ROCZNIKI HUMANISTYCZNE
Tom LXXII, zeszyt 6 – 2024
DOI: https://doi.org/10.18290/rh247206.6

KATARZYNA KLIMKOWSKA
KONRAD KLIMKOWSKI

STUDENTS' MULTILINGUAL EXPERIENCES WITH ONLINE MACHINE TRANSLATION: IMPLICATIONS FOR GENERAL LANGUAGE USE

INTRODUCTION

This article rests on a working assumption regarding how technology influences contemporary general language use. The assumption is that contemporary users of general language like Polish become plurilingual in everyday life activities like e-commerce, tourism or social media. As defined in the CEFR companion volume, plurilingualism is a competence enabling language users' functioning in multilingual contexts (Council of Europe, 2020). As discussed below, plurilingualism is not tantamount to bilingualism ("the coexistence of more than one language system within an individual", Ferreira & Schwieter, 2023, p. 3). Plurilingualism tends to be seen in terms of an "unbalanced," "partial," and "uneven" competence (Coste et al., 2009, p. 31).

Embracing our working assumption, we researched a group of almost 200 Polish BA and MA students in Education Studies at the Maria Curie-Skłodowska University (Lublin, Poland) to learn about their experiences and perceptions concerning online machine translators (OMT) in performing everyday plurilingual communicative exchanges with foreign interlocutors, e.g. when sending an email

Dr hab. KATARZYNA KLIMKOWSKA – Associate Professor at the Maria Curie-Skłodowska University in Lublin, Institute of Education Studies and Psychology; correspondence address: Wydział Pedagogiki i Psychologii UMCS, ul. Głęboka 43, 20-612 Lublin, Poland; e-mail: katarzyna.klimkowska@mail.umcs.pl; ORCID: https://orcid.org/0000-0001-6388-274X.

Dr hab. KONRAD KLIMKOWSKI – Associate Professor at the Maria Curie-Skłodowska University in Lublin, Department of Applied Linguistics; correspondence address: Wydział Filologiczny UMCS, pl. Marii Curie-Skłodowskiej 4A, 20-031 Lublin, Poland; e-mail: konrad.klimkowski@mail.umcs.pl; ORCID: https://orcid.org/0000-0002-9835-635X.

to confirm a purchase and delivery options. That in the Polish context plurilanguaging predominantly takes place between the native language (L1) and English (L2) requires no empirical testing: the EU data shows beyond doubt that the L2 of the first choice for Polish learners is English (European Commission, 2019, p. 101). This is why in our research we only asked about English as the L2 in plurilingual interaction in everyday matters.

The main objective of our research was to determine if research participants used machine translation as a tool in their plurilingual communication in everyday life contexts (e-shopping, booking hotels abroad or engaging into social media activities in English). Should the majority of our respondents admit reliance on machine translators, we could venture a claim that contemporary general language (communicative) practices in Poland need to be increasingly seen in terms of plurilingualism.

LITERATURE OVERVIEW

Plurilingualism and text mediation

As already noted, plurilingualism allows language users to function in multilingual and multicultural contexts (Council of Europe, 2020). Plurilingualism can be compared with bilingualism, yet the two should not be equated. As explained by Coste et al. (2009, s. 10), the notion of bilingualism suggests in itself a competence balance between L1 and L2, which means bilinguals have a comparable degree of competence in both (Cummins, 1996), whereas plurilingualism signals a far more dynamic, emergent and unbalanced view of skills relating to language use, meaning making and identity.

> In a plurilingual approach, learners are encouraged to reflect on the insights, competences, and strategies that constantly contribute to the fluid and magmatic development of their repertoire…. Even more fundamentally, it is crucial to being comfortable with the complex linguistic and cultural identities of oneself and others, to being at ease with one's own fluid and ever-developing identity. (Piccardo et al., 2021, p. 6)

Plurilingualism is a complex framework of developmental trajectories rather than binary defined competences (Mc Kee & Eraut, 2012).

> This is seen as being unbalanced, partial, incomplete – dependent on each individual trajectory. It is seen as a changing or transitory competence, in which capacities in one language or variety may well be very different in nature to those in another. It is embedded in an equally developing pluricultural competence. And every person's

> plurilingual repertoire is unique since it reflects both their background and their subsequent trajectory, interests, and experiences. (Piccardo et al., 2021, p. 2)

In practical terms, plurilingualism can involve situational code-switching, mediation of meanings and senses in multilingual groups. It can also use non-verbal means to augment meaning-making (Council of Europe, 2020, p. 30). If plurilingualism is a competence of its own, the practice of its situational application is often called plurilanguaging (e.g. Piccardo et al., 2021). Plurilanguaging is not only about adding or multiplying language competences.

> It permits combinations and alternations of different kinds. It is possible to switch codes during a message, and to resort to bilingual forms of speech. A single, richer repertoire of language varieties and available options thus allows choices based on this interlinguistic variation when circumstances permit. (Coste et al., 2009, p. 11)

Another notion worth mentioning in this context is that of mediation, as outlined in the CEFR companion volume as part of the functional matrix for contemporary language learning and use. Mediation represents the most complex set of language practices and involves mediating communication, texts and concepts (Council of Europe, 2020, p. 33). The reason for our reference to mediation is that plurilingual practices are hugely dependent on it (Piccardo, 2021). What is more, in our research, we want to examine if online machine translators are used by general language users in plurilingual mediation of texts.

A final note in this section concerns the change in the role of foreign language learning, as promoted by the CEFR companion volume, but also by numerous other authors. They advocate for a learning perspective where the dominant L2 focus in language learning (seeking to build as if a mythological proficiency in L2) is substituted by learning for mediation between L1 and L2 (and possibly other foreign languages) (Coste et al., 2009; Cook, 2010; Lüdi, 2021). They also argue that language learning and use is far more than just a linguistic phenomenon, involving social and identity-building contexts (Kramsch, 2010).

Online machine translators (OMT)

In her discussion on how contemporary individuals and societies engage in plurilingual interaction in everyday matters, Torres-Hostench (2022) poses a question of considerable import to our line of argument:

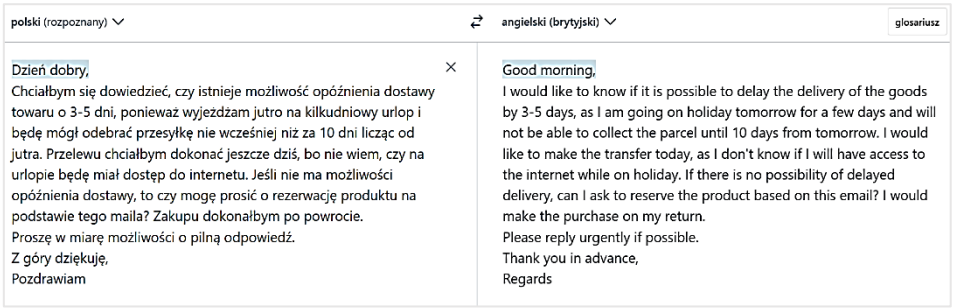
> Is there a "technological multilingualism", understood as the ability of societies, institutions, groups and individuals to engage, on a regular basis, with more than one language in their day-to-day lives, through multilingual translation tools? (Torres-Hostench, 2022, p. 7)

Although Torres-Hostench uses the notion of multilingualism, following how the concept is defined and used by the European Commission (e.g. European Commission, 2007), it is perhaps unquestionable that these two concepts can be taken as synonyms for the purposes of our article. As for the question itself, Torres-Hostench answers it in a definitely positive way, almost simultaneously redirecting the argument to the educational plane:

> From the current perspective, machine translation is not present enough in the EU discourse of language diversity and multilingualism. How could machine translation be included in language learning projects? (Torres-Hostench, 2022, p. 8)

In what follows we adopt a parallel perspective, but before we are ready to share it with the reader, we need to make at least some basic reference to online machine translation as a phenomenon that plays a crucial role in our research. Fortunately, the technicalities of machine translation have been widely discussed in the literature, with the most recent contributions being Pérez-Ortiz (2022) or Kenny (2022). These two accounts of the present-day status quo of neural machine translation (NMT, a prevalent technology in OMT at this moment) allow us to confine ourselves to a very short and simplistic definition of a neural machine translation engine as software dedicated to translation of language strings, relying on complex probability assessment concerning lexical, phrasal and clausal structures that are most likely equivalents to the structural elements of the source text. To substantiate this sketchy definition, let us illustrate how an NMT engine works, relying on *DeepL Translator* (henceforth *DT* for brevity) to render a text from Polish into English – the one that we used in our research questionnaire – which is presented below along with its machine rendering into English by *DT*.

Figure 1
The main window layout in DeepL Translator



As illustrated in Figure 1, *DT* has a twin-window interface: the left-hand window is where users feed the source texts, while the right-hand window is where draft translations appear. When a user points with the mouse next to a word of their choice, *DT* displays a menu with lexical, collocational, phrasal and clausal hints for potential post-editing of the NMT draft.

Figure 2

Post-editing options in DeepL Translator

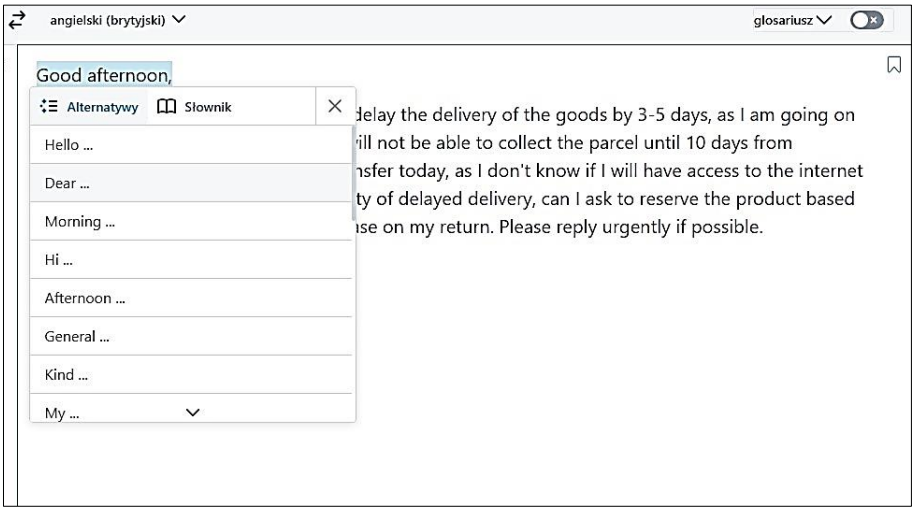
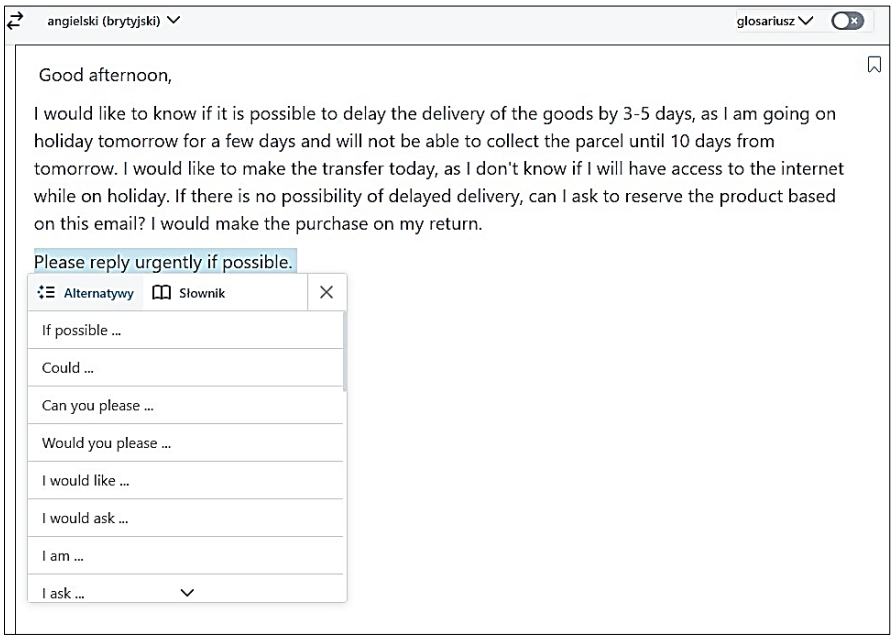


Figure 2 demonstrates that positioning the mouse pointer next to the opening phrase (*Good afternoon*) activated the *DT* post-editing functionality. *DT* displayed a list of items it considered possible substitutes for its own original rendition. The illustrated case represents a phrasal substitution, but *DT* is fully capable of suggesting clausal options as well.

Figure 3

A clausal substitute proposal in DeepL Translator *post-edition functionality*



This time the mouse pointer is positioned next to the clause *Please reply urgently if possible*. *DT* shows a dropdown list with clausal substitutes to pick.

The post-editing functionality in *DT* is a powerful asset in language learning and use. In fact, this function allows NMT users to stay in control of their plurilingual text mediation. Thus, at the level of application functionality, the user is equipped with necessary quality control functions. The problem, obviously, is if the user chooses to be in control – a topic related to risks and reservations concerning the use of OMT and other language technologies in language learning and communication. Detailed discussions on the topic can be found in numerous research reports in the area of foreign language learning and teaching. One of the most recent and synthetic treatments in this regard is Jolley and Maimone (2022), to which the reader is kindly referred for details.

It seems that more and more foreign language educators accept the fact that OMT (and other technologies) cannot be *banned* or *persecuted* in the language classroom or in individual language learning (Briggs, 2018; Carré et al., 2022; Kenny, 2022; Niño, 2020). In fact, the optimal way to avert most risk factors is to address them directly through education, instead of approaching them in terms of a classroom taboo. This leads us to an obvious educational postulate:

online machine translation should become part of language learning (Niño, 2020; Torres-Hostench, 2022) and if so, the relevant competences should include control.

In what follows we present the perspective on the issue held by our research subjects. Apart from getting to know if they use NMT in everyday plurilanguaging, we also enquired about their views on the relationship between NMT and language learning.

METHOD

Research objectives and methods

The main research objective was to determine how the respondents use the OMT engines when facing plurilingual tasks in day-to-day functioning. In particular, we wanted to establish if they use OMT engines at all; if they do, how, and how they assess the relationship between the use of OMT and language learning and use. We only asked about English as L2, as the most likely choice among language learners and users in the EU countries (European Commission, 2019, p. 100). Since the research was diagnostic in nature, no overt hypotheses were put forward. The demographic and educational data concerning the subjects were used to provide a general overview of the research group. The diagnostic survey was a research technique applied, with authors' own questionnaire as a research tool.

Research group

The research involved 192 students of education at the Maria Curie Skłodowska University in Lublin, Poland. They recruited from six different majors: organization of cultural life, early childhood education, social rehabilitation, pedagogy, special needs education and social work. The majority of the respondents were women (93.75%), the age bracket was 18–31, and the average age was 21. The most represented were the students of the first year of BA courses and the first year of the one-cycle (five-years) MA course in early childhood education (as a mandatory mode for this field of studies in Poland). The first-year students accounted for 61.46% of responses (118), the third-year BA students gave 23.44% (45) of the results, while the second-year BA students yielded 15.10% (29). As for the field of study, the largest respondent group consisted of pedagogy students (58, 30.21%), with an almost similar share of special needs education (56, 29.17%). The other groups of students were noticeably smaller: social work (28, 14.58%), social rehabilitation (25, 13.02%) and early childhood education (24, 12.50%).

The main two reasons for our targeted research group recruitment were the age and the academic status of the respondents. This choice rested on the assumption that university students represent a generation of present or near-future users of OMT in plurilingual communicative exchanges (everyday, general language use). Also, the fact that their fields of study are not directly related to either language or technology helped us avoid a potential bias towards OMT. At the same time, we do not aspire to claim that our research is in any way representative (subject to direct extrapolation) to any larger population of potential subjects.

RESULTS

The respondents' English language competence

English is the main L2 taught in elementary and secondary schools in Poland as well as at the university level, and the fact that almost all respondents admitted having learned English does not come as a surprise: 189 students (98.44%) said they had learned English in the past, with only 3 (1.56%) saying they had not. A gross majority of the respondents also declared being learners of English at the time of research: 154 students (80.21%) said they were active learners of English, while 38 (19.79%) said they were not. These latter data may find at least a partial explanation in the fact that during the first and second years of university studies in Poland language classes are held by default. At the same time, it is worth noting that declarations of plans to continue English language learning in the future were signalled by almost 80% of the respondents: 79 students (41.14) answered *definitely yes*, and 73 (38.02) *rather yes*. As many as 28 respondents (14.59) were unable to decide, while 10 (5.21) answered *rather not* and 2 (1.04) *definitely not*.

English in plurilingual tasks

When asked how often they needed to write short messages and texts in English (for e-shopping, hotel booking, purchase complaints or social media), 13 students (6.77%) chose *very often*, while 26 (13.54%) *often*. Noticeably higher results were recorded for the response *rarely* (59, 30.37%), *very rarely* (60, 31.25%) and *never* (34, 17.71%). Thus, it can be concluded that the respondents were generally in little need of English in day-to-day communicative tasks.

When asked about how easy for them it was to write a short functional text in English, over 60% of the respondents found it *very easy* (28, 14.58%) and *rather easy* (91, 47.39%). These results can suggest that the majority of the

respondents are skilled plurilinguals, even though the total percentage of the students admitting difficulty in using English in the tasks at hand is relatively high. More than one-fifth of the respondents (43, 22.39%) were unable to decide on the issue, and a clear difficulty in handling the tasks was reported by 30 (15.64%) students.

Online machine translators (OMT) in plurilingual tasks

Another batch of questionnaire items concerned the use of online machine translators for plurilanguaging. When asked a general question if they use online translators to write texts in English, 164 (85.42%) respondents said *yes*, and 28 (14.58%) said *no*. The distribution of the results for how frequently the respondents relied on OMT was as follows: *very often* – 15 (7.81%), *often* – 55 (28.65%), *rarely* – 85 (44.27%), *very rarely* – 33 (17.19%) and *never* – 4 (2.08%). When asked about the direction of OMT translation, 133 respondents (69.27%) said they translated in both directions (PL<>EN), with 30 students translating into English only and 18 into Polish, whereas 11 respondents said they used no OMT in either direction.

It is difficult to ignore the fact that with a yes/no question, the number of respondents who were negative about their use of OMT was 28, but with the frequency index involved, the number of those never relying on OMT dropped to 4. Interestingly enough, when the respondents were asked about the direction of translation in OMT, the number of those rejecting OMT altogether reached 11. The latter figure may partly result from the fact that the question about the directionality of translation was formulated in general, without confining its scope to working on short functional texts. However, the discrepancy between the 28 and 4 negative answers in the previous two questions is hard to explain this way.

Another questionnaire item involved an assessment on the part of the participants as regards translating into English a concrete short message. The Polish and the working English version of the message is presented above when the *DT* post-editing functionality is discussed. The question asked in this context was if the respondents believed they would need OMT support in translating this particular piece or not. 33 students (17.18) said they would *definitely* need support, and as many as 93 (48.45%) would *rather* seek support. 19 (9.89%) respondents were not sure, 42 (21.88%) answered *rather not*, and another 5 (2.60%) *definitely not*. This latter questionnaire item was intended to examine if the respondents' general readiness to use OMT would correspond with data on their readiness to employ OMT in a particular task. It seems that when faced with an actual task, more subjects were ready (*definitely yes*, *rather yes*) to employ

OMT than when asked about its application in general (see the previous question). Of course, one needs to keep in mind a different formulation of the items compared, yet at least a tendency for the *undecided* to use OMT when faced with an actual translation task can be observed.

The last but one questionnaire item to be reported here is that concerning the respondents' opinion on the level of L2 proficiency that allows effective use of OMT in day-to-day plurilingual communication. When asked if an OMT user should possess (at least some) language competence in L2, 80 respondents (41.67%) answered *definitely yes*, 85 (44.27%) *rather yes*, 15 (7.81%) found it difficult to decide, 12 (6.25%) said *rather not*, with no respondent opting for *definitely not*. These data are crucial in that they suggest a relatively high degree of awareness of the respondents of the benefits and risks of OMT in plurilingual exchanges.

Further optimistic data come with the last item on our list, where the respondents were asked about what they do with the machine translated output. 55 (28.65%) respondents admitted *checking and correcting* the OMT output, 87 (45.31%) admitted *reading with occasional corrections*, 23 (11.99%) *read with rare corrections*, 19 (9.89%) *read with corrections as a last resort*, while 8 (4.16%) admitted *copying the text with no reading or correcting it*. The optimism we have in mind stems from the fact that the vast majority of the students participating in our research seem to have developed an accountable approach to OMT in plurilingual tasks, showing their tendency to stay in control of the translation process and its outcome.

DISCUSSION

The data presented above permit a large number of generalisations, yet the following three seem the most evident:

1. The majority of the respondents have built a repertoire for plurilingual text mediation, and many plan to improve their L2 skills.

2. Irrespective of the L2 resources they have already developed and the plans for advancement, the respondents admitted a high degree of reliance on OMT in plurilingual contexts (day-to-day text mediation), even though they do not find themselves all too often in need of such mediation.

3. A very interesting observation comes with the respondents' use of OMT in both language directions! This fact can serve as a confirmation of a working

assumption that the students use OMT to engage in authentically plurilingual text mediation.

CONCLUSIONS AND IMPLICATIONS FOR GENERAL LANGUAGE PRACTICES

Not only normative solutions like the CEFR framework or the EU multilingual policies, but also everyday life practices of young people in Poland can justify a claim that modern European societies are becoming plurilingual (multilingual). More and more communicative exchanges are likely to involve more than one – native – language. The vast majority of our research respondents admitted having an educational background in English. Yet, they are open and ready to rely on technological support for the plurilingual engagement, and OMT seems one of the optimal options at hand.

To avert the risks of excessive reliance on technology for plurilanguaging, technologies like OMT need to become standard tools in L1 and L2 language classrooms: if multilingualism is to become a matter of fact, supporting only L2 translation processes will not suffice. L1 also requires training and refinement. OMT training in language classrooms cannot be reduced to technicalities or parameter setting. Issues like control (metacognitive skills) are equally vital. Language applications will certainly advance (e.g. GPT and other Large Language Models), and to keep them under human control will be more and more (educationally) demanding. Even such simple tasks like the one discussed in our research (writing an email about a hotel reservation or an e-commerce complaint) can be successfully introduced to regular, curricular language classrooms in individual, group or team contexts. A feedback session to discuss options, variants and modifications can help avoid "automatic" reliance on the machine translation output without post-editing.

REFERENCES

Briggs, N. (2018). Neural machine translation tools in the language learning classroom: Students' use, perceptions, and analyses. *The JALT CALL Journal*, *14*(1), 3–24.

Carré, A., Kenny, D., Rossi, C., Sánchez-Gijón, P., & Torres-Hostench, O. (2022). Machine translation for language learners. *Translation and Multilingual Natural Language Processing*, *18*, 187–207. https://doi.org/10.5281/zenodo.6760024.

Cook, G. (2010). *Translation in language teaching: An argument for reassessment*. Oxford University Press.

Coste, D., Moore, D., & Zarate, G. (2009). *Plurilingual and pluricultural competence*. Council of Europe Publishing.

Cummins, J. (1996). *Negotiating identities: Education for empowerment in a diverse society*. California Association for Bilingual Education.

Council of Europe (2020). *Common European Framework of Reference for Languages: Learning, teaching, assessment: Companion volume*. Council of Europe Publishing.

European Commission (2007). *Final report from High Level Group on Multilingualism*. European Commission.

European Commission (2019). *Education and training monitor 2019*. Publication Office of the European Union.

Ferreira, A., & Schwieter, J.W. (2023). *The Routledge handbook of translation, interpreting and bilingualism*. Routledge.

Jolley, J.R., & Maimone, L. (2022). Thirty years of machine translation in language teaching and learning: A review of the literature. *L2 Journal*, *14*(1), 26–44. https://doi.org/10.5070/L214151760

Kenny, D. (2022). Human and machine translation. In D. Kenny (Ed.). *Machine translation for everyone: Empowering users in the age of artificial intelligence* (pp. 23–50). Language Science Press. https://zenodo.org/record/6653406

Kramsch, C.J. (2010). *The multilingual subject: what foreign language learners say about their experience and why it matters*. Oxford University Press.

Lüdi, G. (2021). Promoting plurilingualism and plurilingual education. A European perspective. In E. Piccardo, A. Germain-Rutherford, & G. Lawrence (Eds.). *The Routledge handbook of plurilingual language education* (pp. 29–45). Routledge.

Mc Kee, A., & Eraut, M. (Eds.). (2012). *Learning trajectories, innovation and identity for professional development*. Springer.

Niño, A. (2020). Exploring the use of online machine translation for independent language learning. *Research in Learning Technology*, *28*. https://doi.org/10.25304/rlt.v28.2402

Pérez-Ortiz, J.A. (2022). How neural machine translation works. In D. Kenny (Ed.). *Machine translation for everyone: Empowering users in the age of artificial intelligence* (pp. 141–164). Language Science Press. https://zenodo.org/record/6653406

Piccardo, E. (2021). The mediated nature of plurilingualism. In E. Piccardo, A. Germain-Rutherford, & G. Lawrence, *The Routledge handbook of plurilingual language education* (pp. 65–81). Routledge.

Piccardo, E., Germain-Rutherford, A., & Lawrence, G. (2021). *The Routledge handbook of plurilingual language education*. Routledge.

Torres-Hostench, O. (2022). Europe, multilingualism and machine translation. In D. Kenny (Ed.). *Machine translation for everyone: Empowering users in the age of artificial intelligence* (pp. 1–21). Language Science Press. https://zenodo.org/record/66534061–21

STUDENTS' MULTILINGUAL EXPERIENCES WITH ONLINE MACHINE TRANSLATION: IMPLICATIONS FOR GENERAL LANGUAGE USE

Summary

This article discusses how online machine translators (OMT) can influence the way people use general language or languages. The latter distinction has to do with the fact that contemporary lifestyles turn language users into plurilingual communicators. Online shopping, travelling abroad or social media often require at least some degree of plurilingual text mediation skills. Irrespective of foreign language competences, a lot of plurilingual communicators seek OMT support in making sure their messaging with international partners is correct and effective. The article discusses research results concerning how a selected group of BA and MA students in education use machine translation for day-to-day plurilingual communication tasks. We asked them about the relation between machine translation, language learning and language use. We give some insight into the machine translation engine *DeepL Translator*, which can effectively be used in support of plurilingual text mediation. The article also contains basic educational implications for why and how to make OMT part of foreign language curricula.

Keywords: neural online machine translation; DeepL Translator; plurilingualism; text mediation

WIELOJĘZYCZNOŚĆ A TŁUMACZENIE MASZYNOWE. DOŚWIADCZENIA STUDENTÓW ORAZ IMPLIKACJE DLA JĘZYKA OGÓLNEGO

Streszczenie

W artykule omówiono, w jaki sposób internetowe translatory maszynowe (OMT) mogą wpływać na sposób użycia języka lub języków ogólnych. To ostatnie rozróżnienie wynika z faktu, że współczesny styl życia wymusza na mówiących posługiwanie się wieloma językami. Zakupy online, podróże zagraniczne lub media społecznościowe często wymagają przynajmniej pewnego stopnia wielojęzycznych umiejętności mediacji na poziomie tekstu. Niezależnie od kompetencji w zakresie języka obcego, wielu mówców sięga po tłumaczenie maszynowe online, aby mieć pewność, że ich korespondencja z partnerami międzynarodowymi będzie poprawna i skuteczna. W artykule omówiono wyniki badań na wybranej grupie studentów studiów licencjackich i magisterskich w dziedzinie pedagogiki, którzy wykorzystują tłumaczenie maszynowe w codziennych zadaniach związanych z komunikacją wielojęzyczną. Kwestionariusz badawczy dotyczył relacji między tłumaczeniem maszynowym, nauką języka i jego używaniem. Artykuł przedstawia główne funkcje translatora maszynowego *DeepL Translator*, który może być skutecznie wykorzystywany do wielojęzycznej mediacji na poziomie tekstu. Autorzy zarysowują kilka sugestii dotyczących tego, dlaczego i w jaki sposób włączać tłumaczenie maszynowe do programów nauczania języków obcych.

Słowa kluczowe: tłumaczenie maszynowe online na podstawie sieci neuronowej; DeepL Translator; wielojęzyczność; mediacja na poziomie tekstu