictionary of Polari and Gay Slang*. London. Continuum Intl Pub Group.
- Halliday, M. A. K. (1978). *Language as Social Semiotic: The Social Interpretation of Language and Meaning*. London: Edward Arnold.
- Harvey, K. (1998/2012). Translating camp talk: Gay identities and cultural transfer. In L. Venuti (ed.) *The Translation Studies Reader*, 3rd edition, 344-64.
- Johnsen MA, O. R. (2008). "He's a Big old girl!" Negotiation by gender inversion in gay men's speech. *Journal of homosexuality*, 54(1-2), 150-168.
- Munday, J. (2016). *Introducing Translation Studies: Theories and Applications*. London and New York. Routledge.
- Pedersen, J. (2005). *How is Culture Rendered in Subtitles?*. EU-High-Level Scientific Conference Series. MuTra 2005 – Challenges of Multidimensional Translation.



Ranzato, I. (2012). Gayspeak and gay subjects in audiovisual translation: strategies in italian dubbing. *Meta*, 57(2), 369-384.

Vinay, J. & Darbelnet J. (1958/1995). *Comparative Stylistics of French and English: A Methodology for Translation*. Amsterdam and Philadelphia: John Benjamins.



## *Ethical Dimension of Translation. AI or not: Do we still speak Human?*

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The sense of freedom our forefathers acknowledged and recognized as such stopped permeating our horizons since our digital caves made us consensual, symbiotic captives. The written word, intoxicated by code, by written code, has been intrinsically tied to basic significance and made us tributary to information, fast and steady pushing us away from the light of knowledge. The light of truth has been interspersed with sequential beams of foggy, deep fake news and shady contents ceaselessly streaming from media outlets worldwide. Are we, humans, in need of claiming our innate right for words of truth while facing digital caves of all sorts? Are we intoxicated by digital code and imagery in the way in which the prisoners in Plato's cave have been bound by mythical and narrative images? We are tied to the digital screen and refuse to let go, bound to streams of AI (re)claiming our entire, precious, inner self? Are we using our Intelligence enough while obliviously visiting and considering the perspective(s) of AI invading all our areas of life, under the pretext of technological leaps to a glorious future in the Metaverse? Will we still speak Human at the dawn of AI supremacy? While navigating shady waters of ethical considerations, digital advancements, and ever evolving demands of a globalized world to rewrite (translate or interpret as a matter of fact) cross cultural, communicational and linguistic boundaries, we need a compass. We need a performant moral compass not only in interpreting and translating texts, but in speaking Human as well, while pondering upon the dawn of a new era, of a new age in which being, not only speaking Human, is turning into a never before encountered challenge. Our humanity is at stake along with our humane way of living. We are at a threshold of times when it is required of us to be naturally intelligent, creative and resilient, profoundly grounded in our human values, our history and tradition, in order to be able to stand tall in our Humanity. The present paper is an attempt to discuss Human versus Machine Translation following a subjective ethical dimension of it at the dawn of Infocracy.

# *Translating Environmental Emotions: Human-Crafted and AI-Generated Neologisms in Climate Crisis Narratives*

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This study explores the intersection between neologisms and the issue of climate change, elucidating the dynamic evolution of language in response to environmental challenges (Stibbe, 2020). By focusing on insights into the simultaneous processes occurring in individuals' minds when dealing with emotions related to climate change, this paper draws upon concepts related to concept-formation and translating emotions into neologisms (Shmid, 2008). The reference is to Glenn Albrecht's work in *Earth Emotions: New Words for a New World* (2019), where he presents a list of twelve neologisms to express emotions related to the relationship between humans and nature, known as psychoterratic states. Of these twelve terms, seven are classified as negative psychoterratic states, while five are classified as positive psychoterratic states. Albrecht's neologisms aim to translate unprecedented emotions arising from the current climate crisis and the increasingly tangible threats it poses. In doing so, Albrecht provides a detailed explanation of the motivations and choices behind each neologism, allowing us to trace the path of verbal creation. However, verbal creation is no longer exclusively within the domain of the human mind; it can also be facilitated by language models (LLMs). Therefore, this study aims to test the ability of the most famous and widely used LLM, ChatGPT, to create neologisms related to the climate crisis. Specifically, Albrecht's neologism descriptions were used as prompts to verify similarities and differences in the resulting words, given the same initial meaning. Employing Critical Discourse Analysis tools (Statham, 2021; Fairclough, 2010; Van Dijk, 2009; Kress, 1985) and the Appraisal Theory approach (Martin & White, 2005), the purpose of this study is to investigate the form and motivation of both human-crafted and AI-generated neologisms, measure their attitude and engagement, and illuminate how language reflects and shapes perceptions of environmental issues.

## **References**

- Albrecht G. (2014). "Ecopsychology in 'The Symbiocene' ", in *Ecopsychology* 6 (1): 58–59.
- Albrecht, G. (2005) "Solostalgia: A New Concept in Human Health and Identity" in *PAN* 3: 44-59.
- Albrecht, G. (2019). *Earth Emotions. New Word for a New World*: Cornell University Press.
- Bassnett, S. (2014). *Translation Studies*: Routledge.
- Cronin, M. (2017). *Eco-Translation: Translation and Ecology in the Age of the Anthropocene (New Perspectives in Translation and Interpreting Studies)*: Routledge.
- Fairclough, N. (2010). *Critical Discourse Analysis: The Critical Study of Language*: Routledge.
- Goldman, A. and McGrath M. (2017). *Epistemology: A Contemporary Introduction*: OUP USA.
- HU, G. (2020). *Eco-Translatology: Towards an Eco-Paradigm of Translation Studies*: Springer Nature.
- Kress G. (1985), *Linguistic Processes in Sociocultural Practice*: Deakin University.
- Martin J. R, White P. R. (2005). *The Language of Evaluation*: Palgrave Macmillan
- Rees, W.E. (2018). "Planning in the Anthropocene", Chapter 5 in Gunder M., A Madinipour A. and Watson V. (eds), *The Routledge Handbook of Planning Theory*: Routledge.
- Shmid, H.J. (2008). "New Words in the Mind: Concept-formation and Entrenchment of Neologisms" in Anglia. *Journal of English Philology* (De Gruyter) 126 (1): 1-36.
- Sobel, D. (1999). *Beyond Ecophobia: Reclaiming in Heart in Nature Education*: Orion Society.





- Statham, S. (2021). *Critical Discourse Analysis: A Practical Introduction to Power in Language*. Routledge.
- Stibbe, A. (2020). *Ecolinguistics: Language, Ecology and the Stories We Live By (2nd edition)*: Routledge.
- Van Dijk, T.A. (2009) “Critical Discourse Studies: A Sociocognitive Approach”, in R. Wodak and M. Mayer (eds) *Methods of Critical Discourse Analysis*: Sage, 62-86.

# *Subtitling Justice: Exploring Computer-Assisted Translation in Legal TV Series*

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The presence of a specialised discourse within a screen product poses some unique challenges in the subtitling of legal dramas, such as the need for accuracy and adherence to legal terminology as well as time and space constraints of the audiovisual text. Despite these issues, both Machine Assisted Human Translation (MAHT) and Human Assisted Machine Translation (HAMT) may be extremely beneficial in subtitling a legal TV series. My paper aims to analyse the application of a computer-assisted translation (CAT) tool (SmartCAT) in the English-Italian subtitling of episode 01x01 of the American legal drama *For the People* (2018), thus illustrating the potential and the limitations of using new technologies in AVT. A two-step approach is adopted: 1. SmartCAT is used to provide an accurate and effective Italian translation of the English script; 2. the translated script is integrated into the subtitling program AegiSub to tailor line lengths, timing, and phrasing to the on-screen action. Given the distinctive linguistic and textual nature of legal dramas, despite the help of machine translation, human translators would be still essential to provide an accurate and high-quality translation of the legal TV series and to ensure that the subtitles meet the space-time constraints of the audiovisual text. My proposal intends to target the issue of the intersection of translation technology and audiovisual content, specifically in the legal domain, and to stimulate further research and discussion on the ethical and practical implications of applying CAT tools in the entertainment industry.

## **References**

- Diaz-Cinats, J. (Ed.). (2009). *New Trends in Audiovisual Translation*. Multilingual Matters.
- Diaz-Cintas, J. (2012). Subtitling. Theory, Practice and Research. In Millan, C., & Bartrina, F. (Eds.), *The Routledge Handbook of Translation Studies* (pp. 273-287). Routledge.
- Freddi, M., & Pavesi, M. (Eds.). (2009). *Analysing Audiovisual Dialogue. Linguistic and Translational Insights*. CLUEB.
- Hatim, B., & Munday, J. (2004). *Translation: An Advanced Resource Book*. Routledge.
- Monti, J. (2019) *Dalla Zairja alla traduzione automatica. Riflessioni sulla traduzione nell'era digitale*. Paolo Loffredo Editore.
- Piazza, R., Bednarek, M., & Rossi, F. (Eds.). (2011). *Telecinematic Discourse: Approaches to the Language of Films and Television Series*. John Benjamins Publishing Company.
- Perego, E. (2005). *La traduzione audiovisiva*. Carocci Editore.
- Scarpa, F. (2008). *La traduzione specializzata. Un approccio didattico-professionale*. Hoepli.
- Villez, B. (2005). *Television and the Legal System*. Routledge.

## *Translating Women's Health: Assessing ChatGPT's Efficiency in Multilingual Medical Communication*

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**Context:** The pervasive influence of gender bias in machine translation (MT) systems has emerged as a significant matter of concern, particularly in sensitive fields such as health (Stanovsky et al., 2019; Savoldi et al., 2021; Farkas & Németh, 2021). For instance, the incorrect assumption of a patient's gender based on their condition, or the mistranslation of gender-neutral terms can lead to misunderstandings, misdiagnoses, or the perpetuation of stereotypes, potentially impacting the patient's treatment and well-being. Indeed, previous literature shows that MT experiences difficulties with grammatical gender by explicitly or implicitly gendering the source phrase when referring to a human individual (Ghosh & Caliskan, 2023; Měchura, 2022). This issue is not merely a technical glitch; but rather seems to stem from deeper societal biases that are inadvertently encoded into the machine learning models during their training phase (Nemani et. al, 2024 Turney, 1995, Mehrabi et al., 2021); Conversely, professional translators boast culturally-nuanced understanding and sensitivity to context, and greater ability to capture meanings that transcend the literal text, thereby minimizing potential gender-biased interpretations.

**Objective:** To investigate the extent and implications of gender bias in MT, focusing on the performance of AI-driven models like ChatGPT in comparison with traditional human translations (HT). Ultimately, this paper seeks to contribute to the broader discourse on ethical AI development, and on the need for equitable, accurate health information dissemination across languages and genders.

**Methodology:** Grammatical, terminological and morphological analysis for potential gender bias identification will be carried out based on a specially selected corpus, comprising a set of health-related texts, including medical guidelines for patients, and medical articles, to ensure a broader spectrum of vocabulary and contexts. The study will feature a comparative analysis between human and ChatGPT's performance on translations from English into Italian and Spanish, two gender-inflected languages. For the purpose of the analysis, the authors will use AI-powered gender bias identification tools, as well as official guidelines.

**Outcomes:** The underlying hypothesis is that in-depth examination will reveal intricate gender-biased manifestations in MT in the health sector. On the contrary, human translators will prove more sensitivity to context and gender nuances due to the translators' cultural awareness and linguistic competencies. In contrast, ChatGPT's translations will reveal systemic biases (eg. the use of female inflection for the word "nurse"), reflecting the limitations of its training data and algorithms, especially in Italian and Spanish.

## References

- Farkas, A., & Németh, R. (2022). How to measure gender bias in machine translation: Real-world oriented machine translators, multiple reference points. *Social Sciences & Humanities Open*, 5(1), 100239. <https://doi.org/10.1016/j.ssaho.2021.100239>
- Ghosh, S., & Caliskan, A. (2023). ChatGPT perpetuates gender bias in machine translation and ignores non-gendered pronouns: Findings across Bengali and five other low-resource languages. *arXiv*. <https://doi.org/10.48550/arXiv.2305.10510>
- Měchura, M. (2022). What You Need to Know About Bias in Machine Translation. *Slator*. <https://slator.com/what-you-need-to-know-about-bias-in-machine-translation/>
- Mehrabi, N., & Pashaei, E. (2021). Application of Horse Herd Optimization Algorithm for medical problems. *IEEE Xplore*. <https://doi.org/10.1109/INISTA52262.2021.9548366>
- Nemani, P., Joel, Y. D., Vijay, P., & Liza, F. F. (2024). Gender bias in transformers: A comprehensive review of detection and mitigation strategies. *Natural Language Processing Journal*, 6(6), 100047. <https://doi.org/10.1016/j.nlp.2023.100047>
- Savoldi, B., et al. (2021). Gender Bias in Machine Translation. *Transactions of the Association for Computational Linguistics*, vol.9, pp.845–874. <https://acrobat.adobe.com/id/urn:aaid:sc:EU:0323a4e2-a1bf-4b2d-bf92-4ba973a2ccd4>
- Stanovsky, G., Smith, N., & Zettlemoyer, L. (2019). *Evaluating Gender Bias in Machine Translation*. <https://arxiv.org/pdf/1906.00591.pdf>
- Turney, P. (1995). Technical Note: Bias and the Quantification of Stability. *Machine Learning*, 20(1/2), pp. 23–33. <https://doi.org/10.1023/a:1022682001417>

## *Translating Cultural Milkscapes: A Corpus-Based Cross-linguistic Analysis of Breastfeeding Discourses in Italian and English News*

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Mothers are increasingly seen as ‘risk managers’ (Furedi, 2002 / Reese, 2005 / Lee, 2008) responsible for mitigating potential dangers for their children, thus leading to a rise in seeking expert guidance in parenting decisions (Knaak, 2006). Due to societal pressures and judgments, decision-making concerning childbirth and breastfeeding is heavily influenced, with pro-breastfeeding organisations sometimes adopting a judgmental tone to dissuade formula feeding by appealing to women’s conscience and instilling guilt. In this respect, scholars (Kukla, 2006 / Avashai, 2007 / Wolf, 2007 / Lee & Bristow, 2009) have noticed a shift in the discourse surrounding breastfeeding, emphasising its moral dimension over health-related issues. This moralisation has resulted in the redefinition of breastfeeding as a benchmark for ‘good motherhood’, precipitating feelings of shame and self-blame among women who do not breastfeed and impacting on their psychological well-being. Into the bargain, multiple challenges, including medical conditions, work constraints and societal pressures, contribute to what is described as a ‘culture of pressure’ surrounding breastfeeding (Knaak, 2006), affecting women’s decision-making and experiences. In view of this, this pilot study sets out to uncover the predominant linguistic patterns used in the discursive (mis)representation of breastfeeding across a sample of Italian and English newspapers, aiming to facilitate a cross-linguistic comparison, shedding light on the practices and sub-discourses that emerge in the corpora investigated and reflecting on the challenges translators can encounter in dealing with them across languages. To this end, two corpora were compiled to look into the discourse on breastfeeding in Italian and English news media, each containing 100 articles published between November 9, 2021 and November 9, 2023. The *Allattamento Corpus*, focusing on Italian news outlets, and the *Breastfeeding Corpus*, incorporating contributions from national and international English news sources, enabled a preliminary quantitative and qualitative analysis of linguistic patterns in breastfeeding discourse. This study turns to Corpus-Based Discourse Analysis (CBDA) (Baker & McEnery, 2015 / Egbert & Baker, 2019 / Egbert *et al.*, 2020 / Baker, 2023) and Appraisal Theory (Martin & White, 2005) in data analysis and interpretation, where CBDA helps to unearth linguistic patterns shaping public perceptions, while Appraisal Theory reveals evaluative components like judgment and engagement levels. Therefore, this paper will illustrate i) how pervasive societal discourses surrounding breastfeeding influence and restrict the dialogic space, perpetuating normative attitudes towards women who cannot or choose not to breastfeed; ii) the manners in which Italian and English linguistically construct and reproduce breastfeeding discourses and practices.

### **References**

- Avashai, O. (2007). Managing the Lactating Body: The Breast-Feeding Project and Privileged Motherhood. *Qualitative Sociology*. 3. pp. 135–152.
- Badon, S. E., Hedderson, M. M., Hyde, R. J., Quesenberry, C. P., Avalos, L. A. (2019). Pre-and Early Pregnancy Onset Depression and Subsequent Rate of Gestational Weight Gain. *Journal of Women's Health*. 28 (9), pp. 1237–1245.
- Baker, P. (2023). *Using Corpora in Discourse Analysis* (2nd edition). London/New York: Bloomsbury.
- Baker, P., & T. Mcenery, (2015). *Corpora and Discourse: Integrating Discourse and Corpora*. London: Palgrave.

- Egbert, J., & P. Baker. (2019). *Using Corpus Methods to Triangulate Linguistic Analysis*. London: Routledge.
- Egbert, J., T. Larsson, D. Biber. (2020). *Doing Linguistics with a Corpus: Methodological Considerations for the Everyday User*. Cambridge: Cambridge University Press.
- Fairclough, N. (1992). *Discourse and Social Change*, Cambridge: Polity Press.
- Furedi, F. (2002). *Paranoid Parenting: Why Ignoring the Experts May Be Best for Your Child*, Chicago: Chicago Review Press.
- Knaak, S. (2005). Breast-Feeding, Bottle-Feeding and Dr. Spock: The Shifting Context of Choice. *The Canadian Review of Sociology and Anthropology*. 42(2), pp. 197–216.
- Kukla, R. (2006). Ethics and Ideology in Breastfeeding Advocacy Campaigns. *Hypatia*. 21(1), pp. 157–180
- Lee, E. (2008). Living With Risk in the Era of ‘Intensive Motherhood’: Maternal Identity And Infant Feeding. *Health, Risk and Society*. 10(5), pp. 467–477.
- Lee, E. & Bristow, J. (2009) Rules for Feeding Babies, in Sclater, S.D. *et al.* (eds.). *Regulating Autonomy*, Oxford: Hart Publishing.
- Martin J. R, White P. R. (2005). *The Language of Evaluation*. Basingstoke: Palgrave Macmillan.
- Reese, H. (2005). From Parental Responsibility to Parenting Responsibility. *Current Legal Issues*. 8, pp. 459–483.
- Stubbs, M. (1996). *Text and Corpus Analysis*. London: Blackwell.
- Wolf, J.B. (2007). Is Breast Really Best? Risk and Total Motherhood in the National Breastfeeding Awareness Campaign. *Journal of Health Politics, Policy and Law*. 32(4), pp. 595–636.

# *AI-Driven Intralingual Translation across Historical Varieties: Theoretical Frameworks and Examples from Early Modern English*

## **Fabio Ciambella**

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This research paper explores how Artificial Intelligence (AI) can bring about changes in the field of translating within the same language with a specific focus on its application to historical varieties, particularly Early Modern English. The study delves into the foundations that support AI-based intralingual translation providing insights into the challenges and opportunities presented by this advanced technology.

The theoretical groundwork for this investigation draws from established models in linguistics, natural language processing, and historical linguistics. By combining these frameworks, the paper aims to establish a basis for comprehending the complexities of AI-driven translation especially when it comes to tracking changes in linguistic forms over time.

The core of the paper lies in examining the different levels of modernization/normalization/standardization of Early Modern English. By using examples from both literary and specialized collections of texts from that era this paper highlights how AI (particularly Machine Translation or MT) can effectively navigate through linguistic subtleties found in literature and specialized language usage during that historical period. Examples from domains like literature, medicine, law, and science illustrate how well AI-powered intralingual translation captures and conveys the intricate vocabulary and syntax of Early Modern English.

Additionally, this paper critically assesses the implications of AI-driven translation for fields such as historical linguistics, and digital humanities.

It delves into how these technologies can enrich our comprehension of how language evolves offering contextually sensitive interpretations of texts from the past. The study also addresses potential pitfalls and limitations, considering issues such as anachronism and the importance of human oversight in ensuring accurate and culturally sensitive translations.

Since the practical applications of AI-driven intralingual translation in the study of historical varieties extend beyond academia, the paper discusses the potential for these technologies to contribute to the digitization and accessibility of historical texts, making them more readily available to a broader audience. This democratization of access to historical linguistic resources can foster a deeper appreciation for the evolution of language and culture.

### **References**

- Craig, H. & Greatley-Hirsch, B. (2017). *Style, computers, and early modern drama: Beyond authorship*. Cambridge University Press.
- Domingo, M. & Casacuberta, F. (2023). Interactive machine translation for the language modernization and spelling normalization of historical documents. *Pattern Analysis and Applications*, 26: 1601–1614.
- Massey, G., Huertas-Barros, E. & Katan, D. (Eds.). (2022). *The human translator in the 2020s*. Routledge.
- Quah, C. K. (2006). *Translation and technology*. Palgrave Macmillan.
- Zheng, B., Tyulenev, S. & Maraisb, K. (2023). Introduction: (re-)conceptualizing translation in translation studies. *Translation Studies*, 16(2): 167–177.

## *Translating language innovation: assessing the performance of AI systems*

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Recent studies have highlighted the differences between machine translation systems, aimed at drawing the boundaries between text data processing based on a neural architecture (NMT, Neural Machine Translation ) or artificial intelligence (AI) (Jiang *et al.* 2023; Gaspari *et al.* 2015). The training of NMT translation systems, such as Deep L or Google Translate, based upon parallel corpora in different language combinations and basically including just written sources, shows obvious limitations when compared with AI systems (ChatGPT, for example), which are configured as learning tools based on monolingual corpora in multiple languages that can also produce language-related tasks other than translation, such as mathematical reasoning. However, comparison with human translation (HT) reveals the difficulty of automated systems to adapt to pragmatic and contextual variations (Jiang *et al.* 2023).

Few studies have so far been concerned, from a qualitative point of view, with the comparison of translation performance of automatic systems dealing with language innovation and change. Gen Z jargon is undoubtedly illustrative of the cultural impact of language change and the rapidity with which human language is transformed by its speakers, particularly through new generations and ongoing processes of lexical resemantization, word-formation or outright creation of new words in new contexts. In Italy, the influence of the English language of social media on younger generations and the co-presence of local dialect substrata make the process of language change even more complex and difficult to predict.

The present work, therefore, aims to test NMT and AI-based translation systems on what can be called "language frontiers," i.e., the most recent and innovative slang expressions included in the language of Gen Z (citizens born between 1995 and 2010). The absence of linguistic corpora of Italian youth slang varieties, comparable to the corpus for the English language which is being built within the iGen project (Katz *et al.* 2021), limits the investigation to a qualitative test conducted on the translation from Italian into English of about 100 sentences extracted from social media (*X, Tik Tok, Instagram, YouTube*) and representative of different forms of online interaction. On such a corpus, the purpose of the work is first and foremost a) to provide a first description of the linguistic features of translation outputs from English into Italian produced by different machine translation systems (ChatGPT *vs.* Deep L) dealing with language change; b) to describe the translation differences between NMT and AI devices; c) evaluate the nature of the gap between AI generated translations and human translation.

### **References**

Gaspari, F., Almaghout, H., & Doherty, S., (2015). A survey of machine translation competences: Insights for translation technology educators and practitioners. *Perspectives*, 23:3, 333-358, DOI: [10.1080/0907676X.2014.979842](https://doi.org/10.1080/0907676X.2014.979842).

Jiang, Z., Lv, Q., & Zhang, Z. (2023). Distinguishing Translations by Human, NMT, and ChatGPT: A Linguistic and Statistical Approach. *arXiv:2312.10750v1* [cs.CL], <https://doi.org/10.48550/arXiv.2312.10750>.

Katz, R., Ogilvie, S., Shaw, J. & Woodhead, L. (2021). *Gen Z Explained. The Art of Living in a Digital Age*. University of Chicago Press.





University of Oxford, iGen project. <https://dictionarylab.web.ox.ac.uk/igen-language>

## *Are machines fit for extreme translations? Comparing English-Italian human translation to MT and AI output*

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Extreme translations are a controversial topic in Translation Studies, as they still have no universal recognition. For the purpose of this article, the expression will encompass the translation of any text originally written under constraint, including poetry or experimental prose. Such texts highlight the fundamental differences between languages, thus advocating for human interpretation as a requirement in the translation process, while raising questions concerning the use of MT and AI.

Extreme translations make it necessary to opt for freer, less literal renditions, attempting to establish a relationship between sound and meaning which honours the one in the original text. A significant modern example is *Ella Minnow Pea: A Progressively Lipogrammatic Epistolary Fable*, written by American playwright Mark Dunn in 2001 and translated as *Lettere: Fiaba epistolare in lipogrammi progressivi* by Italian translator Daniele Petruccioli in 2008.

As suggested by its title, the novel includes progressive lipograms, pangrams, puns and other rhetorical devices, which are all pivotal in the development of the plot. Petruccioli's award-winning translation was centred on the belief that all translation necessarily requires change. Since English and Italian don't share the exact same alphabet, the translator adapted the progression of the lipogram and the structure of the pangrams to the peculiarities of the Italian language.

Could a machine replicate all (if any) of this? This article answers the question through an experiment carried out on DeepL and on ChatGPT 3.5: the English pangrams from the novel are given to both tools, prompting them to give an Italian translation, with and without context. What follows is an analysis of the two outputs, showing the differences between MT and AI errors, and how they compare to the official human translation. In particular, the results from the experiment show the limits of MT and AI when dealing with extreme translations, hence suggesting a reflection on the role translators can play in this dynamic. Lastly, they inspire ethical considerations surrounding the visibility and positionality of translators in the current market.

### **References**

- Bellos, D. (2011). *Is That a Fish in Your Ear? Translation and the Meaning of Everything*. Faber and Faber, Inc.
- Bender, E., Koller A. (2020). Climbing towards NLU: On Meaning, Form, and Understanding in the Age of Data. Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics. Association for Computational Linguistics. Pages 5185-5198.  
[https://www.researchgate.net/publication/343302041\\_Climbing\\_towards\\_NLU\\_On\\_Meaning\\_Form\\_and\\_Understanding\\_in\\_the\\_Age\\_of\\_Data](https://www.researchgate.net/publication/343302041_Climbing_towards_NLU_On_Meaning_Form_and_Understanding_in_the_Age_of_Data)
- Carr, N. (2010). *The Shallows*. Atlantic.
- Cronin, M. (2013). *Translation in the Digital Age*. Routledge.
- Dunn, M. (2001). *Ella Minnow Pea: A Progressively Lipogrammatic Epistolary Fable*. MacAdam/Cage Publishing.
- Dunn, M. (2008). *Lettere: Fiaba epistolare in lipogrammi progressivi* (D. Petruccioli, Trans.). Voland. (Original work published 2001).
- Eco, U. (2019). *Dire quasi la stessa cosa*. Bompiani.



Farrell, M. (2018). Machine Translation Markers in Post-Edited Machine Translation Output. Proceedings of the 40<sup>th</sup> Conference Translating and the Computer. AsLing. Pages 50-59. [https://www.researchgate.net/publication/363281238\\_Machine\\_Translation\\_Markers\\_in\\_Post-Edited\\_Machine\\_Translation\\_Output](https://www.researchgate.net/publication/363281238_Machine_Translation_Markers_in_Post-Edited_Machine_Translation_Output)

Farrell, M. (2022). Do translators use machine translation and if so, how? Results of a survey held among professional translators. Presented at the 44<sup>th</sup> Conference Translating and the Computer. Post-review version.

# *Artificial Intelligence in Text Translation: A Comparative Analysis between Human and AI Translation*

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With the rapid development of technology and specifically of artificial intelligence, an equally the rapid transformation of the profession of the translator is inevitable. This study aims to conduct a comparative analysis between human translations and those exclusively performed with AI, also considering possibility of educating the latter through the diversification of prompts.

In drafting a text, the writers select lexical elements and chooses a particular syntactic arrangement to fulfill their communicative purposes. The translator's task is to retrieve and satisfy these objectives in another language. However, since every reading of a text is unique, this process is inherently subjective. Additionally, lexical choices, sentence structures, and rhetorical strategies vary not only between languages but also within speech communities, reflecting preferences, accepted collocations, and sensibilities. These variations constitute the only tangible tools for evaluation. Therefore, it is prudent to speak of the adequacy in translation rather than equivalence.

With his concept of dynamic equivalence, linguist Eugene Nida, argues that a text should be rendered in the target language so that the audience perceives it in the same way as native speakers of the language in which the original text is written do. A pragmatic-textual approach, such as that of Julian House, emphasizes the effectiveness of translation not at the level of individual sentences but of expressions, seeking equivalence not only at the semantic but also the pragmatic level.

The crucial question is: what is the outcome of translation when performed by a machine? It will be addressed by manually analysing a corpus of translations of text excerpts with different emotional impact. Specifically, purposefully selected sections of books such as “*The Lost Language of Cranes*” by David Leavitt, “*The heart is Deceitful Above All Things*” by J.T Leroy and “*Giovanni's Room*” by James Baldwin will be examined. Translations resulting from human and AI-assisted processes will be focused on contrastively, identifying translation strategies based on parameters defined by scholars such as Mason, Steiner, House, Newmark, and Hatim. The translations will be assessed to evaluate the extent to which expressions in the target language, Italian, diverge from or align with the original language, English.

## **References**

- Austin, J. (1962). *How to do things with words*. [http://pubman.mpdl.mpg.de/pubman/item/escidoc:2271128/component/escidoc:2271430/austin\\_1962\\_how-to-do-things-with-words.pdf](http://pubman.mpdl.mpg.de/pubman/item/escidoc:2271128/component/escidoc:2271430/austin_1962_how-to-do-things-with-words.pdf)
- Baldwin, J. (1984). *Giovanni's Room*. Penguin Classics.
- Baldwin, J. (2001). *La stanza di Giovanni*.
- Bex, T., Burke, M., & Stockwell, P. (2000). *Contextualized stylistics*. <https://doi.org/10.1163/9789004487390>
- Chamberlain, L. (1988). *Gender and the metaphors of translation*. *Signs*, 13(3), 454–472. <https://doi.org/10.1086/494428>
- Cronin, M. G. (2013). Translation and globalization. In *Routledge eBooks* (pp. 509–520). <https://doi.org/10.4324/9780203102893-48>
- George Steiner's Hermeneutic Translation Theory. (2023). *International Journal of Educational Curriculum Management and Research*, 4(3). <https://doi.org/10.38007/ijecmr.2023.040307>
- Goldfajn, T. (2022). *The translator and the pea*. In *Routledge eBooks* (pp. 45–62). <https://doi.org/10.4324/9781003056652-4>



- Hatim, B., & Munday, J. (2005). *Translation: An advanced resource book*. <http://ci.nii.ac.jp/ncid/BA7004341X>
- House, J. (1997). *Translation quality assessment: A model revisited*. <http://ci.nii.ac.jp/ncid/BA30481579>
- House, J. (2002). Translation Quality Assessment: Linguistic Description versus Social Evaluation. *Meta: Translators' Journal*, 46(2), 243–257. <https://doi.org/10.7202/003141ar>
- Hubscher-Davidson, S. (2014). Emotional Intelligence and Translation Studies: A new bridge. *Meta: Translators' Journal*, 58(2), 324–346. <https://doi.org/10.7202/1024177ar>
- Huang, M. H., & Rust, R. T. (2018). Artificial intelligence in service. *Journal of Service Research*, 21(2), 155–172. <https://doi.org/10.1177/1094670517752459>
- Leavitt, D. (2014). *The lost language of Cranes*. A&C Black.
- Leavitt, D. (2022). *La lingua perduta delle gru*. SEM.
- LeRoy, J. T. (2001). *The Heart is Deceitful Above All Things*. Bloomsbury Publishing PLC.
- LeRoy, J. T. (2002). *Ingannevole è il cuore più di ogni cosa*. Fazi Editore.
- Nida, E. A., & Taber, C. R. (1982). *The theory and practice of translation*. <https://doi.org/10.1163/9789004669147>
- Tariq, S., Iftikhar, A., Chaudhary, P., & Khurshid, K. (2022). Examining some serious challenges and possibility of AI emulating human emotions, consciousness, understanding and “Self.” *Zenodo (CERN European Organization for Nuclear Research)*. <https://doi.org/10.5281/zenodo.6637757>

## *ChatGPT and AI text generation tools as the new ‘language calculators’: do we still need to teach and study translation?*

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Building upon prior studies that explore the integration of data-driven activities, translation, corpora and online tools to empower foreign language learners, this paper investigates the emerging challenges presented by AI text generation tools, such as chatGPT and Gemini, in translation courses. Similar to experiences with other online tools, learners are often familiar with AI tools, while teachers and educational institutions are frequently unprepared for what seems to be an inevitable future development in teaching and learning practices. Is this new generation of online tools a threat to translation- teachers? Or can it be viewed as an opportunity? How does it relate to the concept of autonomy?

A parallel with the impact electronic calculators had on mathematics teachers in the last century might provide a thought-provoking perspective. Suddenly, learners no longer needed to master time-consuming procedures to obtain results; they could simply use a machine. The pocket calculator needed many years “to graduate from a clunky, expensive piece of [...] equipment to become an established, uncontroversial tool used by millions of students and embraced by many of their teachers” and shifting the focus from “basic arithmetic skill development” to “teaching children to solve problems through a combination of mathematical thinking and human-machine collaboration” (Urlaub and Dessein, 2022, p.47). Language interaction is not an exact science as maths, and Logical and mathematical intelligence is different in many ways from Linguistic and interpersonal intelligence, but the new AI text generation tools will inevitably be utilized as “language calculators” in the near future. Non-experts will have access to ready-made solutions for their language needs, while advanced users will be able to enhance their performance.

The paper underlines how AI tools highlight the difference between passively using translation and linguistic tools and actively critically profit from their contribution. It presents examples of teaching practices that leverage AI, emphasizing the importance of increasing awareness among teachers, stakeholders and learners on how these tools can be integrated into the learning process, offering a novel and significant approach to promoting autonomy and proficiency.

### **References**

- Poole, F. (2023). Using ChatGPT to Design Language Material and Exercises. *FLTMAG*. Retrieved from <https://hcommons.org/deposits/item/hc:57723>
- Tseng, W., & Warschauer, M. (2023). AI-writing tools in education: If you can’t beat them, join them. *Journal of China Computer-Assisted Language Learning*, 3, 258-262.
- Urlaub, P., & Dessein, E. (2022). From Disrupted Classrooms to Human-Machine Collaboration? The Pocket Calculator, Google Translate, and the Future of Language Education. *L2 Journal*, 45-59.
- Warschauer, M., Tseng, W., Yim, S., Webster, T., Jacob, S. R., Du, Q., & Tate, T. P. (2023). The Affordances and Contradictions of AI-Generated Text for Second Language Writers. *SSRN Electronic Journal*.
- Zanca, C. (2014). Developing translation strategies and cultural awareness using corpora and the web. Retrieved from <https://aclanthology.org/www.mt-archive.info/Tralogy-2011-Zanca.pdf>



Zanca, C. (2018). Corpora, Google e roba simile: Per quale ragione gli studenti di una lingua straniera dovrebbero perderci tempo? In A. Ciliberti, D. Zorzi (Eds.), *Translation and Interpreting for Language Learners (TAIL): Lessons in Honour of Guy Aston* (pp. 201-220). Milano: AItLA.

Zanca, C. (2021). Acquiring intercultural competence and corpus linguistics methodology: A suggestion for integration in the language learning syllabus. In *Centri Linguistici di Ateneo: Strategie d'intervento nei processi di comunicazione interlinguistica e interculturale* (pp. 205-222). Napoli: Edizioni Scientifiche Italiane.

## *Navigating the digital frontier: A study of Concurrent Translation (CT) practices among Italian professionals*

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In the realm of translation practices, collaborative translation has long been recognised as a pivotal force, facilitating the dissemination of knowledge and fostering cultural exchange across civilisations. Throughout history, from ancient civilisations to the Renaissance era, collaborative translation has played a significant role in connecting cultures and advancing intellectual growth (Trzeciak-Huss, 2018). In more recent times, technological advancements have further revolutionised collaborative translation, giving rise to Concurrent Translation (CT), a phenomenon characterised by synchronous translation activities conducted on cloud-based platforms by multiple professional translators (Jiménez-Crespo, 2020).

This talk seeks to explore the evolving landscape of collaborative translation practices, particularly focusing on CT, and its impact on the translation industry. By examining the historical interconnection between collaborative translation and CT, this study aims to shed light on how technological advancements have reshaped the collaborative translation process over time. Furthermore, the research delves into the profound implications of CT on translation workflows, emphasizing its role in enhancing productivity and fostering global collaboration among translators, editors, and project managers (Gough *et al.*, 2023).

However, alongside its benefits, CT also presents certain challenges and ethical considerations that warrant examination. Issues such as quality control, privacy concerns, and overreliance on AI-based machine translation pose significant hurdles for translators engaged in collaborative translation projects (Firat, 2021; Zwischenberger, 2021).

Inspired by a seminal study conducted by Gough and Temizöz (2023), this paper aims to address these concerns by conducting a qualitative analysis of a survey involving Italian professional translators, with a focus on their experiences and perspectives regarding CT workflows. By gaining insights from practitioners directly involved in CT, this study seeks to contribute to a deeper understanding of the social, ethical, and practical dimensions of collaborative translation practices in the age of digitalisation. Ultimately, the findings of this research aim to inform future developments in translation technologies and workflows, ensuring that they align with the needs and expectations of translators in an ever-evolving industry landscape.

### **References**

- Firat, G. (2021). Uberization of translation: Impacts on working conditions. *The Journal of Internationalization and Localization (JIAL)*, 8(1), 48-75.
- Gough, J., & Temizöz, Ö. (2023). Love it, hate it, tolerate it: Translators' experiences with concurrent translation on collaborative platforms. *Cultus: The Journal of Intercultural Mediation and Communication*, 16(1), 262-291.
- Gough, J., Temizöz, Ö., Hieke, G., & Zilio, L. (2023). Concurrent translation on collaborative platforms. *Translation Spaces*, 12(1), 45-73.
- Jiménez-Crespo, M. A. (2020). The 'technological turn' in translation studies: Are we there yet? A transversal cross-disciplinary approach. *Translation Spaces*, 9(2), 314-341.
- Trzeciak-Huss, J. (2018). Collaborative Translation. In K. Washbourne & B. V. Wyke (Eds.), *The Routledge Handbook of Literary Translation*. Routledge.
- Zwischenberger, C. (2021). Online collaborative translation: Its ethical, social, and conceptual conditions and consequences. *Perspectives*, 30(1), 1-18.



# *Can AI Translation Effectively Replace Human Translation? An Exploration of the Perceptions of Professional Translators*

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The aim of my research is to investigate about the use of AI in translation, particularly in the context of machine-translated texts and the differences between HT and MT. The focus of this investigation is to discover whether this software can compete with the skills of professional translators and eventually replace them. The trigger comes mainly from articles on machine translation vs human translation that I read to have a broader view of this topic. Artificial intelligence seems to have revolutionized machine translation technology in recent times. According to the prevalence of research in the area of Translation Studies, with the rise of AI-powered translation tools, the process of translating and localizing content has become more efficient and faster. On the one hand, one of the benefits is that these tools can quickly translate large volumes of content and improve the accuracy by using machine learning and natural language processing to analyse the context. On the other hand, AI translation still has plenty of pitfalls: some source texts can be misinterpreted and this could lead to inaccuracies and errors, as well as to cultural insensitivity or bias. Important issues to consider, include mainly the potential impact of AI on the job market for human translators along with the need to ensure that translations are respectful and culturally appropriate. My research aims to discover whether in the future translators and localization experts will disappear in the job market or whether new job roles will emerge instead as a result of AI, since expert translators could be needed to train and manage AI-powered tools. Moreover, translators could have to specialize in specific fields to remain competitive, focusing on highly technical-scientific contents that can be more difficult for AI-powered tools to translate accurately. The literature review describes in detail theoretical issues with regard to Ethical considerations for AI-powered translation. It also makes reference to a few key findings from former research. The data gathering processes consists mainly of qualitative semi-structured interviews with Italian professional translators, interview transcripts and content analysis which I use to examine and interpret data and findings.

## **References**

- Breakwell, G.M. (2006). *Research methods in psychology*. London. Sage.
- Brown, D. (2007) *Principles of language learning and teaching*. White Plains, NY: Pearson Education.
- Buckingham, L. (2015). *Doing a research project in English studies: A guide for students*. UK.Routledge.
- Burnard, P., Gill, P., Stewart, K., Treasure, E. and Chadwick, B. (2008). Analysing and presenting qualitative data. *British dental journal*. 204(8). 429-432.
- Cavaliere, F., (2021). L'Identità del Traduttore: Una, Nessuna, Centomila, in *Traduttologia: Rivista di Interpretazione e Traduzione*, vol. 12, n. 23-24, pp. 45-75.
- Chaoying, Y. (2022). *The Application of Artificial Intelligence in Translation Teaching*. ICIST '22: Proceedings of the 4th International Conference on Intelligent Science and Technology. Pages 56–60 <https://doi.org/10.1145/3568923.3568933>
- Denzin, N.K. and Lincoln, Y.S. (2013). *Introduction: The Discipline and Practice of Qualitative Research*. In Denzin, N.K. and Y.S.Lincoln (eds.), *Collecting and Interpreting Qualitative Materials*. London: Sage. 1-42.
- Dicicco-Bloom, B. and Crabtree, B. F. (2006). *The Qualitative Research Interview*. Medical



education,40(4)314-321. -

Dunne, K., Dunne. E. (2011). *Translation and Localization Project Management: The Art of the Possible*, Amsterdam and Philadelphia, PA: John Benjamins. -

Jackson, R. L., Drummond, D. K. & Camara, S. (2007). *What is Qualitative Research?* Qualitative Research Reports in Communication, 8,21-28. -

Hartley, A. (2009). Technology and Translation, in Munday, J. (ed.) *The Routledge Companion to Translation Studies*, Abingdon and New York: Routledge, pp. 106-27. -

Kumar, R. (2014). *Research methodology: A step-by-step guide for beginners*. London: SAGE Publications. -

Moneus. A., M., Sahari, Y., M. (2023). *Artificial Intelligence and Human Translation: A Contrastive Study Based on Legal Texts*. University of Bisha. Heliyon. -

Munday, J., Pinto, S. R., Blakesley, J. (2022). *Introducing Translation Studies: Theories And Applications*, London and New York: Routledge. -

Taylor, Christopher J. (2006) “The translation of regional variety in the films of Ken Loach”, in Nigel Armstrong and Trudgill, Peter (2000) “The Dialects of England”. Oxford and Malden: Blackwell. -

Trudgill, Peter (2002) “Sociolinguistic Variation and Change”. Edinburgh: Edinburgh University Press. -

Wang, L. (2023). *The Impacts and Challenges of Artificial Intelligence Translation*. Tool on Translation Professional. SHS Web of Conferences 163. DOI:10.1051/shsconf/202316302021

## *In the shadow of AI?: an MTPE adventure in Sherlockiana*

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Independent Scholar

While relating aspects of an on-going Machine Translation Post-Editing (MTPE) adventure into English of a series of Italian Sherlock Holmes apocrypha - the end-product intended ultimately to be taken up by a British publisher -, central issues addressed will include, considerations of the relative quality of HT and various MT outcomes (as do e.g. Jiang et al 2023), parameters for analyzing translation equivalence and quality (particularly in literary texts of this type and purpose) and related questions of the relative ‘cognitive load’ and time/effort of HT and Post-Editing in these circumstances (see e.g. Terribile 2023). A centrally relevant issue throughout is also the (low) perception of the status and role of the professional translator, in general, (see e.g. Katan 2011) and in relation to their use of various available Machine Translation tools, especially in the light of more recent AI developments (see e.g. Lambert & Walker 2020). Perception of translators’ relatively low status has always been connected to the general public’s misperceptions / under-estimation of the complexity involved in Translation, now compounded by wide (non-linguists’) over-estimation of what various types of MT can now do (since AI advances in NMT tools -e.g. DeepL, and in LLMs such as ChatGPT). Perceived professional status is naturally also related to job satisfaction – as reflected in relations with ‘clients’ and co-editors not least in satisfactory remuneration negotiation. The MTPE perspective (Rico Perez 2024) is, moreover, I think, particularly illuminating, allowing a clearer focus on the relationship between Translator and AI translation aids, and a fresher one on perceived status and role of the translator when using AI tools, putting the translator at the centre, as the one choosing and deciding among suggestions, responsible for final quality (Do Carmo & Moorkens 2021: 35-41). The AI tools are ancillary, not the translator. The MTPE focus also ‘legitimizes’ unabashedly, unguiltily, using MT tools thus getting possible useful suggestions, while also prompting a healthy, cautious awareness of its shortcomings.

In practice, in my talk I would illustrate what struck me as different types of fails in the ChatGPT renderings of these types of texts, which I colour-coded and annotated in order to show the author and clients (highly educated academics and teachers- therefore all the more surprising as ‘misperceivers’) how the work involved should be more highly evaluated. Though venerably unsurprising in Translation studies (recognizable already in Vincent 1976), the parameters were devised bottom up rather than top down as I annotated the parallel texts (supplied to me) and made my informed ‘edits’. This showing and discussing the post-editing interventions was mutually educational and relatively successful in (mutual) renegotiation of relative status. In the process it has confirmed for me the ‘dangers’ of public ignorance towards the complexity of good translation outcomes, the overly high expectations of ChatGPT and the relatively perceived low, minor role of a translator, let alone as Post-Editor, and that what can (and must?) be managed at least in one-to-one client-translator situations is the client’s perception of the translator/editor’s status, not to mention how we might try to protect and educate our students and future professional translators for the wider workplace in LPS, for example (see also Liu 2020, Nunes Vieira, L & E. Alonso 2020).

### **References**

- Carmo, F. & Moorkens, J. (2021). “Differentiating editing, post-editing and revision.” Maarit Koponen, Brian Mossop, Isabelle S. Robert and Giovanna Scocchera (eds) (2021). *Translation revision and post-editing*. London: Routledge, 35-49.
- Jiang, Z., Lv, Q. & Zhang, Z. (2023) Distinguishing Translations by Human, NMT, and ChatGPT: A Linguistic and Statistical Approach, arXiv:2312.10750v1, <https://doi.org/10.48550/arXiv.2312.10750>



- Katan, D. (2011) Status of Translators. In *Handbook of Translation Studies*, Y. Gambier & L. van Doorslaer eds. 146-152. John Benjamins.
- Lambert, J., & Walker, C. (2022). Because We're Worth It: Disentangling Freelance Translation, Status, and Rate-Setting in the United Kingdom, in *Translation Spaces*, 11(2), 277–302.
- Liu, Christy Fung-Ming (2020). “How Should Translators Be Protected in the Workplace? Developing a Translator Rights Model Inventory.” *Hermēneus. Revista de Traducción e Interpretación* 22, 243-269.
- Moorkens, J. (2020) A tiny cog in a large machine. Digital Taylorism in the Translation Industry – *CORE*, Benjamins, DOI: 10.1075/TS.00019.MOO
- Nunes Vieira, L & E. Alonso (2020) Translating Perceptions and Managing Expectations: An Analysis of Management and Production Perspectives on Machine Translation, DOI: 10.1080/0907676X.2019.164677
- Rico Pérez, C. (2024) Re-thinking Machine Translation Post-Editing Guidelines, *The Journal of Specialised Translation*, 41, 24-46, <https://www.jostrans.org/article/view/4696/4261>
- Terribile, S. (2023) Is post-editing really faster than human translation?, *Translation Spaces* DOI: <https://doi.org/10.1075/ts.22044.ter>
- Vincent, J. (1976) On Translation: A First Approximation, *Annali di Anglistica, Ist.Univ. Orientale* (1976, 1), 41-114.

# *Literary translators as “early casualties of the AI revolution”? Reflections on the fears of the literary translation community, supported by the analysis of a few samples of Sciascia’s ‘sinuous’ style across Italian and English*

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Machine Translation of literary texts has been a subject of interest since the late 1940s (Poibeau, 2017), but it is only since the remarkable progress generated by the recent advances in Neural Machine Translation that the literary translation community has started to seriously consider the possibility of Artificial Intelligence becoming a real challenge, with an article in *Le Monde* worryingly presenting literary translators as “early casualties of the AI revolution” (Vulser, 2024, n.p.).

The talk will offer the author’s personal view on the issue, starting with a brief overview of technological advancements from MT to NMT. A reflection on the fears expressed by some members and representatives of the literary translation community will follow, also considering more optimistic perspectives.

The reflection will be supported through references to the author’s previous analysis of a few samples of Leonardo Sciascia’s ‘sinuous’ style (see Jacobbi in Camilleri, 2003[1979], n.p.) across Italian and English (Di Martino, forthcoming), which was conducted using Contextualized Stylistics tools (Bex, Burke and Stockwell, 2000). The analysis conducted prior to this event will be expanded to cover the topics of the conference in a comparison of existing versions of Sciascia’s texts translated into English with new ones produced via Google Neural Machine Translation to consider the current alternatives offered by AI.

## **References**

- Bex, T., Burke, M. and Stockwell, P. (eds) (2000). *Contextualized Stylistics*. In Honour of Peter Verdonk. Rodopi.
- Di Martino, E. (forthcoming). The Complexities of a ‘Simple Story’: Conventionality and Creativity in the English Translation of an ‘Acidic’ Style.
- Jacobbi, R. in Andrea Camilleri (2003[1978]). *Il corso delle cose*. Sellerio, Inside cover.
- Poibeau, T. (2017). *Machine translation*. MIT Press.
- Vulser, N. (2024). Literary translators, early casualties of the AI revolution. *Le Monde*, 4 Feb. 2024. [https://www.lemonde.fr/en/economy/article/2024/02/04/literary-translators-early-casualties-of-the-ai-revolution\\_6491526\\_19.html](https://www.lemonde.fr/en/economy/article/2024/02/04/literary-translators-early-casualties-of-the-ai-revolution_6491526_19.html)

# *The Potential Differences between Human Translation and Machine Translation in Translating Scientific and Literary Texts from English into Persian*

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Due to the recent progress of technology, machine translation (MT) has become faster and cheaper than human translation (HT); while in terms of accuracy and appropriacy, much needs to be done. Although Persian belongs to the Indo-Iranian group of Indo-European languages, when translated from English, machine-translated texts present too many inaccuracies to be accepted without deep edition. This descriptive-analytic research compares human-translated and Google translated texts from English into Persian to identify the fields in which MT and HT are respectively more successful and in which the target texts need less human edition and proof reading. Halliday and Hassan's (1976) cohesive theory with four components of referencing, substitution and ellipses, conjunction, and lexical cohesion—is the basis of the analysis. Also, the functional (extrinsic aspects of the translations, such as context, and their intrinsic aspects, such as word order, length of sentences, and type-token ratios, etc., encompass this manual corpus analysis. Six English original literary prose as subjective and culture-based texts and medical texts as science-based and objective texts (e.g., on children's diseases), selected randomly from the works published in the last decade, make up the research corpus. It is anticipated that HT faces fewer decision-making difficulties for the same target words when translating literary texts as human translators share emotional states with the authors. HT, however, presents numerous problems when translating the medical texts from English into Persian due to a lack of Persian equivalents for medical words because of the rapid evolution of English medical terminology. Also, MT observes word order when translating English medical and literary texts despite that fact that the verb in a Persian sentence is located in end position while it comes after the subject in English. And HT is longer than MT in number of words in translating the literary texts, because to localize the target text, HT refers to idioms and cultural points of both source and target texts to resonate with the target audience.

## **References**

Halliday, M.A.K., & Hassan, R. (1976). *Cohesion in English*. London and New York: Longman.

## *How fAIr and sustAInable are AI-powered translation technologies?*

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This paper challenges the deterministic and positivist notion, which seems widely legitimized in expert discourse (Bondi et al., 2015) and uncritically propagated by the media (Sorial, 2017), that Artificial Intelligence (AI) is necessarily and inevitably a force for universal good when it is applied to language and translation technologies. In contrast, due to the severe imbalance in the current availability of high-quality curated data, translation-oriented resources and processing tools across languages (Gaspari, 2023; Rehm and Way, 2023; Vetere, 2023), we argue that the benefits brought by AI are in fact very unevenly distributed among language communities, thus raising challenging ethical concerns for linguists, translation scholars and technology experts (Fort and Couillault, 2016; Kenny et al., 2020; Moniz and Parra Escartín, 2023).

The paper examines some of the main issues concerning the overall fairness and sustainability of AI-powered translation technologies in relation to recent critiques such as Schwartz et al. (2020), Hessenthaler et al. (2022), and Ramesh et al. (2023), discussing first socio-demographic algorithmic biases in neural machine translation (e.g. Savoldi et al., 2021; Rescigno and Monti, 2023; Vanmassenhove, 2024), and then the energy consumption and environmental impact of building and deploying state-of-the-art models and systems (e.g. Strubell et al., 2019; Shterionov and Vanmassenhove, 2023), reviewing options to mitigate adverse effects including efficient training data selection and knowledge distillation (Jooste et al., 2022).

Against this background, in an attempt to provide a unifying framework to address concerns about the fairness and sustainability of developing and using competitive AI-based translation technologies in both industry and academia, the paper discusses the potential of the recently proposed “triple bottom line for translation automation and sustainability” (Moorkens et al., 2024). The author directly contributed to the collaborative design of this innovative model for evaluating the responsible and sustainable automation of translation at a time of unprecedented and rapid technological progress propelled by AI: by giving equal importance to performance, people and planet, the model aims to redress the balance between these three key elements, which is currently heavily skewed towards relentlessly improving performance, largely neglecting the role of, and costs for, humans and the environment.

### **References**

- Bondi, M., Cacchiani, S., & Mazzi, D. (eds) (2015). *Discourse In and Through the Media: Recontextualizing and Reconceptualizing Expert Discourse*. Cambridge Scholars Publishing.
- Fort, K., & Couillault, A. (2016). “Yes, We Care! Results of the Ethics and Natural Language Processing Surveys”. *Proceedings of the Tenth International Conference on Language Resources and Evaluation*. European Language Resources Association. 1593–1600. URL: <https://aclanthology.org/L16-1252.pdf>.
- Gaspari, F. (2023). “Corpora as Resources for Digital Equality between Official EU Languages”.
- Raus, R. (ed) *How Artificial Intelligence Can Further European Multilingualism Strategic Recommendations for European Decision-makers*. Ledizioni LediPublishing. 55–59. URL: [www.collane.unito.it/oa/items/show/153](http://www.collane.unito.it/oa/items/show/153).
- Hessenthaler, M., Strubell, E., Hovy, D., & Lauscher, A. (2022). “Bridging Fairness and Environmental Sustainability in Natural Language Processing”. *Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing*. 7817–7836. URL: <https://aclanthology.org/2022.emnlp-main.533.pdf>.

- Jooste, W., Way, A., Haque, R., & Superbo, R. (2022). “Knowledge Distillation for Sustainable Neural Machine Translation”. *Proceedings of the 15<sup>th</sup> Biennial Conference of the Association for Machine Translation in the Americas*. 221—230. URL: <https://aclanthology.org/2022.amta-upg.16.pdf>.
- Kenny, D. Moorkens, J., & Do Carmo, F. (eds) (2020). “Special Issue on Fair MT: Towards ethical, sustainable Machine Translation”. *Translation Spaces* 9(1): 1—169. DOI: 10.1075/ts.9.1.
- Moniz, H., & Parra Escartín, C. (eds) (2023). *Towards Responsible Machine Translation: Ethical and Legal Considerations in Machine Translation*. Springer. DOI: 10.1007/978-3-031-14689-3.
- Moorkens, J., Castilho, S., Gaspari, F., Toral, A., & Popović, M. (2024). “Proposal for a Triple Bottom Line for Translation Automation and Sustainability: An Editorial Position Paper”. *JoSTrans – The Journal of Specialised Translation*. Special Issue on Translation Automation and Sustainability 41:2–25. DOI: 10.26034/cm.jostrans.2024.4706.
- Ramesh, K., Sitaram, S., & Choudhury, M. (2023). “Fairness in Language Models Beyond English: Gaps and Challenges”. *Findings of the Association for Computational Linguistics: EACL 2023*. Association for Computational Linguistics. 2106–2119. URL: <https://aclanthology.org/2023.findings-eacl.157.pdf>.
- Rehm, G., & Way, A. (eds) (2023). *European Language Equality: A Strategic Agenda for Digital Language Equality*. Springer. DOI: 10.1007/978-3-031-28819-7.
- Rescigno, A. A., & Monti, J. (2023). “Gender Bias in Machine Translation: a statistical evaluation of Google Translate and DeepL for English, Italian and German”. *Proceedings of the International Conference Human-Informed Translation and Interpreting Technology*. 1—11. URL: [https://unora.unior.it/retrieve/cec8e426-aa91-43c1-bb58-f5e9e2c81eb0/HiT-IT-2023-proceedings\\_compressed.pdf](https://unora.unior.it/retrieve/cec8e426-aa91-43c1-bb58-f5e9e2c81eb0/HiT-IT-2023-proceedings_compressed.pdf).
- Savoldi, B., Gaido, M., Bentivogli, L., Negri, M., & Turchi, M. (2021). “Gender Bias in Machine Translation”. *Transactions of the Association for Computational Linguistics* 9: 845—874. DOI: 10.1162/tacl\_a\_00401.
- Schwartz, R., Dodge, J., Smith, N. A., & Etzioni, O. (2020). “Green AI”. *Communications of the ACM*. 63(12): 54–63. DOI: 10.1145/3381831.
- Shterionov, D., & Vanmassenhove, E. (2023). “The Ecological Footprint of Neural Machine Translation Systems”. Moniz, H., & Parra Escartín, C. (eds) *Towards Responsible Machine Translation: Ethical and Legal Considerations in Machine Translation*. Springer. 185—213. DOI: 10.1007/978-3-031-14689-3\_10.
- Sorial, S. (2017). “The Legitimacy of Pseudo-Expert Discourse in the Public Sphere”. *Metaphilosophy* 48(3): 304—324. DOI: 10.1111/meta.12233.
- Strubell, E., Ganesh, A., & McCallum, A. (2019). “Energy and Policy Considerations for Deep Learning in NLP”. *Proceedings of the 57<sup>th</sup> Annual Meeting of the Association for Computational Linguistics*. 3645–3650. URL: <https://aclanthology.org/P19-1355.pdf>.
- Vanmassenhove, E. (2024). “Gender Bias in Machine Translation and The Era of Large Language Models”. *arXiv*. arXiv:2401.10016v1, 18 January 2024. DOI: 10.48550/arXiv.2401.10016.
- Vetere, G. (2023). “Elaborazione automatica dei linguaggi diversi dall’inglese: introduzione, stato dell’arte e prospettive”. Raus, R., Silletti, A. M., Zollo, S. D., & Humbley, J. (eds). *De Europa*. Special Issue on Multilingualism and Language Varieties in Europe in the Age of Artificial Intelligence. 2022: 69—87. Ledizioni LediPublishing. URL: [www.collane.unito.it/oa/items/show/132](http://www.collane.unito.it/oa/items/show/132).





## *Man versus Machine. Round Forty-two*

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Across the world, scholars and researchers rely on translators to facilitate the exchange of ideas and information in a wide variety of fields. A successful translation not only requires a deep understanding of both languages and cultures, but also an equal understanding of the discipline specific culture of dissemination in the target language.

As artificial intelligence (AI) evolves to emulate human-like linguistic abilities, there's growing anticipation for AI-powered machine translation tools to offer swift and precise translations. However, in highly specialized fields, such as cultural heritage, which relies on culturally bound terms and concepts rooted in specific geo-political contexts and a variety of historical periods, machine translation tools are put to the test.

Translations from Italian to English on cultural heritage topics present a compelling case study since a significant portion of Italian heritage sites are recognized as World Cultural Heritage sites. Examining the language accuracy, coherence, and contextual appropriateness of translations produced by both AI and human translators, highlights the comparative strengths and limitations of each. This study showcases the evolving interplay between AI technology and human expertise in the complex relationship between language, culture, and technological innovation. The collaborative potential of human-AI translation partnerships offers insights into optimizing translation processes for maximum accuracy and efficiency.

### **References**

- Chomsky, N., Roberts, I., & Watumull, J. (2023, March 8). Opinion | Noam Chomsky: The False promise of ChatGPT. *The New York Times*. <https://www.nytimes.com/2023/03/08/opinion/noam-chomsky-chatgpt-ai.html>
- Colvin, G. (2015). *Humans are underrated: What High Achievers Know That Brilliant Machines Never Will*. Penguin.
- Munday, J. (2001). *Introducing translation studies: Theories and Applications*. Psychology Press.
- Rendall, S. (1997). The Translator's Task, Walter Benjamin (Translation). *TTR*, 10(2), 151. <https://doi.org/10.7202/037302ar>
- Siti del Patrimonio dell'Unesco in Italia - Italia.it. (n.d.). Italia.it. <https://www.italia.it/en/italy/things-to-do/art-culture/unesco-sites#:~:text=Of%20the%2059%20UNESCO%20sites,of%20the%20World%20Cultural%20Heritage>
- Tegmark, M. (2018). *Life 3.0: being human in the age of artificial intelligence*. London: Penguin Books.
- Yuxiu, Y. (2024). Application of Translation Technology based on AI in Translation Teaching. *Systems and Soft Computing*, 200072. <https://doi.org/10.1016/j.sasc.2024.200072>



## *Bible Translations from Manuscript to Screen: Cultural and Epistemological Issues*

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The Bible is one of the most widely translated books in history available in as many as 2,508 languages and in multiple versions within the same language (Anderson, 2012, p. 10). Its early translations from Hebrew, the Septuagint and the Vulgata, respectively in Greek and Latin, the former dating back to the third century BC, and the latter to the fifth century CE, have greatly influenced the subsequent translations and also shaped theological thinking. While much of the interest in translating the Bible lies in its sacred character as the Holy Book for Christians and Jews, nowadays, the Bible's positioning as the word of God has lost much of its appeal to people more in touch with the rational side of science, or with postmodern forms of spirituality (Moberg, Granholm, and Nynäs, 2012). According to the recent survey carried out by the American Bible Society, only 39% of the adult population in the USA have identified themselves as Bible users (Fuch, Petersen and Plank, 2023). Yet, the popularity of Bible apps and websites that enable the close reading of parallel versions of the Bible seem to indicate just the opposite trend and a rising surge of interest on the part of common readers, regardless of their religious creed (Siker 2015).

In light of the major changes that have affected the shape and materiality of the Bible as well as the web users' perception of its new digital encoding (Rakow 2021; van Peursen 2014), this paper is aimed at reviewing some current issues on the English Bible translations made available through websites such as Bible Gateway (<https://www.biblegateway.com/>) and the Bible Hub (<https://mail.biblehub.com/>). Besides the still relevant issues about gender (i.e. how best to translate general reference words such as "man" or "brothers" into a more inclusive language) and culture (how to make some culture-specific concepts such as "Kingdom of Heaven" accessible to all) (Perry and Grubbs 2020; Wierzbicka 2001 and 2019), the analysis of some aspects such as concordancing, hypertextual links, multimedia can help us have a better grasp of the new Bible literacies associated with translation websites. In particular, this preliminary investigation intends to look at the way in which translation frameworks may have been shaped by religious beliefs and sociopolitical ideologies in the far away past as well as in the new millennium.

### **References**

- Anderson, S. R. (2012). *Languages: A Very Short Introduction*. Oxford University Press.
- Fulks, J, Petersen, R. and Plake, J. F. (2023). *State of the Bible USA 2022*. American Bible Society, <https://sotb.research.bible/> (accessed 22/ 10/2023).
- Moberg, M., K. Granholm, and P. Nynäs. (2012). Trajectories of post-secular complexity: An introduction. In Peter Nynäs, Mika Lassander and Terhi Utriainen (Eds.) *Post-Secular Society* (pp. 1-25). Transactions.
- Perry, S. L. and Grubbs J.B. (2020). Formal or Functional? Traditional or Inclusive? Bible Translations as Markers of Religious Subcultures, *Sociology of Religion: A Quarterly Review*, 81(3), 319–342. DOI: 10.1093/socrel/sraa003
- Rakow K. (2021). The Material Nature of The Bible from Print to Digital Text. In Dan J. Clanton, jr and Terry R. Clark (Eds.), *The Oxford Handbook of The Bible and American Popular Culture* (pp. 414-432). Oxford University Press.
- Siker, J. S. (2015 Fall). Digital Turns and Liquid Scriptures. *Reflections*, 53-56. [https://reflections.yale.edu/archives?field\\_issue\\_title\\_value=fall\\_2015&field\\_issue\\_year\\_value\\_1%5Bvalue%5D%5Byear%5D=](https://reflections.yale.edu/archives?field_issue_title_value=fall_2015&field_issue_year_value_1%5Bvalue%5D%5Byear%5D=) (accessed 19/2/2024).



Van Peursen, W. (2014). Is the Bible losing its covers? Conceptualization and use of the Bible on the threshold of the Digital Order. *HIPHIL Novum*, 1(1), 44-58.

Wierzbicka, A. (2001). *What Did Jesus Mean? Explaining the Sermon on the Mount and the Parables in Simple and Universal Human Concepts*. Oxford University Press.

Wierzbicka, A. (2019). *What Christians Believe. The Story of God and People in Minimal English*. Oxford University Press.

## *Telling dolls stories across languages: how does AI translate corporate storytelling?*

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The changes AI is bringing about in professional and non-professional environments are, more or less manifestly, impacting the language industry and, consequently, the translation industry. This extremely rapid and inevitable change is splitting professional translators into two categories: the ones who have accepted and embraced AI and the ones who still mistrust it as a threatening shadow (Mattioda, Molino e Cinato, 2023; Riedeger e Galati 2023). While deciding whether or not professional translators are an endangered species may be premature (and probably of little use), AI compels translation scholars and professional translators to re-think and (re)adapt some of the concepts that are central to Translation Studies (Monti, 2019), namely the role played by the translator as ‘author’ of the text in the target language and the competences s/he has to have to be both an efficient mediator and a competitive professional in the translation market.

Drawing on these premises, this paper aims to look at the challenges linked to the automatic translation of the mission statements of two toy companies born in 2016: *Healthy Roots* and *Sibahle Collection*. The companies were created to fill a gap in the toy market, inspire black children to nurture their beauty, and take care of their natural hair. That is the reason why, in terms of corporate storytelling, the websites of *Healthy Roots* and *Sibahle Collection* do not just show a set of discursive constructs through which two business organizations communicate and perform their brand identities (Brown, 2006; D’Avanzo and Garofano, 2021; D’Avanzo 2022), they also present narrations that are meant to convey multi-layered identities and emotionally engage eventual buyers.

Turning to Translation Studies (Cronin, 2012; Poibeau, 2017; Monti, 2019), Corporate Storytelling (Brown, 2006; Boje, 2008) and Martin and White’s Appraisal Framework (2005) the paper aims to join the debate around and about the efficacy of AI-generated translation products, assessing some translation outcomes provided by both Gemini and ChatGPT chatbots to consider if such translations succeed in conveying the attitude and engagement codified in the communication of the brand identities and what is the role potentially played by the human translator.

### **References**

- Boje, D. M. (2008). *Storytelling Organisations*. London: Sage.
- Brown, A. D. (2006). A narrative approach to Collective Identities. *Journal of Management Studies* 43(4), 733-753.
- Cronin, M. (2012). The translation age: translation, technology, and the new instrumentalism, in Venuti, L. (ed.) *The translation studies reader*, London: Routledge.
- D’Avanzo, S. (2022). The Role of Cognitive Linguistics in Corporate Storytelling – A Methodological Perspective. *mediAzioni* 34, A77-A88. <https://doi.org/10.6092/issn.1974-4382/15513>, ISSN 1974-4382.
- D’Avanzo, S, Garofano, A. (2021). Telling food and wine stories: storytelling strategies from linguistic and marketing perspectives, in Pennarola, C. et al. (eds) *Specialized Discourses of Well-Being and Human Development*, Torino/Paris: L’Harmattan.
- Martin J. R, White P. R. (2005). *The Language of Evaluation*. London: Palgrave Macmillan.
- Mattioda, M. M., Molino, A., Cinato, L. (2023). L’intelligenza artificiale per la traduzione: orizzonti, pratiche e percorsi formativi. *mediAzioni* 39, A1-A16. <https://doi.org/10.6092/issn.1974-4382/18786>.



Monti, J. (2019). *Dalla Zairja alla traduzione automatica. Riflessioni sulla traduzione nell'era digitale*. Napoli: Paolo Loffredo.

Poibeau, T. (2017). *Machine translation*. Cambridge: MIT Press.

Riedeger, H., Galati, G. (2023). La traduzione nell'era dell'IA: nuovi ruoli, nuove competenze, nuova formazione. *mediAzioni* 39, A35-A54. <https://doi.org/10.6092/issn.1974-4382/18786>.

# *AI and the Curriculum Vitae: Translating the Self within the Web of the Untranslatable*

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Putting words to the existential and nebulous concept of the self is challenging at best and the attempt to do so within the confines and constrictions of a curriculum vitae– that reductive document which seeks to encapsulate and, in many ways, justify one’s existence and productivity in the most excellent way– is that much more so. When the words are eventually found and appropriately curated to reflect exactly what you have done and where and how you have done it you realise that you must board the perhaps the most “risky vehicle” in “cultural traffic” (Bassnett and Trivedi, 1999) – translation.

Questions of identity are thrown into question through their very manifestation, within the boundaries and framework of a CV, and then its consequent interpretation. And one is left wondering if artificial intelligence, this “simulation of human intelligence” is capable of assuming the immense responsibility of translating, not just a language, but more critically a culture– the culture– of the self? Within the evermore globalised and fragmented space of the contemporary, the accessibility to reach places –both physical and virtual– continues to gain momentum. Yet, through all this movement, the importance of that dastardly document– the CV–persists as a kind of entryway into promised lands – both literally and metaphorically. With language being such a fundamental element in cultural identity one cannot but consider the act of translation through André Lefevere’s question which asks: “can culture A ever really understand culture B on that culture’s (i.e. B’s) own terms?” (Lefevere, 1999, p.75). What happens when the interpretation of the words is misinterpreted from one cultural context into another. A docente a contratto say, in the Italian translates into Adjunct professor in English, respecting a system of education where such a word exists to describe those professors employed on the shaky and uncertain terrain of contract work. It might sound far more grandiose in the English than its Italian counterpart when in fact, it is precisely the same thing. The material adopted in this study includes samples of academic CVs written in different languages reflecting diverse cultural perspectives. AI will then translate the CVs from one language to another.

ChatGPT describes itself as being “trained on a large corpus of text from the internet, allowing it to understand and generate responses in a manner that resembles human language” but is this “language” one that is culturally sensitive and nuanced? And what is at stake when a CV is translated from one culture to another? Does the self then, quite literally, risk being lost in translation?

## **References**

- Susan Bassnett S. and Harish Trivedi H. (eds.) (1999). *Post-Colonial Translation. Theory & Practice*. Routledge
- Lefevere A. (1999). “Composing the Other”, in Bassnett S. and Trivedi H. (eds.), *Post-Colonial Translation*. Routledge, pp.75-94.

## *TALL: a Shiny app of Text Analysis for All. A new tool for linguists and translators.<sup>1</sup>*

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In the era of big data, researchers across various disciplines face the challenge of analyzing extensive textual data spanning research articles, social media posts, customer reviews, and survey responses. These new sources harbor valuable insights applicable to advancing knowledge in several fields ranging from the social sciences to healthcare. Researchers aim to identify patterns, recognize trends, and extract meaningful information from textual data, employing advanced natural language processing (NLP) techniques and machine learning algorithms for tasks such as topic detection, polarity detection, and text summarization. For instance, linguists are increasingly asked to provide measurement of their research as well as interconnections in their discourse analysis endeavors, to better explain meanings, metaphors, framing, etc. translators, in their turn, are also interested in providing established solutions especially in the field of English for Specific Purposes.

Moreover, both the rise of digital platforms and the proliferation of online content have generated vast amounts of previously inaccessible textual data. Linguists may tap into these resources to explore new research questions, validate existing theories, and develop novel insights. Computational tools facilitate the efficient processing and analysis of large text volumes, significantly reducing the time and effort required compared to manual methods. Yet, many linguists lack the necessary programming skills for effective textual data analysis, creating a demand for user-friendly text analysis tools. Despite the powerful capabilities of R and Python (two main software programs used in textual analysis), acquiring proficiency in these programming languages often requires additional time or resources.

This contribution presents the first version of TALL - Text Analysis for All - a new R Shiny app that combines all the major text analysis advancements developed in recent years. TALL serves as a groundbreaking, innovative and more practical solution for linguists and translators without programming skills, offering an intuitive interface that enables interaction with data and the execution of analyses without extensive programming knowledge. TALL provides a comprehensive workflow for data cleaning, pre-processing, statistical analysis, and visualization of textual data by combining state-of-the-art text analysis techniques into an R Shiny app.

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# *Evolving Standards: Assessing Translation Quality in the Age of Machine Translation and Post-Editing*

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The considerable growth of interest in the translation field in recent years, due to the pressure to increase the productivity of translation in terms of both amount of text and processing time, has led researchers from multiple fields of study including linguistics, computer sciences and artificial intelligence to investigate the role of machine translation (MT) (Koehn & Knowles 2017). On one hand, automatic translation is seen as a challenging opportunity to foster and support the translation process, in the form of post-editing, increasing the speed and productivity of translators. On the other, the increasing spread of MT software, to respond to the significant growth of linguistic content to process, contributes to questioning the translation output in terms of expected level of quality. The article investigates the dynamic interplay between Human Translation (HT), post-editing (PE), and MT addressing the controversial issue of translation quality (Gaspari & Toral 2018; Nitzke & Groves 2019; O'Brien & Klapka 2018). An overview of different methodologies and approaches is provided, identifying a number of perceived issues concerning translation in terms of process, product and evaluation systems. In particular, the work addresses the most recent developments, since 2013, regarding the role of post-editing effort in assessing the quality of neural machine-translated texts (Toral et al. 2018). A discussion on the observed tendency to objectify translation standards, adopting automatic metrics, is included with a focus on the implications it may have for the research and translation community. Qualitative analyses are conducted through a survey with a community of professional translators and post-editors to capture their perceptions, experience, and attitudes towards the integration of MT and PE into their workflow. The study contributes to the on-going discourse on the combined use of MT and HT in professional translation environments. It underscores the need for a collaborative approach that leverages the strengths of both human expertise and machine capabilities to achieve optimal translation outcomes. The findings have implications for translation industry stakeholders, including translators, language service providers, and technology developers. The work emphasizes the importance of continuous training, effective quality assessment methodologies, and well-defined workflows in achieving the full potential of MT and PE in the translation industry.

## **References**

- Gaspari, F., & Toral, A. (2018). Post-editing Effort of a Phrase-Based Statistical and a Neural Machine Translation System. *Machine Translation*, 32(1-2), 107-130.
- Koehn, P., & Knowles, R. (2017). Six Challenges for Neural Machine Translation. In *Proceedings of the First Workshop on Neural Machine Translation* (pp. 28-39). Association for Computational Linguistics.
- Nitzke, J., & Groves, D. (2019). Exploring the Boundaries of Post-Editing: A Study on Professional Translators' Perception, Expectations and Experiences. *Translation Spaces*, 8(1), 20-46.
- O'Brien, S., & Klapka, S. (2018). Investigating the Relationship between Post-Editing and Translation Revision Effort. *Translation Spaces*, 7(2), 282-305.
- Toral, Antonio, Castilho, Sheila, Hu, Ke, and Andy Way, 2018, "Attaining the unattainable? Reassessing claims of human parity in neural machine translation" in *Proceedings of the Third Conference on Machine Translation: Research Papers*, pages 113–123, Brussels, Belgium, October. Association for Computational Linguistics.



## *Easy peasy... not that easy. Beliefs and reality in MTPE*

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The language industry has undergone a significant transformation due to technological advances, notably impacting professionals in the field. A substantial portion of translation tasks, traditionally managed by human translators, now sees automation through services such as Machine Translation (MT) and Post-Editing (MTPE). The adoption of these automated systems has notably risen within Language Service Companies, and projections suggest this trend may eventually surpass Human Translation (HT) in prevalence (EUATC, 2023).

In response to these industry shifts, translation training institutes and universities emphasize their commitment to aligning and developing programs with market needs. (Kenny and Doherty, 2014). However, a discrepancy is observed in the Italian translator training landscape, where a misalignment exists between the professional demands and the content of translation training programs (Latorraca, 2022). Furthermore, both the professional and academic realms harbor beliefs and biased assumptions about the seemingly straightforward and non-specialized nature of MTPE as a professional task, often underestimating the required competencies and effort (Guerberof Arenas, 2013).

This study aims to explore how the perceived simplicity of MTPE translates into actual performance outcomes. A cohort of translation trainees was asked to perform an MTPE assignment and their post-edited works were subsequently tagged by means of labels adapted from Mossop's revision changes (2014), and analyzed. Results reveal a notable disparity between trainees' previously assessed perception of task complexity (Latorraca, 2023) and the actual quality of their MTPE performance. These findings raise critical questions about the necessity for more targeted and specialized translation training curricula to address specific challenges in the ever-evolving landscape of translation services.

### **References**

- EUATC. (2023). ELIS 2023. *European Language Industry Survey 2023*. Presentation at the Translating Europe – Survey Result Workshop, p. 21. March 2023.
- Guerberof Arenas, A. (2013). What do professional translators think about post-editing. *JoSTrans The journal of specialised translation*, 19, 75–95.
- Kenny, D. (2020). “Machine translation.” In Baker, M., Saldanha, G. (Eds.), *Routledge Encyclopaedia of Translation Studies*, third ed. Routledge London, New York, pp. 305–310.
- Latorraca, R. (2022). Translator and reviser training: the white whales of Italian academia. *Anglistica AION an interdisciplinary journal* 24 (2), 29–41. <https://doi.org/10.6093/2035-8504/9293>.
- Latorraca, R. (2023). Lost in post-editing. An exploratory study on translation trainees' perceived EN> IT post-editing vs. translation performance. *Ampersand*, 11, 100144. <https://doi.org/10.1016/j.amper.2023.100144>
- Mossop, B. (2014). *Revising and editing for translators*. Routledge London/New York.

## *Subtitling English varieties on Prime Video: defining identities and building accessibility*

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The present study discusses the level of diamesic variability between intralingual closed captioning (CC) and geolinguistic and diaphasic variations of English in audiovisual products. Since subtitles are multimedial, as they refer to the acoustic element in a visual modality (Díaz-Cintas & Remael, 2021), any marked varieties in register, style, and dialect may represent an issue. Furthermore, subtitles' complexity increases in respect to accessibility.

For instance, verbatim CC would graphically match with the spoken, context-bound variety, thus avoiding any form of 'censorship' (Neves, 2008); however, this may challenge spatial and temporal restrictions, since subtitling for aurally impaired audiences must contain any significant information on both soundtrack and paralinguistic features (Zárate, 2021). Moreover, implications on reading capabilities may arise from a cognitive perspective when unfamiliar slang or spelling appears on screen. By contrast, an over-standardisation would lead to the risk of not adequately depicting character portrayals as thought by screenwriters, thus missing important parts of the plot (Díaz-Cintas, 2020).

Based on these premises, the study focuses on accessibility strategies from a variationist viewpoint in the CC offered by Amazon Prime Video, since it is still little investigated and seems to lack homogeneous textual conventions and rules. For this purpose, two black comedies have been chosen and gathered, namely the film *Borat Subsequent Moviefilm* (2020) and the stand-up comedy show *Paul Chowdhry: live innit* (2019), both distributed by Amazon Studios and released on Prime Video. This sample gives a first glance at the strategies used by Amazon's CC when defining a character's identity through the correspondent idiolect, in this case a pseudo-Kazakh 'incorrect' English and a slangy, multi-accented English, respectively. The work employs a hybrid, corpus-assisted methodology to provide a first quantitative analysis of significant tokens and ease their qualitative investigation from a sociolinguistic perspective. Results show that, despite Amazon's overall choice for the verbatim solution, some challenges still remain when it comes to transcribing marked speech, which leads to the loss of certain distinctive features in accessible subtitles.

### **References**

- Díaz-Cintas, J. (2020). The Name and Nature of Subtitling. In Bogucki, Ł., Deckert, M. (eds.), *The Palgrave Handbook of Audiovisual Translation and Media Accessibility* (pp.149-171). Palgrave Macmillan.
- Díaz-Cintas, J. & Remael, A. (2021). *Subtitling: Concepts and Practices*. Routledge.
- Neves, J. (2008). 10 fallacies about Subtitling for the d/Deaf and the hard of hearing. *The Journal of Specialised Translation*, 10, 128-143.
- Zárate, S. (2021). *Captioning and Subtitling for d/Deaf and Hard of Hearing Audiences*. UCL Press.