

## Unlocking the Future of Localisation: A Fusion of Human Expertise and Artificial Intelligence in a Cutting-Edge Syllabus

### Yerelleştirme Alanına İlişkin Geleceğin Kilidini Açmak: Son Teknoloji Bir Ders Programında İnsan Uzmanlığı ve Yapay Zekânın Birleşimi

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#### ABSTRACT

Towards the end of the first quarter of the 21st century, the impact of information and communication technologies continues to grow, shaping a once-unimaginable future. New jobs and opportunities have emerged, driven by advancements associated with science fiction in the past. Artificial intelligence, once a concept portrayed in futuristic films, has now become central to various fields such as medicine, military, engineering, genetics, molecular biology, and even social sciences. Evaluated under the social sciences, Translation Studies has also had its share of these developments. Integrating state-of-the-art technologies and artificial intelligence within TS has generated innovative areas in translation. Many translation and interpreting programmes at universities now offer courses targeted at new technologies. Localisation is one of them. This research explores the syllabus proposals for localisation courses generated by *ChatGPT* and *PopAI*. The starting point is a fascinating question: "If artificial intelligence were a translation scholar, how would it create a localisation course syllabus?" Therefore, in response to this inquiry, the applications in question were used to design localisation syllabus without human intervention. The proposed syllabi by these applications were assessed based on a deductive and descriptive methodology and subsequently refined through a fusion of artificial intelligence insights and human input. The final proposal as the integration of AI and humans, intended for teaching in translation and interpreting programmes, is considered a useful resource for educators in this field as it mixes both AI and human touch.

**Keywords:** Artificial Intelligence, AI, *ChatGPT*, *PopAI*, artificial intelligence applications, localisation

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## ÖZ

21. yüzyılın ilk çeyreğine doğru, bilgi ve iletişim teknolojilerinin etkisi giderek artmakta ve bir zamanlar tasavvur dahi edilemeyen bir gelecek şekillenmektedir. Bilim kurgu ile özdeşleştirilen ilerlemeler sayesinde yeni iş alanları ve fırsatlar ortaya çıkmıştır. Bir zamanlar gelecekte geçen filmlerde tasvir edilen bir kavram olan yapay zekâ, artık tıp, askeriye, mühendislik, genetik, moleküler biyoloji ve hatta sosyal bilimler gibi çeşitli alanlarda merkezi bir rol oynamaktadır. Sosyal bilimlerin altında değerlendirilen çeviribilim de bu gelişmelerden payını almıştır. Çeviribilim alanına en son teknolojiler ve yapay zekânın entegre edilmesi çeviride yenilikçi alanların ortaya çıkmasına katkı yapmıştır. Üniversitelerdeki birçok mütercim tercümanlık programı artık yeni teknolojilere yönelik dersler sunmaktadır. Yerelleştirme de bunlarda biridir. Bu araştırma, *ChatGPT* ve *PopAI* tarafından oluşturulan yerelleştirme dersine yönelik müfredat önerilerini incelemektedir. Başlangıç noktasını ise büyüleyici bir soru oluşturmaktadır: "Eğer yapay zekâ bir çeviribilimci olsaydı, yerelleştirme dersi için nasıl bir müfredat önerisi oluştururdu?" Buradan hareketle, söz konusu uygulamalar, ilk olarak insan müdahalesi olmaksızın bu soruya yanıt arayışı içerisinde yerelleştirme müfredatı tasarlamak amacıyla kullanılmıştır. Bu uygulamalar tarafından önerilen müfredatlar, tümdengelsel ve betimsel bir metodolojiye dayanarak değerlendirilmiş ve ardından yapay zekâ öngörülleri insan girdisiyle geliştirilmiştir. Mütercim Tercümanlık programlarında verilen eğitim için tasarlanan bu nihai öneri, yapay zekâ ile insan dokunuşunun bir birleşimi olarak, bu alandaki eğitimciler için faydalı bir kaynak olarak görülmektedir.

**Anahtar Kelimeler:** Yapay Zekâ, AI, *ChatGPT*, *PopAI*, yapay zekâ uygulamaları, yerelleştirme

## Introduction

Digital transformation is rapidly unfolding, introducing new paradigms into our lives and evoking a mixture of astonishment and fear with the emergence of machines capable of human-like thinking. Artificial intelligence (AI) technologies are now pervading various facets of our daily existence. In its simplest form, AI can generate images through applications like *Dream Booth Steam Diffusion*. Moreover, it allows us to virtually resurrect deceased individuals for interviews or replicate the voices of others by manipulating our own. Tools like *Cry Analyser*, for instance, enable us to discern the needs of infants. Consequently, AI serves as an entertaining activity and permeates numerous aspects of social life.

The 2001 film "Artificial Intelligence," directed by Steven Spielberg, initially perceived as a surprising science fiction movie, has now metamorphosed into reality. Gareth Edwards' 2023 film "The Creator" may similarly offer a glimpse into a future two decades hence, portraying robots created with AI that think, eat, and drink like humans, and even represent a distinct race. Sophia, a humanoid robot, stands out as a prime example, signifying a promising advancement for the future of AI. She is a human-designed science fiction character marking the future of AI and robotics and a cutting-edge platform for AI and robotics research. Besides, she has drawn global attention as the first robot to receive citizenship and the UNDP's first-ever robot Innovation Ambassador<sup>1</sup>.

The advent of AI necessitates the introduction of new professions and reforms as well. What was once relegated to science fiction has now materialised into reality. The pervasive influence of AI is palpable across all spheres of life, including medicine<sup>2</sup>, military affairs, engineering, genetics, molecular biology, and social sciences.

Transformations brought by digitalisation and AI has radically affected Translation Studies. Modern technologies and AI are exerting their influence on Translation Studies, prompting the emergence of new specialisations that focus on current needs and future trends<sup>3</sup>. Translation curricula are undergoing rapid changes to keep pace with this evolving landscape, as the profession must adapt to ensure sustainability.

This research delves into localisation syllabus proposals generated by AI applications such as *ChatGPT* and *PopAI*<sup>4</sup> for translation and interpreting departments. The central question guiding this research is: "If artificial intelligence were a translation scholar, how would it create a localisation syllabus course?" Accordingly, the applications in question were requested to design localisation syllabus. The proposed syllabi for these applications were assessed and subsequently refined through a fusion of artificial intelligence insights and human input. A final proposal was formulated, incorporating a human touch through machine-human interaction. The aim is to contribute to the available literature with these proposed syllabi and a human touch at the end. Additionally, showing the integration of AI into translation education is one of the key objectives of the research.

<sup>1</sup> <https://www.hansonrobotics.com/sophia/>

<sup>2</sup> In the healthcare sector, for instance, the integration of AI/robotics with brain-computer interfaces offers distinctive assistance to individuals experiencing sensory or motor deficits. Additionally, this combination has also been streamlining the care of patients with disabilities (Braun, et.al, 2021: 2).

<sup>3</sup> There are some studies focusing on incorporating artificial intelligence into Translation Studies. In his theoretical work, Soysal (2023), for instance, highlights the significance of including AI-related subjects in Translation Studies curricula, encouraging mutual research efforts between academics and AI developers, and dealing with the gap between AI's cognitive and emotional capabilities from a wider perspective.

<sup>4</sup> In the field of Translation Studies literature, a study on *ChatGPT* in the context of post-editing and pre-editing processes was found (see Türkmen, 2023, Pre-editing and post-editing processes during the translation: an interview with Chatgpt).

## Methodology

The research employed a deductive methodology, starting with explaining the concept of artificial intelligence (AI). To this end, information on localisation was offered briefly. Then, relevant syllabus proposals were presented through discussions on the basis of the descriptive methodology. Finally, incorporating a human touch, the AI application syllabi were refined and envisioned to serve as guidance for translation scholars instructing localisation courses.

## Research Questions

1. What are the similarities and differences between the syllabi developed by AI applications and the one created by a human?
2. Can AI applications alone be sufficient when developing a syllabus?
3. Is human intervention necessary in the syllabi developed by AI applications?
4. To what extent can human intervention be made in the syllabi developed by AI applications?

## The Concept of Artificial Intelligence (AI)

In 1950, Alan Turing proposed a methodology for the purpose of evaluating machine intelligence based on its capacity to manifest intelligent behaviours indistinguishable from those of a human. Turing envisioned a scenario in which a conversational agent would undergo an interview with a human judge. If the judge could not reliably discern whether the entity in question was human or machine, the machine would be considered to have passed the test successfully (Bartneck, et.al, 2021: 9-10). This early initiative might be considered the beginning of AI research.

However, the emeritus Stanford Professor John McCarthy created the term “artificial intelligence” in 1955. He initially defined it as the science and engineering of forming intelligent machines. While early research predominantly involved humans programming machines to exhibit human-like behaviours, such as playing chess, contemporary emphasis has been placed on machines that can learn, albeit to some extent mirroring human learning processes<sup>5</sup>.

The emergence of artificial intelligence (AI) lies in imitating human intelligence to enable computers to execute tasks typically reliant on human cognitive capabilities. AI can proficiently handle extensive volumes of structured and unstructured data in imitating human intelligence, exhibiting adaptability to dynamic changes. In addition, AI is adept at learning historical patterns, incorporating expert input, engaging in feedback loops, employing deductive and inductive reasoning, drawing inferences contextual to the situation, and undertaking analysis of problems within both specialised and general domains<sup>6</sup>.

Based on specialised and general domains, artificial intelligence applications increasingly appear in every aspect of our lives. When technology was not so advanced, practical studies were relatively few and only limited to the theoretical level. Today, however, there is a lot of experimental and scientific research on this subject, and artificial intelligence is used more frequently at the practical level. For example, Arora et al. (2024) asserted that *‘artificial intelligence (AI) is very helpful to find the targeted way to get the novel pharmaceutical applications for natural products. This method provides a cheap and easy platform for manufacturing natural products with the same effects.’* Likewise, AISHkipi and Zahran (2024) stated that AI has been integrated into the field of interior design to increase sustainability, personalisation, and efficiency. Ordinary internet users can even attempt to overcome a traumatic situation by using an artificial intelligence application as a virtual psychologist for advice. AI applications then span various fields, including economics, mathematics, physics, chemistry, military, and even users’ daily activities and personal needs.

## What is Localisation? How did it become very crucial within TS??

For individuals who have recently developed an interest in localisation, providing a concise introduction to the concept might prove useful. At its basic level, localisation refers to preparing a product for a different location. LISA defines localization as the process of taking a product and adjusting it both linguistically and culturally to fit the target locale, implying the specific country, region, and language in which the product is used and marketed (see Jimenez Crespo, 2018).

Localisation covers various tasks, typically associated with information technology and marketing, and requires a language specialty. The definitions of the term often focus on products rather than texts, describing the procedures as involving the “preparation,” “tailoring,” or “adaptation” of the product for a new context. Localisation can be said to

<sup>5</sup> <https://hai.stanford.edu/sites/default/files/2020-09/AI-Definitions-HAI.pdf>.

<sup>6</sup> <https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/deloitte-analytics/deloitte-nl-data-analytics-artificial-intelligence-whitepaper-eng.pdf>.

include four phases: globalisation, internalisation, localisation plus translation. In particular, the internationalisation<sup>7</sup> phase of localisation makes it a new theory (cf. Pym, 2023) within TS. The presence of different phases in localisation and the fact that localisation is about a product rather than text hints that this concept is more than mere translation. Then, localisation might include various activities such as project managing, localisation engineering, desktop or online management, terminology, technical writing and so forth based on the nature of the product to be localised (cf. Esselink, 2000). With the advent of modern technologies, it can be said that localisation types expanded from software localisation, website localisation, game localisation to small device localization (see Jimenez Crespo, 2013), app localisation<sup>8</sup>, and perhaps AVT, all of which require different localisation strategies.

Considering these insights, localisation represents a forward-looking specialisation that adeptly follows dynamic market trends. The types of localisation, as demonstrated above, extend beyond a specific domain and comprise areas with substantial economic potential in the market. Translators who cultivate expertise in these realms, aligning themselves with localiser identity, stand to gain more job opportunities and substantial earnings. Professionals engaged in the localisation field can also bolster their prospects for market sustainability.

Nowadays, it is argued that localisation has even evolved into a discipline distinct from Translation Studies (cf. Jimenez Crespo, 2013). In today's world, where machine-generated translations are becoming increasingly common, localisation is constantly gaining significance as a field where translators can continue to earn a living. As a result, the number of courses and research dedicated to localisation is on the rise. For instance, the University of Texas Rio Grande Valley offers online training in localisation and audiovisual translation<sup>9</sup>. Besides, the Hochschule Anhalt University of Applied Sciences offers a Master of Science in Education regarding software localisation<sup>10</sup>. Examples can be multiplied.

In this connection, the growing number of courses and training programmes worldwide shows the increasing focus on localisation. At this stage, localisation goes beyond mere translation. To become a fully qualified expert in this field, one must possess skills in coding, graphic design, localisation engineering, localisation testing, etc. in addition to translation. Acquiring this expertise requires hands-on, practical education. Therefore, it is essential to incorporate localisation courses into the translation and interpreting departments, and field experts should offer them.

### Syllabus Proposals for Localisation Course by *ChatGPT AND PopAI*

This section introduces the course syllabi by artificial intelligence applications for localisation courses within translation and interpreting programmes. Through an examination of these proposals, a third syllabus was recommended, incorporating human integration.

In creating localisation syllabus, both applications were asked the following question as a prompt<sup>11</sup>:

*“If you were a translation scholar teaching in the department of Translation Studies, how would you prepare a syllabus for localisation course? Could you prepare a syllabus starting from the first week until the end of the fifteenth week?. Choose two weeks and insert mid-term and final exams in these weeks. Please also explain your assessment and evaluation when measuring the exam scores. Is it sensible to hold mid-term and final exams or assign projects in lieu of exams? Also give suggested references for students at the end.”*

<sup>7</sup> Internationalization is defined as the process of designing products to meet the needs of users in most countries, so that they might easily be adapted to achieve a goal” (<https://www.investopedia.com/terms/i/internationalization.asp>).

<sup>8</sup> see Jimenez Crespo, 2013.

<sup>9</sup> <https://www.utrgv.edu/graduate/for-future-students/graduate-programs/program-requirements/localization-and-audiovisual-translation-certificate/index.htm>

<sup>10</sup> <https://www.hs-anhalt.de/en/study/orientation/degree-programs/detail/software-localization-master-of-science.html>

<sup>11</sup> The questions were prepared and syllabi were offered by two AI applications between January and February 2024.

**Table 1.** *ChatGPT* Syllabus Proposal for Localisation Course<sup>12</sup>

<p><b>Week 1-2: Understanding Localisation</b></p> <ul style="list-style-type: none"><li>• <b>Introduction to Localisation</b><ul style="list-style-type: none"><li>• Definition, historical context, and importance.</li><li>• Differentiating translation from localisation.</li></ul></li><li>• <b>Key Concepts in Localisation</b><ul style="list-style-type: none"><li>• Cultural adaptation, linguistic nuances, and non-textual elements.</li></ul></li></ul> <p><b>Week 3-4: Cultural Aspects of Localisation</b></p> <ul style="list-style-type: none"><li>• <b>Cultural Awareness in Localisation</b><ul style="list-style-type: none"><li>• Impact of culture on product design and user experience.</li><li>• Strategies for culturally sensitive adaptation.</li></ul></li><li>• <b>Case Studies</b><ul style="list-style-type: none"><li>• Analysing successful and unsuccessful localised products.</li><li>• Integrating cultural considerations into user interface design.</li></ul></li></ul> <p><b>Week 5-6: Technical Aspects of Localisation</b></p> <ul style="list-style-type: none"><li>• <b>Software Localisation</b><ul style="list-style-type: none"><li>• Tools, technologies, and best practises.</li><li>• Hands-on exercises with localisation tools.</li></ul></li><li>• <b>Website Localisation</b><ul style="list-style-type: none"><li>• Challenges, solutions, and SEO considerations.</li><li>• Practical application through website localisation exercises.</li></ul></li></ul> <p><b>Week 7-8: Linguistic Aspects of Localisation</b></p> <ul style="list-style-type: none"><li>• <b>Language Nuances</b><ul style="list-style-type: none"><li>• Handling idioms, metaphors, and culturally-specific expressions.</li><li>• Adapting humour and wordplay.</li></ul></li><li>• <b>Terminology Management</b><ul style="list-style-type: none"><li>• Consistent terminology creation and maintenance.</li><li>• Glossary development exercises.</li></ul></li></ul> <p><b>Week 9-10: Project Management in Localisation</b></p> <ul style="list-style-type: none"><li>• <b>Localisation Project Lifecycle</b><ul style="list-style-type: none"><li>• Planning, execution, and evaluation phases.</li><li>• Budgeting, time management, and risk assessment.</li></ul></li><li>• <b>Quality Assurance</b><ul style="list-style-type: none"><li>• Testing, validation processes, and common issues.</li><li>• Practical quality assurance exercises.</li></ul></li></ul> <p><b>Week 11-12: Industry Trends and Future Developments</b></p> <ul style="list-style-type: none"><li>• <b>Emerging Technologies in Localisation</b><ul style="list-style-type: none"><li>• Artificial intelligence, machine translation, and automation.</li><li>• Virtual reality and augmented reality in localisation.</li></ul></li><li>• <b>Globalisation and Local Markets</b></li></ul>
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<sup>12</sup> The syllabus format was created by the application as in the table. Therefore, there has been no human intervention to arrange it.

**Table 1.** Continued

<ul style="list-style-type: none"><li>· Expanding markets and understanding user behaviours.</li><li>· Adapting to future industry changes.</li></ul> <p><b>Week 13-14: Exams and Project Presentations</b></p> <ul style="list-style-type: none"><li>· <b>Mid-term Exam</b><ul style="list-style-type: none"><li>· Covers material from weeks 1-8.</li><li>· Mix of multiple-choice, short answer, and essay questions.</li></ul></li><li>· <b>Project Presentations</b><ul style="list-style-type: none"><li>· Students present their ongoing or completed localisation projects.</li><li>· Evaluation based on creativity, application of concepts, and problem-solving.</li></ul></li></ul> <p><b>Week 15: Final Exam and Course Reflection</b></p> <ul style="list-style-type: none"><li>· <b>Final Exam</b><ul style="list-style-type: none"><li>· Covers material from weeks 9-14.</li><li>· Similar format to the mid-term exam but emphasises advanced concepts.</li></ul></li><li>· <b>Course Reflection</b><ul style="list-style-type: none"><li>· Reviewing key takeaways, personal reflections, and future applications.</li></ul></li></ul> <p><b>Assessment and Evaluation:</b></p> <ul style="list-style-type: none"><li>· <b>Mid-term Exam (20%):</b><ul style="list-style-type: none"><li>· Tests the understanding of foundational concepts and principles.</li></ul></li><li>· <b>Project Presentations (30%):</b><ul style="list-style-type: none"><li>· Assess the practical application of localisation concepts in a real-world project.</li></ul></li><li>· <b>Final Exam (30%):</b><ul style="list-style-type: none"><li>· Evaluates a comprehensive understanding of the advanced topics covered in the latter part of the course.</li></ul></li><li>· <b>Class Participation and Assignments (10%):</b><ul style="list-style-type: none"><li>· Regular engagement in discussions, completion of assignments, and participation in group activities.</li></ul></li><li>· <b>Attendance and Class Engagement (10%):</b><ul style="list-style-type: none"><li>· Regular attendance and active participation in class discussions.</li></ul></li></ul> <p><b>The suggested References for Students:</b></p> <ol style="list-style-type: none"><li>1. "The Art of Software and Website Localisation" by Nitish Singh</li><li>2. "Found in Translation: How Language Shapes Our Lives and Transforms the World" by Nataly Kelly and Jost Zetsche</li><li>3. "Language and Culture in Depth: A Competency-Based Introduction to Foreign Language and Intercultural Communication" by Alla Nedashkivska</li><li>4. "The Globalisation and Localisation Association (GALA) Knowledge Centre"</li><li>5. Relevant academic articles, industry reports, and case studies.</li></ol> <p>This syllabus aims to provide a comprehensive understanding of localisation, balancing theoretical knowledge with practical application. The inclusion of both exams and project presentations allows for a well-rounded assessment of students' skills and knowledge. Adjustments can be made based on the specific needs and level of students in the Translation Studies department.</p>
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After *ChatGPT* prepared this draft syllabus, another question (prompt) by the author was asked to *ChatGPT*:

“Thank you. What is the privilege of this syllabus compared to that of a human? Do you think you created a superior and more advantageous syllabus compared to a human translation scholar?”

Furthermore, reply from the application was as follows:

“The syllabus I generated is a result of data-driven processing, efficiency, and integration of the latest information, which are the advantages associated with AI. However, it is essential to recognise the unique strengths of a human translation scholar and the potential limitations of an AI-generated syllabus:

**Advantages of the AI-Generated Syllabus:**

1. **Efficiency:** AI can process vast amounts of information quickly, leading to efficient syllabus creation and staying updated on emerging trends.
2. **Data-Driven Insights:** The syllabus is based on data analysis, which helps identify patterns, gaps, and areas that may need emphasis.
3. **Consistency:** AI ensures consistency in coverage and structure, adhering to predefined rules and criteria.

**Limitations and Considerations:**

1. **Lack of Intuition and Experience:** AI lacks the intuition, personal experience, and real-world insights that a human translation scholar brings to curriculum design. The human touch is crucial for understanding the nuanced needs of students.
2. **Creativity and Flexibility:** While AI excels in structured content, it may struggle with the creative and flexible aspects of course design. Humans can tailor the syllabus to the unique student characteristics and evolving industry dynamics.
3. **Understanding Student Dynamics:** A human instructor can better understand diverse student backgrounds, learning styles, and abilities. They can adjust the teaching approach based on student feedback and engagement.
4. **Contextual Awareness:** Human scholars bring contextual awareness by considering factors such as institutional culture, student demographics, and specific departmental goals.

**Comparison and Conclusion:**

While the AI-generated syllabus has advantages in terms of efficiency, data-driven insights, and consistency, it is not inherently superior to a syllabus created by a human translation scholar. The optimal approach may involve a collaborative effort, leveraging AI's strengths in information processing alongside human expertise in understanding student needs, fostering creativity, and adapting to the unique context of a translation studies department. The synergy between AI and human input can result in a well-rounded and effective curriculum.”

## Discussion of the *ChatGPT* syllabus<sup>13</sup>

Upon reviewing the syllabus created by *ChatGPT* for the localisation course, it becomes evident that each course topic can be said to be organised for a two-week coverage. The first two weeks of the course, under the heading "Introduction to Localisation," focus on the definition, history, importance of localisation, differences between translation and localisation, as well as cultural adaptation, linguistic nuances, and non-textual elements. Weeks 3 and 4 are designated for the cultural aspects of localisation. An inconsistency is noticed when examining the topic of cultural awareness in this section because *ChatGPT* has already referred to cultural adaptation and non-textual elements for week 1-2. Weeks 3-4 also imply that the success and failure levels of localised products will be analysed as case studies by integrating cultural considerations in user interface design, which may, however, be considered early for a thorough analysis of localised products. If weeks 3 and 4 are meant for an in-depth exploration of the cultural aspects of localisation, an abrupt shift to analysis might be seen as an inconsistency. For a comprehensive analysis of localised products, providing information on all aspects of localisation is essential.

*ChatGPT* gave place to the linguistic aspect of localisation for weeks 7 and 8. However, the sequence should be reconsidered for consistency by first addressing the linguistic and cultural dimensions, followed by the technical dimension. The current arrangement, discussing cultural aspects, delving into intricate technical topics, and later revisiting the linguistic dimension of localisation, implies an inconsistent course outline. This might also lead to confusion among students, and a scattered syllabus increases the risk of losing the focal point.

The technical dimension of localisation, scheduled for weeks 5 and 6, could be more logically placed after the linguistic and cultural aspects of localisation, i.e., in weeks 7 and 8. The inconsistency can be prevented in this way. In the technical aspects of the localisation section, software localisation and website localisation were specified as two distinct types of localisation. Nonetheless, other localisation types exist, such as game and mobile device/small device localisation (Jimenez Crespo, 2013). These could be added to enrich the content of the syllabus. With the increased variety of topics, allocating three weeks to these subjects instead of two and exploring technical aspects in weeks 7,

<sup>13</sup> In their article titled *ChatGPT for Professional English Course Development in 2024*, Kostikova et al. addressed various issues associated with incorporating *ChatGPT* into the development of Law English courses, including curriculum and syllabus development. The authors underlined that *ChatGPT* can be used in several areas, such as delivering information, generating texts, answering queries, and supporting language teaching and learning.

8, and 9 might be more sensible with a human touch. The fact that the project management and quality assurance are handled in Weeks 9 and 10 seems like appropriate. Project management is crucial not only for localisation but also for other translation fields.

Weeks 11 and 12 are designated for discussing artificial intelligence, machine translation, automation, virtual reality, and augmented reality, which are relevant and trendy topics. Additionally, these weeks cover the concepts of globalisation and local markets, which are fundamental to the essence of localisation.

As previously mentioned, the remaining weeks were allocated to exams and project presentations. While the syllabus prepared by *ChatGPT*, with necessary adjustments, provides a sufficient theoretical understanding of localisation, it does not give enough space to the practical aspects of localisation and leaves little room for students to actively engage. Although practise is included in some weeks, such as Week 5-6 and 9-10, it remains limited, and the focus on practise is not enough. This contradicts the nature of localisation, which heavily involves social constructivism, evoking the creation or construction of meaning and knowledge via active participation (see Kiraly, 2000).

The mid-term exam is said to be held in week 13, and project presentations in week 14. The mid-term exam consists of multiple-choice, short-answer, and essay questions. Students are expected to be responsible for topics covered in weeks 1 to 8 of the mid-term exam. The final exam, set for week 15, follows a format similar to that of a mid-term exam, with students being responsible for topics covered in weeks 9 to 14. In the assessment and evaluation section, it is also specified that the mid-term exam holds a weight of 20%, with project presentations holding 30% and the final exam holding a 30% weight, which has accounted for 90%. *ChatGPT* accidentally used two distinct terms that imply the same meaning for student participation as “Class Participation and Assignments” (10%) and “Attendance and Class Engagement” (10%). One must be omitted, and the class participation can be 20% in this way. While the mid-term exam criteria in week 13 include multiple-choice, short-answer, and essay sections, the assessment and evaluation section mentions a mid-term exam test, creating inconsistency.

Concerning the recommended references for students specified by *ChatGPT*, there are doubts whether such references exist in the literature or not. The purported work "The Art of Software and Website Localisation" by Nitish Singh could not be found. The fact that "Language and Culture in Depth: A Competency-Based Introduction to Foreign Language and Intercultural Communication" is authored by Alla Nedashkivska also remains unverified. Only, "Found in Translation: How Language Shapes Our Lives and Transforms the World" by Nataly Kelly and Jost Zetsche is a verified source<sup>14</sup>. These uncertainties raise concerns about the potential for *ChatGPT* to generate inaccurate information.

As apparent from the statements by *ChatGPT* above, this syllabus was created based on data-driven processes, which is considered advantageous because information can be accessed quickly. Still, the syllabus seems erroneous and inconsistent in some respects. *ChatGPT* has already verified this as the potential limitation of AI, which definitely requires a human touch. Because a human translation scholar, through consistently conducting localisation courses, might provide his/her own experiences and a more practical-oriented approach to teaching. While *ChatGPT* may acquire knowledge through learning, its ability to offer practical considerations is limited because it lacks the intuition and experiential understanding that humans possess. This deficiency is evident in the syllabus by *ChatGPT*. Furthermore, *ChatGPT* cannot connect with students as intimately as a human translation scholar since it does not give enough space to practise. This limitation also hampers the development of contextual awareness. Nonetheless, *ChatGPT*'s recommendations can be enhanced by incorporating necessary corrections and a human touch. By fostering human-machine interaction, more refined and expeditious outcomes can be achieved.

<sup>14</sup> These references are included at the end of the syllabus by *ChatGPT*.

**Table 2.** *PopAI* Syllabus Proposal for Localisation Course<sup>15</sup>

Creating a syllabus for a localisation course would require a comprehensive look at the skills and knowledge a student would need to be successful in the field. Localisation not only involves translation but also adaptation of content to fit the cultural, technical, and linguistic aspects of the target locale. Here is a step-by-step outline of how to prepare such a syllabus:

**Week-by-Week Syllabus Outline:**

**Week 1: Introduction to Localisation**

- **Topics Covered:** Definition of localisation, difference between translation and localisation, overview of the localisation process.
- **Activities:** Lecture, introduction video, and class discussion on the importance of localisation.
- **Reading:** Introduction chapter from "Localisation Strategies for Global E-Business" by Nitish Singh.

**Week 2: Cultural Considerations in Localisation**

- **Topics Covered:** Cultural models, impact of culture on communication, cultural adaptation.
- **Activities:** Case studies analysis and group discussions.
- **Reading:** Selected chapters from "The Culturally Customised Web Site" by Nitish Singh and Arun Pereira.

**Week 3: Technical Aspects of Localisation**

- **Topics Covered:** Overview of CAT tools, software localisation, website localisation.
- **Activities:** Demonstration of CAT tools and practical exercise using a CAT tool.
- **Reading:** Articles on current CAT tools and their applications.

**Week 4: Legal and Ethical Issues in Localisation**

- **Topics Covered:** Copyright laws, privacy issues, and ethical considerations.
- **Activities:** Guest lecturer from the legal profession, debate on ethical scenarios.
- **Reading:** Case studies on legal and ethical issues in localisation.

**Week 5: Language and Linguistics for Localisation**

- **Topics Covered:** Linguistic nuances, dialects, and language variants.
- **Activities:** Linguistic analysis exercises and discussion of language issues in localisation.
- **Reading:** "Linguistic Cultures of the World: A Statistical Reference" by George L. Campbell.

**Week 6: Project Management in Localisation**

- **Topics Covered:** Stages of localisation projects, role of a project manager, and resource allocation.
- **Activities:** Role-play exercises and project management software overview.
- **Reading:** "Project Management for Localisation Projects" by Keiran J. Dunne.

**Week 7: Quality Assurance and Testing in Localisation**

- **Topics Covered:** QA processes, localisation testing, and bug reporting.
- **Activities:** QA and testing workshop with practical exercises.
- **Reading:** Articles on best practises in QA and testing for localisation.

<sup>15</sup> The syllabus format was created by the application as in the table. Therefore, there has been no human intervention to arrange it.

**Table 2.** Continued

**Week 8: Mid-term Exam**

- **Assessment:** Includes theoretical questions and practical exercises covering topics from weeks 1-7.

**Week 9: Multimedia Localisation**

- **Topics Covered:** Subtitling, dubbing, voice-over, and graphic localisation.
- **Activities:** Practical subtitling exercise and discussion on the challenges of multimedia localisation.
- **Reading:** "Audiovisual Translation: Subtitles and Subtitling" by Laura Incalcaterra McLoughlin et al.

**Week 10: Localisation for Video Games**

- **Topics Covered:** Specifics of video game localisation, culturisation in games.
- **Activities:** Analysis of localised games, group discussion on culturisation.
- **Reading:** "Localisation Strategies for Global e-Gaming" by Carme Mangiron and Minako O'Hagan.

**Week 11: User Interface and Experience in Localisation**

- **Topics Covered:** UI/UX design considerations and usability testing.
- **Activities:** UI/UX design critique and usability testing scenario exercise.
- **Reading:** "International User Interfaces" by Elisa M. del Galdo and Jakob Nielsen.

**Week 12: Machine Translation and Localisation**

- **Topics Covered:** Role of MT in localisation, post-editing, MT engines.
- **Activities:** MT workshop and post-editing exercise.
- **Reading:** Research articles on MT and post-editing.

**Week 13: Localisation of Marketing Materials**

- **Topics Covered:** Transcreation, brand name analysis, and marketing strategies.
- **Activities:** Transcreation exercise and case study analysis.
- **Reading:** "Transcreation in the Digital Age" by Percy Balemans.

**Week 14: Case Studies and Current Trends in Localisation**

- **Topics Covered:** Analysis of successful and unsuccessful localisation projects, discussion on current and future trends.
- **Activities:** Group presentations on case studies and panel discussions on future trends.
- **Reading:** Recent journal articles on localisation trends.

**Week 15: Final Exam**

- **Assessment:** Comprehensive exam with theoretical questions, case studies analysis, and practical localisation exercises.

**Assessment and Evaluation:**

For a course like localisation, assessment can benefit from a mix of exams and projects. Exams can test students' understanding of key concepts and theories, while projects can evaluate their ability to apply these concepts in real-world scenarios. Therefore, a combination of mid-term and final exams, along with ongoing projects, would be a balanced approach.

**Table 2.** Continued

<p><b>Mid-term (20%) and Final Exams (30%):</b></p> <ul style="list-style-type: none"> <li>• <b>Structure:</b> A mix of multiple-choice questions, short answers, and practical exercises.</li> <li>• <b>Evaluation Criteria:</b> Accuracy, understanding of concepts, and quality of the practical exercise outputs.</li> </ul> <p><b>Projects (30%):</b></p> <ul style="list-style-type: none"> <li>• <b>Structure:</b> Students undertake a localisation project, possibly in groups, simulating a real-world scenario.</li> <li>• <b>Evaluation Criteria:</b> Quality of localisation, creativity in problem-solving, adherence to localisation standards.</li> </ul> <p><b>Participation and Homework (20%):</b></p> <ul style="list-style-type: none"> <li>• <b>Structure:</b> In-class participation and weekly homework assignments.</li> <li>• <b>Evaluation Criteria:</b> Engagement, completion, correctness, and effort.</li> </ul> <p><b>Suggested References:</b></p> <ol style="list-style-type: none"> <li>1. "Localisation Strategies for Global E-Business" by Nitish Singh.</li> <li>2. "The Culturally Customised Website" by Nitish Singh and Arun Pereira.</li> <li>3. "Project Management for Localisation Projects" by Keiran J. Dunne.</li> <li>4. "Audiovisual Translation: Subtitles and Subtitling" by Laura Incalcaterra McLoughlin et al.</li> <li>5. "Transcreation in the Digital Age" by Percy Balemans.</li> <li>6. Relevant journal articles, case studies, and current news in the field of localisation.</li> </ol> <p>Combining exams and projects allows for a comprehensive assessment of both theoretical understanding and practical skills, which is essential in a field like localisation. The suggested readings provide foundational knowledge, and the projects encourage students to stay current with industry practises and trends.</p>
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The second question (prompt) asked to *ChatGPT* was also asked *POPAI* and the answer was as follows:

*"The syllabus I have outlined benefits from the comprehensive data and insights that have been programmed into me, which includes a large array of sources and pedagogical approaches in the field of localisation. Here are some advantages that this AI-generated syllabus might have compared to one created by a human translation scholar:*

1. **Data-Driven:** *The syllabus is informed by a broad scan of available literature, teaching methodologies, and industry practises that may be beyond the scope of any single individual's research or experience.*
2. **Up-to-Date Resources:** *I have access to the most recent publications, articles, and news, ensuring that the syllabus can include the latest developments and trends in the field of localisation.*
3. **Diversity of Perspectives:** *By not being limited to a human's inherent biases or knowledge gaps, the syllabus can present a more balanced and multifaceted view of the subject matter.*
4. **Comprehensive Coverage:** *The syllabus is designed to cover all key areas within localisation, ensuring a well-rounded educational experience.*

*However, there are several aspects where a human translation scholar might have advantages over an AI:*

1. **Personal Experience and Insight:** *A human scholar often brings years of personal experience in the field, providing students with unique insights, anecdotes, and learnings that are difficult to replicate through AI.*
2. **Adaptability to Student Needs:** *A human educator can more easily adapt teaching methods and syllabus content on-the-fly in response to the dynamics of the classroom and the progress of students.*
3. **Research and Scholarly Contributions:** *Human scholars contribute original research and thought leadership to their fields, which can inform and enrich a syllabus with first-hand knowledge and cutting-edge theories.*
4. **Interactive and Responsive Learning:** *Human educators can foster an interactive learning environment, mentor students, and provide personalised feedback, which is crucial for complex and nuanced fields like localisation.*
5. **Cultural and Ethical Nuances:** *A human being is more adept at navigating sensitive cultural and ethical discussions, which is particularly pertinent in a course on localisation.*

*In terms of superiority, it is not so much about being better but rather about offering different strengths. A well-designed human syllabus might be enriched by the educator's unique experiences and tailored to the specific context of their students, while an AI-generated syllabus can offer breadth and access to a wide array of up-to-date resources. The optimal approach might be a hybrid one, where a human educator uses an AI-generated syllabus as a starting point and then personalises it based on their expertise and the needs of their students."*

### Discussion of the *PopAI* syllabus

Upon examining the localisation syllabus developed by *PopAI*, it becomes evident that it surpasses *ChatGPT* at its counterpart in terms of comprehensiveness. *PopAI* structured the syllabus with a distinct topic designated for each week instead of *ChatGPT*'s bi-weekly approach. Each week in *PopAI*'s syllabus includes specific topics, activities, and general/specific readings. If we evaluate the syllabus week by week, Week 1 can be said to focus on introduction to localisation, covering its definition, its difference from translation, and an overview of localisation, akin to that of *ChatGPT*. Nonetheless, *PopAI* goes further by detailing how to teach during the class. The first week is said to be in the form of lectures, introduction videos, and class discussions on the importance of localisation. For the first week's reading recommendation, a work by Nitish Singh is suggested, and research confirms the existence of such a source and author. This contrasts with that of *ChatGPT* because the work specified by *ChatGPT* about this author could not be verified.

Week 2 delves into the cultural aspects of localisation, involving case study analysis and group discussions. The recommended work, "The Culturally Customised Website" by Nitish Singh and Arun Pereira, is verified through research.

Week 3 focuses on the technical aspects of localisation, providing an overview of computer-aided translation tools (CAT), software and website localisation. Compared to *ChatGPT*'s syllabus, *PopAI* introduces CAT tools and practical exercises that use these tools. The transition from cultural to technical topics might be perceived as inconsistency, implying a potential rearrangement of the syllabus to present linguistic, cultural, and technical dimensions/aspects sequentially. Notably, there is a terminological inconsistency between the second and third weeks: The second week starts with "Cultural Considerations of Localisation" whereas the third week starts with "Technical Aspects of Localisation." To maintain consistency, either "aspects" or "considerations" should be chosen for the respective headings.

Week 4 focuses on legal and ethical issues in the localisation process, covering copyright, privacy issues, and ethical considerations. A guest lecturer from the legal profession is said to be invited to discuss ethics, a topic absent in *ChatGPT*'s syllabus. Ethical and legal considerations also play a crucial role in localisation, and benefiting from a guest lecturer reflects a more human-centric approach than *ChatGPT*.

Week 5 centres on linguistic aspects of localisation, featuring linguistic analysis exercises and language-related discussion. The recommended reading, *Linguistic Cultures of the World: A Statistical Reference* by George L. Cambell, is a valid book instead of an article, although the research reveals an information error because the work belongs to Philip M. Parker, not George L. Cambell.

Week 6 is based on project management, incorporating role-play exercises and an overview of the project management software. Keiran Dunne's so-called work, "Project Management for Localisation Projects," is recommended, but research indicates that Keiran J. Dunne and Elana S. Dunne co-edited the book *Translation and Localisation Project Management*. In contrast to *ChatGPT*'s syllabus, which covers project management and quality control processes in Weeks 9 and 10, *PopAI* introduces project management in Week 7, including practical QA and testing exercises. During this week, information on QA processes, localisation testing and bug reporting will be offered. As a reading, the articles on the related topic are available.

Week 8 is designated for a detailed midterm exam, covering the theoretical and applied aspects from weeks 1-7.

Week 9 focuses on multimedia localisation, covering subtitles, dubbing, voiceover, and graphic localisation. The class format of this week includes practical subtitling exercises and related discussions. The recommended source is valid, but it is a book edited by Laura Incalcaterra McLoughlin et al.

Week 10 shift attention to video game localisation, involving group discussions on culturisation and analysis of localised games. The recommended source could not be verified, but it is true that Carme Mangiron and Minako O'hagan are confirmed translation scholars in video game localisation.

Week 11 address the user interface and experience in localisation, featuring usability tests, critical discussions, etc. The recommended source is confirmed as a valid reference.

In Week 12, machine translation and localisation are covered, encompassing machine translation engines, post-editing, and the role of machine translation in localisation. Post-editing and machine translation exercises are integrated into the class format, with general readings recommended.

Week 13 focuses on the localisation of marketing materials, emphasising brand names, marketing strategies, and transcreation. The case study analysis and transcreation practises are included. Although the recommended source title has not been found, research reveals that Percy Balemans<sup>16</sup> is a translator specialising in English/German to Dutch translation and offers transcreation services.

Week 14 delves into current trends and case studies in localisation, analysing successful and unsuccessful projects, and engaging in discussions on current trends, including the future. Week 14 also involves group presentations on case studies, discussions on future trends, and a reading list of general journal articles.

In Week 15, the final exam is held, encompassing theoretical analysis, case studies, and practical localisation exercises.

To this point, it is evident that *PopAI* has developed a more comprehensive and logically structured syllabus than *ChatGPT*. The syllabus is both theoretical and practical, offering a detailed approach. While some sources require verification and potential topic rearrangement is suggested, the overall impression is that nearly a human-like syllabus has been created by *PopAI*, which still needs revision.

In the assessment and evaluation section, *PopAI* outlines that the mid-term and final exams will be composed of multiple-choice questions, short answers, and practical exercises. Evaluation will be based on correct answers, understanding of concepts, and the quality of responses to practical questions. The mid-term exam carries a weight of 20%, while the final exam holds a weight of 30%. Projects contribute 30% to the evaluation, with students expected to collaborate on a localisation project, simulating a real market environment. Criteria for evaluation include project quality, creativity in problem-solving, and adherence to localisation standards. Although the syllabus mentions group presentations in week 14, one class hour per week for project presentations might be more realistic, especially in crowded classrooms. Classroom participation holds a weight of 20%, with assignments given. The evaluation criteria include engagement, completion, correctness, and effort.

Additionally, the readings for each week are presented in the list form at the end, with some sources verified and others awaiting confirmation.

The outputs from the *PopAI*-directed question indicate that *PopAI* has attempted to utilise current sources to form the syllabus. Besides, *PopAI* asserts that the syllabus was data-driven, confidently stating that “*by not being limited to a human’s inherent biases or knowledge gaps, the syllabus can present a more balanced and multifaceted view of the subject matter*”.

Ultimately, the application in question acknowledges the AI’s lack of personal experience and insights and adaptability to student needs as a shortfall. Human educators are considered superior in areas such as research, scientific contributions, interactive learning, and responsiveness to the application. The suggestion by *PopAI* is, therefore, a hybrid approach where a human educator can personalise the AI-generated syllabus based on student needs.

<sup>16</sup> <https://www.pb-translations.com/index-en.htm>

**Table 3: Final Proposal for Localisation Course Through Human Touch (Third Syllabus)**

<b>Course Code and Title:</b> ETI 302 Localisation <sup>17</sup>
<b>Methods of Course Delivery:</b> Face-to-Face or Virtual <sup>18</sup>
<b>The Instructor:</b> Mehmet Cem Odacıoğlu
<b>Office Hours:</b> Tuesday/Thursday 13.30-17.00 <b>Email:</b> cemodacioglu@bartin.edu.tr <b>Phone Number:</b> +90 378 501 1000/5608
<b>Theory:2 Practice:2 Credit:3 ECTS Values: 4</b> <sup>19</sup>
<b>Course Description:</b> This course provides an introduction to the localisation industry, which gained prominence from the 1980s onward. In the class, a concise history of localisation is introduced. Then, concepts associated with localisation, the linguistic, cultural, and technical aspects of the localisation process are explained comprehensively. The course also delves into the stages of localisation and its types. During the course, students are taught CAT tools employed in the localisation process, including neural and hybrid machine translation systems such as <i>Memsorce</i> , <i>Smartcat</i> , <i>Memoq</i> , <i>Wordfast</i> , <i>Trados Systran</i> , <i>Google Translate</i> , and <i>DeepL</i> . The instructor also organises group discussions by enabling practical exercises. The creation of translation memories and terminology databases is shown, and students are informed about post-editing processes, project management, quality control procedures, and ethical and legal considerations per week. When providing theoretical insights, practical exercises are gradually intensified. The course in question is designed for the spring semester of the third grade <sup>20</sup> .
<b>Objectives of the Course:</b> The basic objective of this course is to equip students for the localisation industry by enhancing their theoretical foundation and preparing them for the real-time translation market/localisation sector via relevant practical exercises. In doing so, students learn how to address potential challenges in the localisation market, fostering the development of problem-solving skills in the context of localisation processes.
<b>Assessment and Evaluation:</b> <sup>21</sup> <b>Weekly Assignments and Class Participation (20%):</b> Weekly assignments in this course, contributing to 10% of the total grade, are in the form of small group projects. These projects highlight the collaborative aspect of localisation, underlining its team-oriented approach. The remaining 10% of the total grade is based on active class participation.

<sup>17</sup> The offering of the course is expected to begin in the third year, possibly during the spring semester. The course is not scheduled for the final year. Following the provision of general information and practical applications on localisation, an overarching concept, the aim is to provide continuing specialised training in various types of localisation (software, website, video game, multimedia, mobile application) during both the fall and spring semesters of the fourth year. The ETI 302 Localisation course syllabus, developed with the aid of artificial intelligence, is suggested to be mandatory. Nevertheless, there may be other elective courses related to localisation. Considering the technologically advanced era we are in, it would be practical to designate ETI 302 Localisation as a compulsory course, ensuring that all students, although initially reluctant, acquire familiarity with the potential translation technologies. Mastering CAT tools, for example, leads to increased financial gains.

<sup>18</sup> The delivery method depends on the number of students. If the class is large, the course may be conducted online to achieve optimal results. The mode of delivery is not present in the AI-generated syllabi.

<sup>19</sup> The inclusion of both practical exercises and theoretical topics in the course stems from the fact that students have possibly not encountered and become acquainted with localisation and related concepts. The practical exercises can be enhanced in continuing courses regarding localisation.

<sup>20</sup> Due to the extensive content covered, the course is four h long.

<sup>21</sup> In contrast to the syllabus generated by the AI applications in question, the syllabus prepared by a human scholar does not contain a theoretical exam, as shown in the assessment and evaluation section. While multiple-choice questions, short-answers, and essays are considered important for assessment and evaluation in certain scenarios, the localisation course is project-based. Following the delivery of theoretical knowledge by the course instructor during the class, the emphasis is placed on practical exercises. The essential focus is on the ability to convert information into effective practise, a skill attainable not through measuring theoretical knowledge but through practical exercises.

**Mid-Term Project (30%) and Final Project (50%):** While theoretical knowledge is imparted to build the students' foundational understanding, a midterm project and a final project, both conducted in groups and based on practical exercises, are assigned. Compared to small group projects that are assigned weekly, these projects are more comprehensive.

**Evaluation Criteria:** Quality of localisation projects, creativity in problem-solving, adherence to localisation standards, effort, completion, accuracy, consideration of copyright laws, and ethical issues.

**Learning Outcomes:**

1. Students gain a comprehensive understanding of the fundamental components of the localisation industry and localisation practises.
2. Students can discern the differences between localisation, domestication, and translation.
3. Students use CAT tools and other technological resources in the context of localisation processes.
4. Students acquire knowledge of project management and quality control processes and effectively employ related tools.
5. Upon completing this course, students are well-prepared for the practical aspects of the translation market and the localisation industry through practical exercises in various localisation types.

**Week-by-Week Syllabus Outline**

**Week 1: Introduction to Localisation**

- Definition of Localisation and Locale, Difference between Localisation, Domestication, and Translation<sup>22</sup>.
- A Brief History of Localisation
- Definition of Globalisation, Internationalisation, Localisation
- Discussion

**Week 2: Linguistics and Cultural Aspects of Localisation**

- How to Overcome Linguistic and Cultural Challenges? Translation/Adaptation of Idioms, Metaphors, Proverbs, Cliches, Slogans, Brand names in Localisation Projects
- Information on Translation and Localisation Strategies During the Adaptive Process of Linguistic and Cultural Concepts
- Discussion

**Week 3-Technical Aspects of Localisation**

- Introduction to CAT Tools: Clues About How to Create TM, Term Base and Corpora
- Information on Roles of Localisation Specialists such as localisation engineer
- Detailing the Question of “What is Meant by Technical Adaptation of Localised Products?”
- What are the concepts of pre-editing and light/full post-editing?
- How are the formats converted? What is OCR?
- Discussion

**Week 4: Introduction to Localisation Types<sup>23</sup>**

- What is Software? What is Software Localisation? What Types of Technological Tools Are Used in Software Localisation Projects?
- What Is Website Localisation? What Types of Technological Tools Are Used in Website Localisation Projects?
- What Is Video Game Localisation? What Types of Technological Tools Are Used in Video Game Localisation Projects?
- What Is Multimedia Localisation? What Types of Technological Tools Are Used in Multimedia Localisation Projects? Brief Information on Subtitling, Dubbing, Voice Over, and AVT in general
- What Is Mobile App Localisation? What Types of Technological Tools Are Used in Mobile App Localisation Projects?

<sup>22</sup> AI-generated syllabi include difference between localisation and translation, but the human scholar also added domestication

<sup>23</sup> This week seems intense. However, brief but essential information on these concepts is offered. So, four-hour session is enough.

### **Legal and Ethical Issues in Localisation**

- Copyright laws, privacy issues, and ethical considerations

### **Project Management in Localisation**

- What is Project Management?
- What are the Roles of Project Managers?
- What are the Project Management Tools?

### **QA Assurance in Localisation**

- What is QA?
- What are QA Tools?
- Discussion

### **Week 5: Introduction to the History of Machine Translation (MT)**

- What is the Turing Test? What is MT? When did MT first Come Out? What is an AIPAC Report?
- What is the Raw Output or Translation?

### **The types of MT**

- Information on Ruled-Based Machine Translation
- Information on Statistical-based Machine Translation
- Information on the Neural-Based Machine Translation

### **Week 6: Software Localisation Practise**

- Analysis of Software for Local Market Needs
- Pre-Editing Process (Spell Check of the Source Material to Localise, Conversion of File Formats, OCR, Other Technical Issues)
- Translation Process Through a CAT Tool such as *Smartcat* or *Memsource* and Neural Machine Translation Systems including DeepL and Google Translate
- Post-Editing Process of the Translation
- Embedding The Post-Edited Text into The Localised Product Considering Technical Adaptations such as Changing Graphic Colour, Re-Positioning of Images, and Editing the Textual Elements on the Graphics using Photoshop or its counterparts.
- Analysing and Testing the Localised Product using QA tools

### **Week 7: Website Localisation Practise**

- Analysis of the Website for Local Market Needs
- Pre-Editing Process (Spell Check of The Source Material to Localise, Conversion of File Formats, OCR, Other Technical Issues)
- Translation Process Through a CAT Tool such as *Smartcat*, *Memsource*, *Nubuto*, or *Texturised*
- Post-Editing Process of the Raw Translation
- Embedding The Post-Edited Text into The Localised Product Considering Technical Adaptations such as Changing the Graphic Colour, Re-Positioning Images, Editing the Textual Elements on the Graphics using Photoshop or its counterparts, and Transcreating slogans or brand names
- Analysing and Testing the Localised Product using QA tools

### **Week 8: Submission of the Mid-Term Project**

- Five-Minute-Long Project Presentations
- Providing Students with General Feedback on Weekly Assignments
- Group Discussion on Topics Learned So Far

### **Week 9: Multimedia Localisation Practise**

- Analysis of Video Games for Local Market Needs
- Pre-Editing Process (Spell Check of The Source Material to Localise, Conversion of File Formats, OCR, Other Technical Issues)
- Translation Process of Subtitling Through a CAT Tool such as *Smartcat*, *Memsource*, or *Memoq*, *NMT* such as *DeepL*, *Google Translate*
- Post-Editing Process of the Raw Translation of Subtitling
- Analysing and Testing Subtitling Whether It Meets the Standards of Players

### **Week 10: Mobile App. Localisation**

- Analysis of the Mobile App. Local Market Needs
- Pre-Editing Process (Spell Check of The Source Material to Localise, Conversion of File Formats, OCR, Other Technical Issues)
- Translation Process of Through a CAT Tool such as *Smartcat, Memsource, or Memoq, NMT such as Deepl, Google Translate*
- Post-Editing Process of the Raw Translation of Subtitling
- Embedding The Post-Edited Text into The Localised Product Considering Technical Adaptations such as Changing the Graphic Colour for customers, Re-Positioning Images, and Editing the Textual Elements on the Graphics using Photoshop or its counterparts
- Analysing and Testing the Localised Product using QA tools

### **Week 10: Software Localisation Practise**

- Analysis of Software for Local Market Needs
- Pre-Editing Process (Spell Check of the Source Material to Localise, Conversion of File Formats, OCR, Other Technical Issues)
- Translation Process Through a CAT Tool such as *Smartcat* or *Memsource* and NMT such as *Google Translate, DeepL, Systran*
- Post-Editing Process of the Translation
- Embedding The Post-Edited Text into The Localised Product Considering Technical Adaptations such as Changing Graphic Colour, Re-Positioning Images, and Editing the Textual Elements on the Graphics using Photoshop or its counterparts.
- Analysing and Testing the Localised Product using QA tools

### **Week 11: Website Localisation Practise**

- Analysis of the Website for Local Market Needs
- Pre-Editing Process (Spell Check of The Source Material to Localise, Conversion of File Formats, OCR, Other Technical Issues)
- Translation Process Through a CAT Tool such as *Smartcat, Memsource, Nubuto, or Texturised*
- Post-Editing Process of the Raw Translation
- Embedding The Post-Edited Text into The Localised Product Considering Technical Adaptations such as Changing Graphic Colour, Re-Positioning Images and Editing the Textual Elements on Graphics using Photoshop or its counterparts, Transcreating slogans or brand names
- Analysing and Testing the Localised Product using QA tools

### **Week 12: Multimedia Localisation Practise**

- Analysis of Video Games for Local Market Needs
- Pre-Editing Process (Spell Check of The Source Material to Localise, Conversion of File Formats, OCR, Other Technical Issues)
- Translation Process of Subtitling Through a CAT Tool such as *Smartcat, Memsource, Memoq, or Wordfast*
- Post-Editing Process of the Raw Translation of Subtitling
- Analysing and Testing Subtitling Whether It Meets the Standards of Players.

### **Week 13: Mobile App. Localisation**

- Analysis of the Mobile App. Local Market Needs
- Pre-Editing Process (Spell Check of The Source Material to Localise, Conversion of File Formats, OCR, Other Technical Issues)
- Translation Process of Through a CAT Tool such as *Smartcat, Memsource, or Memoq, Trados*<sup>24</sup>
- Post-Editing Process of the Raw Translation of Subtitling
- Embedding The Post-Edited Text into The Localised Product

<sup>24</sup> Tools included in syllabi seem diverse because it is thought that the more tools are taught, the more competent the student profile will be. Besides, even if there is not enough time to show all the tools, at least the software interfaces and logic of these tools can be taught.

Considering Technical Adaptations such as Changing the Graphic Colour for customers, Re-Positioning Images, and Editing the Textual Elements on the Graphics using Photoshop or its counterparts

- Analysing and Testing the Localised Product using QA tools

**Week 14: Inviting A Localisation Expert from the Localisation Company to the Course Through Face to Face or Virtually**

- **Workshop in Localisation**

**Week 15: Final Exam**

- Five-Minute-Long Project Presentations
- Providing Students with General Feedback on Weekly Assignments
- Group Discussion on Topics Learned So Far

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Note that a thoroughly organised course syllabus contains the following:

- Course objectives
- Method of course delivery
- Information about the instructor
- Detailed course description
- Learning outcomes
- ECTS credits for the course
- Assessment and evaluation criteria
- Weekly schedule/plan<sup>25</sup>

Upon examining the two syllabi generated in response to questions posed to artificial intelligence applications, it is evident that *ChatGPT* and *PopAI* have attempted to provide essential information regarding the content. Nevertheless, both syllabi exhibit certain shortcomings. Notably, they lack details such as the instructor's name and course code. Additionally, information about the course objectives, a comprehensive course description, the mode of course delivery

<sup>25</sup> cf. Albrecht, 2009.

(face-to-face or virtual), credit and ECTS values, and learning outcomes are absent in the syllabi generated by *ChatGPT* and *PopAI*. The structure of the *ChatGPT* and *PopAI* syllabi is a result of the specific nature of the questions posed to them. When developing a course syllabus, adherence to established criteria is essential, and it appears that artificial intelligence applications might not fully comply with these criteria. This discrepancy indicates a limitation in the intuitive and experiential aspects of artificial intelligence applications in this context. It is also worth noting that, even if the question does not encompass all the details about creating a syllabus, predefined criteria exist and should be considered before attempting to create a syllabus. Nevertheless, these two applications could not make this possible. Then, considering the criteria in creating a syllabus, the process of revision and re-structuring is pivotal.

The third syllabus, which a human scholar created, took its final shape via the assistance of the artificial intelligence applications in question. Compared to the syllabus by AI applications without a human touch, the third syllabus incorporates all the above-mentioned criteria.

This third syllabus can be said to have been created by following a more logical sequence. Upon examining the assessment and evaluation section, one can say that it differs from *ChatGPT* and *PopAI*. For instance, holding midterm and final projects has been deemed more appropriate for the third syllabus instead of a theoretical exam. This decision is justified by the project-based nature of the localisation course because presenting a theoretical foundation is solely for the purpose of achieving high-quality project outcomes in a localisation course.

The third syllabus is structured week by week, with a detailed introduction in the first week. In contrast to the artificial intelligence applications in question, this initial week provides an in-depth introduction and delves into the stages of localisation, introducing the concept of "domestication" as a term distinct from translation.

The second week focuses on the linguistic and cultural aspects of localisation. Rather than sparing a separate week for cultural elements, the third syllabus combines linguistic and cultural aspects into a single week. Allocating a separate week for cultural elements would reduce the weeks available for practical aspects of the course, contradicting project-based localisation courses.

The third week is based on the technical aspect of localisation, presenting a different sequence than *that of ChatGPT* and *PopAI*.

The fourth week covers localisation types, ethical considerations in localisation, project management, and quality assurance. Opting for separate weekly allocations for these topics may create a misconception that the course will continue as a theoretical course, despite being a practical course. Considering the course duration as a four-hour session, these topics can be covered in a week by offering concise information. Following explanations, the instructor also provides students with discussion opportunities during these weeks.

The fifth week introduces the history of machine translation and machine translation systems. From the sixth to the seventh week, practical exercises are specifically carried out with students in localisation types, with detailed explanation provided in the respective weeks.

The eighth week is designated as the mid-term exam. However, project submission is carried out instead of holding an exam for the following reasons. Students are also expected to present five-minute project presentations this week. The remaining class hours focus on providing feedback on weekly assignments and engaging in discussions related to the topics learned so far.

Starting from the ninth week to the fourteenth week, the syllabus includes practical exercises related to various types of localisation.

In summary, seven weeks were allocated to practical exercises, five weeks to theoretical knowledge transfer based on discussions, and two weeks for mid-term and final presentations. The fourteenth week includes a workshop conducted by a localisation expert, similar to *PopAI*<sup>26</sup>, acknowledging the importance of experiential transfer in localisation. The final section of the syllabus features a reading list compiled from reliable and verifiable sources. Based on these insights into the third syllabus, it can be claimed that the final syllabus is more comprehensive, logical, and practical. Influenced by human and AI contributions, the syllabus in question exemplifies a hybrid-type syllabus through machine-human interaction.

## Conclusion

In conclusion, this study contributed significantly to the ongoing discourse surrounding the intersection of artificial intelligence (AI) and Translation Studies, specifically within the pedagogical context of localisation courses. Through analysing two distinct AI-driven syllabi generated by *ChatGPT* and *PopAI*, the research provides critical insights into

<sup>26</sup> *PopAI* has, however, invited a guest in the legal profession.

AI's current capabilities and limitations in educational design. Though the initial outputs produced by these AI systems may superficially resemble syllabi crafted by human instructors, a deeper examination exposes notable deficiencies. These include issues related to logical sequencing, thematic coherence, and the subtle nuances required for effective curriculum development.

The study highlights that AI can simulate certain aspects of human cognitive processes, but its outputs might lack the pedagogical precision and adaptability that arise from human expertise. This inadequacy necessitates incorporating human intervention to refine AI-generated materials, ensuring they meet the standards of clarity, cohesion, and instructional value expected in higher education contexts.

As such, a third hybrid syllabus, created through the synergistic collaboration between AI and human input, was proposed in the study. This hybrid model addresses the shortcomings in purely AI-generated syllabi by correcting sequencing errors, clarifying ambiguous content, and enhancing the overall pedagogical structure. The resulting syllabus exemplifies a robust model of human-AI interaction, offering a practical solution for educators in translation and interpreting departments who aim to integrate localisation courses into their curricula.

Ultimately, this study not only illustrates the current likely limitations of AI in autonomously generating educational content but also advocates for a hybrid approach in which human expertise complements AI capabilities. This human-machine collaboration holds promise for future advancements in educational technologies within Translation Studies. The research thus invites further exploration into the role of AI in curriculum development, and it is believed that the findings will serve as a foundation for more refined applications of AI in the academic landscape, promoting a balanced integration of technology and human judgment.

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