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The socio-economics of translation industry as part of translator training

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Abstract

As a result of globalization and technological advancements in the past three decades translation industry has undergone major changes pertaining both to work modes and a wider socio-economic landscape. This process had a huge impact on translator training which started to include a range of new modules, skill-sets and activities. Irrespective of its exact form, the rationale behind the refashioning of translation curricula has been relatively clear – to increase the employability of trainee translators by equipping them with what is needed on the 21st technology-driven market. Being consistent with these methodological endeavors directed at better job prospects for students, the present study sketches out a proposal of the course about social and economic aspects of translation industry. More specifically, the course is conceived of as the combination of two interconnected issues. On the one hand, it focuses on some key socio-economic mechanisms that influence the shape of the modern-day translation industry including multidimensional dynamics of supply and demand, positions and interests of various industry stakeholders, and technological and economic trends. On the other hand, the proposal also includes a critical approach to these socio-economic factors which is driven by a concern for human interests and needs. Overall, it is argued that such a course could not only contribute to increasing trainee translators' employability, but it would also improve their critical awareness and survival skills on a highly competitive market.

Keywords: translator training; translation education; translation curriculum; employability; translation industry; socio-economics

1. Introduction

The past three decades have seen a sea change in translation industry. Reshaped by technological advancements such as translation memories and machine translation (O'Hagan, 2020), the profession has been gradually moving from a human-centered activity merely assisted by technology to the industry where human-machine cooperation is the standard practice and machine generated translations become increasingly important (see Angelone et al., 2020). Apart from new technologies, translation industry has been also greatly transformed by globalization increasing the demand for new translations (Cronin, 2003), the growth of new areas, for instance, audiovisual translation, localization (see Bogucki & Deckert, 2020; Pérez-González, 2019), and changes in user practices such as an increase in non-professional translation (see Jiménez-Crespo, 2020). Such transformations have numerous consequences for various stakeholders, including language service providers, professionals, and freelancers, who have been required to adapt to a new industry reality (see, e.g., European Language Industry Survey, 2021). University authorities and translation instructors are one of stakeholders who have been also obliged to take this adaptation pathway with a primary goal of increasing the employability of trainee translators in the 21st technology-driven market (see Kenny, 2020; Schnell & Rodríguez, 2017). This task includes, among others, reshaping translation curricula (see Sawyer et al., 2019) by adding new technology and employability-specific modules and activities (see Rodríguez de Céspedes, 2017), rethinking skill-sets of future translators (see Hurtado Albir, 2017; Pym, 2013), and taking into account human perspectives on technology-induced changes (Kenny, 2017; Trojszczak, forth. 2022).

The present paper attempts to contribute to the discussion about the evolving translation curricula by sketching out a proposal for a new course titled the socio-economics of translation industry whose main goal is to equip students with knowledge about socio-economic factors and mechanisms that operate in the contemporary industry including multidimensional dynamics of supply and demand, interests and negotiating positions of various stakeholders, and techno-economic trends that are shaping the industry. Besides presenting a bird's eye view of who and what pulls the strings on the modern-day translation industry, another, no less important objective of the proposed course is to instill in students a critical approach that emphasizes human interests and needs with regard to market forces, power relations, and financial hierarchies.

2. The changing face of translation industry

For those who still remember an old-fashioned modus operandi with pen and paper/typewriter and printed dictionaries the transformations that translation industry

has undergone in the last three decades must be indeed staggering (see van der Meer, 2020). The changes seem even more profound if we realize that they concern not only the work modes of human translators but also a wider socio-economic land-scape in which the industry operates (see Angelone et al., 2020). Out of numerous factors that have changed its face, it is arguably globalization and technological advancements that are key driving forces behind the revolution in this field.

Similar to other economic sectors, translation industry has been reshaped by the intensification of worldwide social and economic relations, that is, globalization (Cronin, 2003). This process, which accelerated in the late 1980s, is about linking distant markets with the goal to produce, consume, and distribute goods on a global scale (see Bauman, 1998) and consists of two basic dimensions: spatial and linguistic (Cronin, 2010). The first concerns time-space compression through telecommunication and better means of transportation whereas the latter refers to bridging the distance of language through translation. As put by Cronin (2010, p. 134), globalization hinges upon translation to such an extent that it is "literally unthinkable without according a central role to the fact and functions of translation." This centrality is not only due to the fact that more and more communication across borders increases the demand for translators (see Rosa, 2015, for the role of accelerating tendencies in globalization). Another key characteristic which reinforces the centrality of translation for globalization is a growing role of language and knowledge-based informational products in the production of wealth in the modern post-industrial economy (see Hesmondhalgh, 2019; Moulier Boutang, 2008). A plethora of such translation-ready informational products can be found, among others, in expanding digital and media industries including computer programs, websites, smartphone apps, films, TV series, video games, etc.

The increase in demand for translation and the rise of cognitive/cultural capitalism have exerted influence and pressure on translation industry by forcing it to not only deliver more and more translations but also to deliver different types of products. As far as the first aspect is concerned, the increased demand for translation pushed the industry to grow and multiplied job opportunities for language and translation graduates as well as many non-graduates across the globe. On the other hand, this has been also coupled with tighter deadlines and higher workloads which not necessarily go along with the betterment of working conditions and the improvement of the translator's status (see Katan, 2011; Kenny, 2017). As for the second aspect, a growing importance of cultural/cognitive products has resulted in the advent of new translation-related language services. Amongst them are software and video game localization, which go beyond mere translation and include also engineering, testing, and adapting (see Bernal-Merino, 2015; Sajna, 2016). Another area where the observed growth has been

substantial is audiovisual translation, in particular subtitling, voiceover and dubbing of films, TV series, and other media content (see Bogucki & Deckert, 2020; Pérez-González, 2019).

Changes brought about by globalization have been going hand in hand with technological advancements whose ramifications concern the work mode of human translators, operations of language service providers, and social practices associated with translation (see O'Hagan, 2020, for a recent collection of contributions discussing a growing role of technology in translation). When it comes to the modus operandi of human translators, the last decades have seen a number of breakthroughs beginning with mass production of personal computers (Kornacki, 2017). This change required human translators to modify their working environments and habits by moving from pen and paper/typewriter to text editors. Coupled with the development of various computer and Internetbased translation technologies known under the umbrella term of computeraided translation (CAT) (see Bogucki, 2009; Bowker & Fisher, 2010), the work of professional translators has become a human-machine cooperation already in the mid-1990s. The use of dedicated CAT software, for instance, SDL Trados, memoQ, Smarcat, with its translation memories and terminology management systems plus various electronic and online resources such as termbanks, parallel corpora, and dictionaries not only modified the work modes but also helped to respond to the needs of globalized markets by ensuring faster delivery times and higher workloads (Bowker & Fisher, 2010). Another technological breakthrough, i.e., machine translation (MT), which gained ground in the 2010s, modified the modus operandi in the industry even further. Being "a fully automatic process that starts with a text in one language and produces a corresponding text in another language, using a machine of some kind" (Melby, 2020, p. 419), machine translation is no longer a human-driven cooperation as in CAT paradigm, but becomes human assistance in the form of post-editing of machinegenerated texts (Vieira, 2020a). In this increasingly common professional work mode, which ensures even faster delivery times and is used mostly for rendering pragmatic and technical texts, human translators are asked to correct or stylistically edit the MT output and if, its quality is good enough and fit-for-purpose, their task amounts to mere authorization (Pym, 2020a).

Translation industry has been adapting to these technological advancements at a variable pace depending on the country, market size, information flows, language distributions, and the size of enterprise. As shown by consecutive editions of European Language Industry Survey, three general trends could be observed: 1) translation technology is nowadays part and parcel of the

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¹ MTPE, i.e., machine translation post-editing, is the term used in the industry.

industry with CAT software holding strong and MT being increasingly integrated in CAT systems; 2) the market for MTPE services is growing; 3) the bigger the company, the most technology-intensive its operations are with multinational language service providers leading the way (see Esselink, 2020). Another technology-related issue that has changed the face of the industry is a decrease or partial disappearance of certain text-types to translate. This is mainly due to a freely available online MT tools such as Google Translate, "which as of May 2016 was translating an average of 143 billion words a day – 20 words/day for every person on the planet" (Way, 2020, p. 311), powering the rise of non-professional translation (Jiménez-Crespo, 2020). This trend, which economically speaking reduces the market for professional translation services, includes a variety of phenomena such as fan subbing of media content, using MT for assimilation, that is, "when one does not understand the SL and wants to have an approximate idea of the content of the text, its gist" (Forcada, 2010, p. 217), as well as some crowdsourcing initiatives in translating websites and apps (see Jiménez-Crespo, 2017).

3. Adapting translator training to increase students' employability

Although many authors (see Kenny, 2020) emphasize that translation curriculum is not "purely in the service of industry stakeholders" (Mellinger, 2017, p. 281), academic translator training has been dynamically adapting its structure, shape, and content to a new reality (see Kelly, 2010; Pym, 2011; Sawyer et al., 2019 for discussions about various facets of the evolving translation curricula). Regardless of their particular form, these adaptations have been driven by the concept of employability - "a set of skills that enable students to become employable in today's very competitive labor market" (Rodríguez de Céspedes et al., 2017, p. 103). As explained by Schnell and Rodríguez (2017), employability is commonly seen as a collection of various competences employers expect to find in graduates including "classic" components such as translation-related knowledge and skills, generic competences, for example, concern for quality, and personal attributes (soft skills), as well as novel elements oriented towards technology and market requirements including career management and job-finding skills.² A similar approach can be found in the most recent translation competence model by the European Master's in Translation board (2017), which besides traditional linguistic, cultural, and translation competences also emphasizes technological, service provision as well as personal and interpersonal competences. What is characteristic for these attempts to theoretically respond to a new reality is the

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² See Schnell and Rodríguez (2017) and Rodríguez de Céspedes (2017) for discussions about various definitions and the multifaceted nature of employability, which, for lack of space, will not be addressed here.

recognition that increasing students' employability goes beyond a mere upgrade of "classic" translation training and that it requires the implementation of new, previously absent, measures. Generally speaking, these novel measures, which, in practice, take shape of new modules, courses, and activities, cover three areas, that is, 1) translation technology; 2) audiovisual translation, localization, and crowdsourcing; and 3) market and career.

Despite the fact that systematic thinking about teaching translation technology has started not earlier than in the 2000s, technology training is becoming an integral part of translation curricula all over the globe (see Kenny, 2020). The integration of this component includes, stand-alone modules and courses about selected translation tools, for instance, commercial and freely-available CAT software, MT engines, and online resources, which are usually divided into a theoretical part concerned with technical aspects and hands-on training. Moreover, technology training is often designed in a transversal manner with trainee translators using various tools as part of different modules and courses, for example, when focusing on medical or legal text-types they use CAT software to translate them (see Mellinger, 2017). Another technology-related trend is the growth of MTPE courses where trainee translators learn what it takes to revise and correct a MTgenerated text in a skillful way. As explained by Guerberof Arenas and Moorkens (2019), MTPE teaching and training should focus on an extensive practice because it requires a different set of skills than translation, for instance, error identification and target language expertise (see Pym, 2013 for a detailed discussion).

With the aim of meeting the needs of the changing industry, translation curricula also include more modules and courses focusing on localization and audiovisual translation (see Austermühl, 2006; Cerezo Merchán, 2018). Since in these two domains content is mostly translated with the help of technological tools, for example, audiovisual programmes, scripts and dialogue lists, such a training usually takes a practical-cum-theoretical form which combines theoretical explanations and extensive practice. The goal of familiarizing students with translating digital and audiovisual content is also linked with the growing presence of collaborative translation and crowdsourcing scenarios which are common in audiovisual translation and localization (Fan, 2020; Jiménez-Crespo, 2017). Another area where translation curriculum design attempts to take the challenge of the industry concerns market and career-related competences, that is, know-how related to monitoring market requirements, taking account of various job profiles as well as transitioning to professional life with ease and confidence (see, EMT, 2017 under service provision; Rodríguez de Céspedes, 2017). The rationale behind this component comes down to helping trainee translators to set up their future careers and stay employable throughout (see Rodríguez de Céspedes, 2017). Special courses and modules devoted to this aspect address

general areas such as how to gain experience, market professional services and build saleable expertise. At the same time, they cover more specific activities including taxes, invoicing, networking as well as creative job searches and writing CV for a specific context.

4. Teaching the socio-economics of translation industry

The above-described modifications in the form of courses and modules expanding the scope of teaching serve as the background for what is seen here as another area that could be included in translator training, that is, the socio-economics of translation industry. On a theoretical plane, the proposal to integrate in translation curriculum a course of this kind is motivated by recent discussions which emphasize the role of sociology in translator training (see Pym, 2020b), concerns about the rise of automation (Pym & Torres-Simón, 2021; Vieira, 2020b) as well as the importance of critical perspective on technology-driven economic changes which take place before our eyes (see Katan, 2016; Kenny, 2017). In turn, on the curriculum level, the integration of such knowledge is understood as a means of expanding the scope of teaching the so-called "professional aspects of translation" by going beyond practically-oriented job seeking, job finding and career management (see Rodríguez de Céspedes, 2017). In this context, what such a course would bring to the table is a bird's eye view on social and economic mechanisms and trends that shape the industry coupled with the understanding of their impact on the market positions of various stakeholders including freelancers, established professionals, language service provision companies and, last but not least, trainee translators and translation graduates.

Given the complexity of the subject, the design of the course focusing on the socio-economics of translation industry is necessarily a demanding and multidimensional task which includes a variety of issues ranging from the scope of material to be included to the perspectives to be taken (see Sawyer et al., 2019 for discussions about translation curriculum and course design). The present study does not aim, however, to give such a full, syllabus-like description with detailed teaching goals and plans for each unit. Instead, it only attempts to sketch out two elements playing an essential role in its design, that is, proposed content and critical perspective, with other details left for further elaboration and individual customization by translator instructors.

4.1. Content

Although the exact content of the course depends on various contextual factors including local know-how and individual experience of translator instructors, it

is believed that it should not be thought of as a basic introduction to sociology and economics, but rather as the discussion centered around some key issues lying at the intersection of translation, sociology, and economy/economics. It is argued that only such a problem/issue-based approach to teaching this subject ensures that students would perceive it as something relevant for their present situation and future career and not as another course devoted to some abstract and general topic. This, however, begs a question "what should be included in the course"? Below the list of some suggested issues, which by no means claims to be complete, is presented.

First, it is recommended to discuss the issue of supply and demand in translation industry with the emphasis placed on economic exchanges and information flows between various countries, regions, and languages. In this way, students could learn which markets communicate with one another on a regular basis and where communications mediated by translation are limited (see Pym, 2020b). Another point of discussion could be the fluctuations of supply and demand caused by various social, economic, and political factors, for instance, economic booms, financial downturns, political sanctions (see also European Language Industry Survey, 2021 for the discussion about the impact of the Covid-19 pandemic on the industry). The discussion about supply and demand is also inextricably linked to the question of text-types coveted on various markets. Here, translator instructors should in the first place explain that the size and shape of translation industry in a given country or region, i.e., how many and what types of texts get translated, depends on the types of its economic and social exchanges with the outside world. By focusing on this issue students could, for instance, learn what is the position of their place of living in global value chains (see Ponte et al., 2019; Wawrzyniak & Doryń, 2021) and, in consequence, what kind of translation job they can expect to find with ease and what is rather unlikely in their area. Moreover, it should be pointed out that despite our perception biases, which tend to overestimate novelties, for example, the role of audiovisual translation, translation industry is rather conservative in the sense that it is pragmatic, legal, and technical text genres that are still leading the way in terms of volumes and cash flows (see European Language Industry Survey, 2021).

Second, the course should discuss in detail the structure of translation industry by focusing on various types of actors/stakeholders – preferably illustrated with real-life examples. The description of basic translation providers such as multinational companies, local small and medium size enterprises (SMEs) and freelancers would involve, among others, their business models and services, positions in value chains, estimates of their revenues as well as their differing adaptation strategies and capacities (see O'Hagan, 2020; European Language Industry Survey, 2021). Besides various language service providers, the

focus should be also put on the other side of the equation, that is, agents who commission translations on a regular and irregular basis including both public, corporate, and private clients. Given the fact that translation industry, like any other competitive business market, is driven by the goal of maximizing profits and efficiency, it is also advised to include the issue of competition between its various actors on the one hand, and between translation providers and their clients on the other hand. Here, trainee translators could learn about various antagonistic operations endeavored to this end, for example, price pressure exerted by the actors with better negotiating positions, for example, multinationals, international corporate clients, and automation, sub-contracting and outsourcing of certain activities and services. Another issue that should be addressed is shifting business practices in the industry (see LeBlanc, 2017) including the integration of new services and work modes, for instance, MTPE, changing guidelines and standards, as well as abandoning those activities which are no longer economically viable.

Third, given staggering changes in translation industry over the last 30 years (see Angelone et al., 2020; O'Hagan, 2020), it is also recommended to discuss with students the role of various trends that have been and will be shaping translation industry, in particular technological advancements and economic pressures. In this context, the role of translation technology developers should be addressed. This discussion could be centered around their business models and agendas which cannot be easily reconciled with the needs of graduates, freelancers and small translation agencies – to name just those with the lowest negotiating positions. Moreover, worth discussing with trainee translators are practices that are likely to gain relevance in the industry in the foreseeable future. Such discussions could include information about industry moods, profitability expectations, sectors rising and falling, as well as future investment and reorganization plans of various industry stakeholders (see European Language Industry Surveys for a useful source of information about these issues). It is argued that discussing these questions together with a major social and economic challenge of automation (see Pym & Torres-Simón, 2021), should help would-be translators to anticipate some key developments that will directly affect their professional careers.

4.2. Critical perspective

Since the socio-economics of translation industry is meant as a course that familiarizes students with wider sociological and economic mechanisms underlying their future profession, taking a descriptive perspective that covers the issues described in the section above seems self-evident. However, teaching this subject should also include another perspective, that is, critical approach driven by human interests and needs (see Katan, 2016; Kenny, 2017; Trojszczak, forth.

2022). More specifically, besides taking a bird's eye view, it is also recommended to discuss these processes and mechanisms by highlighting what they mean and do to various industry stakeholders and human translators including those who are already established on the market and those who are planning to join in, that is, trainee translators.

In order to develop this critical approach in students, translation instructors should encourage them to apply critical thinking (see Haber, 2020) to any practice, situation, stakeholder, and trend found in the industry. Critical discussions of this kind combined with empirically and theoretically-informed insights from instructors could include, for instance, the following questions: is this practice good or bad, who benefits from this change and who loses, do you think that it is sustainable or likely to disappear soon, who has more power in this context, what are counter-measures that could be taken by this or that actor in such a situation, etc. As can be seen, what is at stake here is critically interpreting different facets of translation industry by, at the same time, putting the constant emphasis on the fact that all of these mechanisms in the end affect humans, including human translators, with their vested economic and every-day interests and needs (see Kenny, 2017 for discussions of various human issues in translation industry). It is believed that framing a discussion in this way could help students to see that socio-economic mechanisms and processes are not merely abstract phenomena, but that they have real-life consequences for their career plans, job satisfaction, and future well-being.

Besides a general critical outlook on all things translation this perspective should also emphasize two crucial socio-economic issues, that is, power and money (see, for instance Scott, 2001). As far as the first aspect is concerned, students should be sensitized about the role of various positions on the market and how this affects power relations/negotiating capacities of different stakeholders, for example, multinationals, corporate clients, freelancers, students upon graduation, translation technology providers, etc. The discussion of power relations should also include the analysis of advantages and disadvantages which come with each position as well as different margins of action available. Moreover, a global perspective on power relations including the role of international value chains so vital in translation industry should be involved (see Ponte et al., 2019; Wawrzyniak & Doryń, 2021). It is argued that discussing these various market positions, actors, differing negotiating powers, as well as associated affordances could have important practical consequences for students. First, it would help them to describe their actual market situation upon graduation in a given country or region by identifying key factors, for example, what are my immediate job opportunities (margin of action), which skills or positions are unachievable for now (limitations), what kind of strategies can I use to climb the

economic ladder (mobility), etc. Second, the focus on such issues could improve their evaluations of potential career paths by making these projections more realistic. This would be especially invaluable in separating promising career paths from those which should not be taken because, for instance, they are likely to become cul-de-sacs due to automation or outsourcing.

Another issue which should be critically discussed is the question of money. Although often seen as somewhat ill-fitting in the academic context, addressing financial benefits associated with different positions in the industry would, in fact, helps to highlight one of key goals of translator training - employability (see Rodríguez de Céspedes et al., 2017). After all, what is of utmost interest, at least in theory, for trainee translators is making a good living by becoming part of translation business sector. It is argued that the discussion about, for instance, rates for 1800 character texts with spaces, rates for post-editing, average monthly salaries, estimated revenues, or expected profit evaluations could be a good point of departure for a better understanding of the role played by money in translation industry. It would not only show students that the higher your position, the greater financial benefits you can expect, but also that the ongoing changes such as automation or outsourcing of services not necessarily mean the same thing for all stakeholders. In other words, what is, for instance, financially viable for multinationals and corporations does not have to be good for your revenues as a freelancer. It is believed that by promoting a critical discussion about money and profits based on human needs, we could teach students how to guickly assess financial benefits and economic viability of various career paths, projects, and job offers. The emphasis on the role of money could also help future translators to negotiate better rates and positions, and, if need be, to adapt to the market either by opting for cost-efficient and resource-saving strategies (see Pym, 2013) or by abandoning niches that no longer offer decent remuneration.

5. Conclusion

As explained by Schnell and Rodríguez (2017, p. 160):

owing to the increasing pressure on Higher Education Institutions (HEI) to meet the needs of an increasingly knowledge-driven economy and to produce competent, knowledgeable, flexible and employable graduates, employability has been gaining relevance.

A growing role of employability is inextricably linked to the recognition that translator training is not only about teaching language and translation skills, but also about teaching students how to survive in the business environment (see Rodríguez de Céspedes, 2017). It is argued that the above-sketched course entitled

the socio-economics of translation industry could help to achieve this goal by providing trainee translators with knowledge and critical perspective that are particularly useful in the industry that is in a constant state of flux (see Angelone et al., 2020; O'Hagan, 2020). This includes both equipping them with relevant information about economic and social mechanisms operating in the business sector they want to join in as well as promoting the critical approach which emphasizes their interests and needs vis-à-vis the industry with all its power relations and financial hierarchies. In the end, this didactic mix of socio-economic insights combined with a human-centered analysis of business realities could be seen both as a tool for helping students to develop better judgments in order to improve their job prospects and as a sort of remedy for gloomy predictions for human translators themselves (see Pym & Torres-Simón, 2021; Vieira, 2020b for discussions of such concerns).

References

- Angelone, E., Ehrensberger-Dow, M., & Massey, G. (Eds.). (2020). *The Bloomsbury companion to language industry studies*. Bloomsbury Academic.
- Austermühl, F. (2006). Training translators to localize. In A. Pym, A. Perekrestenko, & B. Starink (Eds.), *Translation technology and its teaching* (pp. 69-81). Universitat Rovira i Virgili.
- Bauman, Z. (1998). Globalization: the human consequences. Columbia University Press.
- Bernal-Merino, M. A. (2015). *Translation and localisation in video games*. Routledge.
- Bogucki, Ł. (2009). Tłumaczenie wspomagane komputerowo. PWN.
- Bogucki, Ł., & Deckert, M. (Eds.). (2020). *The Palgrave handbook of audiovisual translation and media accessibility*. Palgrave Macmillan.
- Bowker, L., & Fisher, D. (2010). Computer-aided translation. In Y. Gambier & L. van Doorslaer (Eds.), *Handbook of translation studies. Vol. 1* (pp. 60-65). John Benjamins.
- Cerezo Merchán, B. (2019). Audiovisual translator training. In L. Pérez-González, L. (Ed.), The Routledge handbook of audiovisual translation (pp. 468-482). Routledge.
- Cronin, M. (2003). *Translation and globalization*. Routledge.
- Cronin, M. (2010). Globalization and translation. In Y. Gambier & L. van Doorslaer (Eds.), *Handbook of translation studies. Vol. 1* (pp. 134-140). John Benjamins.
- ELIA et al. (2021). European language industry survey. 9th Edition. https://euatc.org/elis2021/
- EMT Board. (2017). European Master's in translation. Competence framework 2017. https://ec.europa.eu/info/sites/default/files/emt_competence_fwk_2017_en_web.pdf
- Esselink, B. (2020). Multinational language service provider as user. In M. O'Hagan (Ed.), *The Routledge handbook of translation and technology* (pp. 109-126). Routledge.
- Fan L. (2020). Collaborative translation and AVT. In Ł. Bogucki & M. Deckert (Eds.), *The Palgrave handbook of audiovisual translation and media accessibility* (pp. 339-356). Palgrave Macmillan.
- Forcada, M. L. (2010). Machine translation today. In Y. Gambier & L. van Doorslaer (Eds.), *Handbook of translation studies. Vol. 1* (pp. 215-223). John Benjamins.
- Guerberof Arenas, A., & Moorkens, J. (2019). Machine translation and post-editing training as part of a master's programme. *Journal of Specialised Translation*, 31, 217-238.
- Haber, J. (2020). Critical thinking. The MIT Press.
- Hesmondhalgh, D. (2019). *The cultural industries* (4th Ed.). SAGE Publications.
- Hurtado Albir, A. (Ed.). (2017). *Researching translation competence by PACTE group*. John Benjamins.

- Jiménez-Crespo, M. A. (2017). *Crowdsourcing and online collaborative translations*. John Benjamins.
- Jiménez-Crespo, M. A. (2020). Technology and non-professional translation. In M. O'Hagan (Ed.), *The Routledge handbook of translation and technology* (pp. 239-254). Routledge.
- Katan, D. (2011). Status of translator. In Y. Gambier & L. van Doorslaer (Eds.), Handbook of translation studies. Vol. 2 (pp. 146-152). John Benjamins.
- Katan, D. (2016). Translation at the crossroads: Time for the transcreational turn? *Perspectives*, *24*(3), 365-381.
- Kelly, D. (2010). Translation didactics. In Y. Gambier & L. van Doorslaer (Eds.), Handbook of translation studies. Vol. 1 (pp. 389-396). John Benjamins.
- Kenny, D. (Ed.). (2017). *Human issues in translation technology*. Routledge.
- Kenny, D. (2020). Technology and translator training. In M. O'Hagan (Ed.), *The Routledge handbook of translation and technology* (pp. 498-515). Routledge.
- Kornacki, M. (2017). Technologia w codziennej pracy tłumacza. In B. Lewandowska-Tomaszczyk (Ed.), *Kompetencje współczesnego tłumacza (2016-2017)* (pp. 161-177). Wydawnictwo PWSZ w Koninie.
- LeBlanc, M. (2017). 'I can't get no satisfaction!' Should we blame translation technologies or shifting business practices? In D. Kenny (Ed.), *Human issues in translation technology* (pp. 45-62). Routledge.
- Meer van der, J. (2020). Translation technology past, present, and future. In E. Angelone, M. Ehrensberger-Dow & G. Massey (Eds.), *The Bloomsbury companion to language industry studies* (pp. 285-309). Bloomsbury.
- Melby, A. K. (2020). Future of machine translation. In M. O'Hagan (Ed.), *The Routledge handbook of translation and technology* (pp. 419-436). Routledge.
- Mellinger, C. D. (2017). Translators and machine translation: knowledge and skills gaps in translator pedagogy. *The Interpreter and Translator Trainer*, 11(4), 280-293.
- Moulier Boutang, Y. (2008). *Le capitalisme cognitif: la nouvelle grande transformation*. Éditions Amsterdam.
- O'Hagan, M. (Ed.). (2020). The Routledge handbook of translation and technology. Routledge.
- Pérez-González, L. (Ed.). (2019). *The Routledge handbook of audiovisual translation*. Routledge.
- Ponte, S., Gereffi, G., & Raj-Reichert, G. (Eds.). *Handbook on global value chains*. Edward Elgar Publishing.
- Pym, A. (2011). Training translators. In K. Malmkjær & K. Windle (eds.), *The Oxford handbook of translation studies* (pp. 475-489). Oxford University Press.
- Pym, A. (2013). Translation skill-sets in a machine-translation age. *Meta: Journal des traducteurs*, *58*(3), 487-502.

- Pym, A. (2020a). Quality. In M. O'Hagan (Ed.), *The Routledge handbook of translation and technology* (pp. 437-452). Routledge.
- Pym, A. (2020b). For a sociology of translator training. In J. Zhao, D. Li, & L. Tian (Eds.), *Translation education* (pp. 9-19). Springer.
- Pym, A., & Torres-Simón, E. (2021). Is automation changing the translation profession? *International Journal of the Sociology of Language, 270*, 39-57.
- Rodríguez de Céspedes, B. (2017). Addressing employability and enterprise responsibilities in the translation curriculum. *The Interpreter and Translator Trainer*, 11(2-3), 107-122.
- Rodríguez de Céspedes, B., Sakamoto, A., & Berthaud, S. (2017). Introduction. *The Interpreter and Translator Trainer, 11*(2-3), 103-106.
- Rosa, H. (2015). Accelerazione e alienazione. Per una teoria critica del tempo nella tarda modernità. Einaudi.
- Sajna, M. (2016). Video game translation and cognitive semantics. Peter Lang.
- Sawyer, D. B., Austermühl, F., & Enríquez-Raído, V. (Eds.). (2019). *The evolving curriculum in interpreter and translator education*. John Benjamins.
- Schnell, B., & Rodríguez, N. (2017). Ivory tower vs. workplace reality. Employability and the T&I curriculum balancing academic education and vocational requirements: a study from the employers' perspective. *The Interpreter and Translator Trainer*, 11(2-3), 160-186.
- Scott, J. (2001). Power. Polity Press.
- Vieira, L. N. (2020a). Post-editing of machine translation. In M. O'Hagan (ed.), *The Routledge handbook of translation and technology* (pp. 319-335). Routledge.
- Vieira, L. N. (2020b). Automation anxiety and translators. *Translation Studies*, 13(1), 1-21.
- Way, A. (2020). Machine translation where are we at today? In E. Angelone, M. Ehrensberger-Dow & G. Massey (eds.), *The Bloomsbury companion to language industry studies* (pp. 311-332). Bloomsbury.
- Wawrzyniak, D. & Doryń, W. (2021). *Kraje Unii Europejskiej w globalnych łańcu-chach wartości.* Lodz University Press.
- Trojszczak, M. (forth. 2022). Translator training meets machine translation selected challenges. In B. Lewandowska-Tomaszczyk & M. Trojszczak (Eds)., Language use, education, and professional contexts. Springer Nature.