

HUMAN EXPERIENCE WITH AI IN AUDIOVISUAL TRANSLATION

Human Experience with AI in Audiovisual Translation

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Abstract

This study is dedicated to exploration of the experiences of audiovisual (AV) translators working with Artificial Intelligence (AI). This research unravels how audiovisual translators use AI-tools, the effectiveness of these tools and challenges encountered by the specialists. This study conducted basic qualitative research with the aim to perceive the experience of audiovisual translators through semi-structured interview which is further analyzed using thematic analysis for identification of patterns in their experiences. Information from 10 interviews with audiovisual translators lead to creation of three main themes: Minimal Impact on Core Translation Processes, AI as a Support Tool for Technical and Routine tasks and Mixed Attitudes Toward AI Adoption from which derived that AI has limited implementation in main translation tasks, while offering means for technical help which lead to work optimization and creative and reference support. The low quality of translations made by AI showcases flaws in understanding of complicated matters such as lack of contextual and emotional sensitivity with the following need for human post-editing. The main role of translator in audiovisual translation is still irreplaceable because of the ability to work with cultural contexts, interpersonal relations and visual elements. AI brings mixed receptions ranging from cautious optimism to skepticism. These findings point out that AI has potential to enhance productivity of translators through optimization of their routine working processes while leaving more time on creative aspects of the work. This hints that AI can be successfully integrated into working processes of translators with humans in a central role that does not bypass translator agency, quality standards and creativity. This study contributes to the forming discourse regarding AI in translation with a view on how AI can be adopted and offering practical insights for healthy collaboration between AI and humans in the audiovisual translation.

Keywords: audiovisual, translation, artificial, intelligence, dubbing, subtitling, voiceover, machine, experiences, limitations, automation.

Аңдатпа

Бұл зерттеу Жасанды Интеллектпен (ЖИ) жұмыс істейтін аудиовизуалды аудармашылардың тәжірибесін зерттеуге арналған. Және ол аудиовизуалды аудармашылардың ЖИ құралдарын қалай қолданатынын, осы құралдардың тиімділігін және мамандардың алдында тұрған қиындықтарды ашады. Зерттеу жұмысы аудиовизуалды аудармашылардың тәжірибесін жартылай құрылымдық сұхбат арқылы қабылдау мақсатында негізгі сапалы зерттеулер жүргізеді, әрі қарай олардың тәжірибелеріндегі заңдылықтарды анықтау үшін тақырыптық талдауды қолдану арқылы талданады. Аудиовизуалды аудармашылармен 10 сұхбаттан алынған ақпарат үш негізгі тақырыпты құруға әкеледі: Негізгі Аударма Процестеріне Минималды Әсер ету, ЖИ Техникалық және Күнделікті тапсырмаларды Қолдау Құралы ретінде және ЖИ Енгізуге Деген Аралас Көзқарас, соның негізінде ЖИ негізгі аударма тапсырмаларын орындауда шектеулі, сонымен бірге техникалық көмек құралдарын ұсынады. жұмысты оңтайландыруға және шығармашылық және анықтамалық қолдауға әкеледі. ЖИ арқылы жасалған аудармалардың сапасыздығы контекстік және эмоционалдық сезімталдықтың болмауы сияқты күрделі мәселелерді түсінудегі кемшіліктерді көрсетеді, бұл адамның кейінгі өңдеуіне келесі қажеттілікті тудырады. Аудиовизуалды аудармадағы аудармашының басты рөлі мәдени контексттермен, тұлғааралық қатынастармен және көрнекі элементтермен жұмыс істеу қабілетіне байланысты әлі де алмастырылмайды. ЖИ сақ оптимизмнен скептицизмге дейінгі әртүрлі қабылдауларды ұсынады. Бұл нәтижелер ЖИ аудармашылардың күнделікті жұмыс процестерін оңтайландыру және жұмыстың шығармашылық аспектілеріне көбірек уақыт бөлу арқылы олардың өнімділігін арттыруға әлеуеті бар екенін көрсетеді. Бұл ЖИ аудармашылардың агенттігін, сапа стандарттарын

және шығармашылығын айналып өтпейтін орталық рөлдегі адамдармен аудармашылардың жұмыс процестеріне сәтті біріктіруге болатынын көрсетеді. Аталған зерттеу ЖИ қалай қолдануға болатынын ескере отырып, аудармадағы ЖИ туралы дискурстың қалыптасуына ықпал етеді және аудиовизуалды аудармада ЖИ пен адамдар арасындағы салауатты ынтымақтастық туралы практикалық түсінік береді.

Тірек сөздер: аудиовизуалды, аударма, жасанды, интеллект, дубляж, субтитр, машиналық, тәжірибе, шектеулер, автоматтандыру.

Аннотация

Это исследование посвящено изучению опыта аудиовизуальных переводчиков, работающих с искусственным интеллектом (ИИ). Это исследование раскрывает, как аудиовизуальные переводчики используют инструменты ИИ, эффективность этих инструментов и проблемы, с которыми сталкиваются специалисты. В этом исследовании проводится базовое качественное исследование с целью изучения опыта аудиовизуальных переводчиков с помощью полуструктурированного интервью, которое затем анализируется с использованием тематического анализа для выявления закономерностей в их опыте. Информация, полученная в ходе 10 интервью с аудиовизуальными переводчиками, позволила сформулировать три основные темы: Минимальное влияние на основные процессы перевода, Искусственный интеллект как вспомогательный инструмент для решения технических и рутинных задач и неоднозначное отношение к внедрению искусственного интеллекта, из чего следует, что ИИ имеет ограниченное применение в основных задачах перевода, в то же время предлагая средства технической помощи, которые приводят к оптимизации работы, творческая и справочная поддержка. Низкое качество переводов, выполненных с помощью искусственного интеллекта, демонстрирует недостатки в понимании сложных вопросов, таких как отсутствие контекстуальной и эмоциональной чувствительности, что приводит к необходимости постредактирования человеком. Основная роль переводчика в аудиовизуальном переводе по-прежнему незаменима из-за способности работать с культурными контекстами, межличностными отношениями и визуальными элементами. Искусственный интеллект приносит смешанные идеи, варьирующиеся от осторожного оптимизма до скептицизма. Эти результаты указывают на то, что искусственный интеллект обладает потенциалом для

повышения производительности переводчиков за счет оптимизации их рутинных рабочих процессов, оставляя при этом больше времени на творческие аспекты работы. Это говорит о том, что искусственный интеллект может быть успешно интегрирован в рабочие процессы переводчиков, где люди играют центральную роль, не обходя при этом агентство переводчиков, стандарты качества и креативность. Это исследование вносит свой вклад в формирование дискурса об искусственном интеллекте в переводе с точки зрения того, как можно использовать искусственный интеллект, и предлагает практические идеи для здорового сотрудничества между искусственным интеллектом и людьми при аудиовизуальном переводе.

Ключевые слова: аудиовизуальный, перевод, искусственный интеллект, дубляж, субтитры, машинный, опыт, ограничения, автоматизация

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Introduction

Is the advent of artificial intelligence (AI) signaling the end of the audiovisual translator's profession? The audiovisual translation (AVT) sector has been at the forefront of technology adoption, rapidly adopting new technologies from the first software iteration to cloud-based translation systems. The recent integration of AI and Machine Translation (MT) into translation services has ignited a substantial discussion. While AI and MT promise enhanced efficiency and accuracy, there are concerns about the future relevance of human translators in the industry (Deryagin et al., 2021; Contre-sommet IA, n.d.). The subject was chosen due to my passion for this field and my future career pursuit. This paper seeks to investigate the experiences of audiovisual translators with AI in AVT, the obstacles they encounter, and the broader implications of these advancements for the profession's future.

Background Information

Audiovisual translation (AVT) is the process of translating both visual and audio materials into another language (Diaz-Cintaz, 2009). It is widely used in the translation field with some professionals preferring the term AVT as an inclusive term for subtitling, dubbing and other related practices. The main goal of AVT is to make movies, TV shows, video games and other multimedia content accessible and appealing to audiences. It aims to bridge the language gap, for viewers and those with hearing impairments (González, 2019).

AVT is closely connected with technology and heavily relies on technology since the source material mainly consists of content, which inherently involves technical aspects (Bywood, 2020). Audiovisual translators depend on technology to aid them in their translations ensuring that translations can be seamlessly integrated with the media content for effective broadcasting.

In the stages of AVT manual methods were predominant where translators would view films or TV shows and then produce subtitles or dubbed versions in a different language (Bywood, 2020). Although this approach was labor intensive it was the choice for many years due to the industry's early phase and technological limitations at that time.

From the 2000s onwards technological advancements have rapidly boosted internet accessibility rates significantly contributing to the rapid expansion of audiovisual content and its translations using techniques like subtitling and dubbing among others in AVT to enhance its global reach (Perego & Pacinotti, 2020). These continuous technological advancements have resulted in adoption of new tools and software applications as well as enhancements in automation and efficiency, within professional processes.

The rise of technology ushered in a new era of efficiency and scalability in the field of AVT. The advent of computer aided translation (CAT) tools transformed the process enabling translators to work on files simultaneously and leverage translation memories to streamline their work. This represented an advancement over traditional manual methods although it also brought forth new challenges with the exponential growth in audiovisual content volume.

In response to these challenges the industry saw the development of advanced translation tools that could handle large-scale projects. These projects cover all aspects of production from transcription to speech synthesis for voiceovers focusing predominantly on non-fiction genres. Taylor et al. (2015) devised a technique for Disney that automates dubbing by utilizing pronunciation dictionaries and language models to match details in a video sequence. In the meantime, Google's Yang et al. (2020) unveiled a platform for automatic voiceover and dubbing. This system transcribes, translates, and synthesizes original content into the target language's speech, utilizing the original speaker's voice and lip movements for synchronized translation.

Similarly, Amazon has developed software aiming to automate dubbing by emphasizing speech synthesis and ensuring synchronization between the translated script and the original dialogue, all while paying attention to timing (Lozano & Mejías-Climent, 2023). This advancement was driven by the increasing need for translation services due to the rise of content. The industry's ability to adapt and innovate in response to these challenges is evident. The progress in AI has played a role in companies investments in dubbing as seen through startups, like Dubdub, Dubverse and Deepdub that mainly cater to educational video content (Wyndham, 2022).

In recent years there has been a noticeable trend towards using cloud-based solutions, which has significantly improved the accessibility and scalability of AVT services (Massidda & Diaz-Cintas, 2019). According to Bolanos García-Escribano and Diaz-Cintas (2020) this shift has allowed translators to work from anywhere and collaborate efficiently. Cloud platforms also offer a cost option for translation service providers by enabling them to adjust their operations based on demand.

The field of AVT is dynamic and constantly evolving to keep up with technologies and challenges. The future of AVT is expected to be influenced by technological advancements and the growing need for translation services in the digital era. This continuous evolution emphasizes the importance of embracing technologies and fostering innovation to meet the increasing demand for AVT services. As highlighted in the European Language Industry Survey 2022 (ELIS) the integration of MT into translation services is now a reality.

ELIS's study, which gathered responses from sources such as translation companies, individual translators, government and private sector translation departments and educational institutions offering translation programs throughout Europe shows that most of these sources use machine translation in more than 20% of their translation projects (ELIS RESEARCH,

2022). Moreover, the progress of intelligence (AI) has significantly improved the use of machine translation (MT) especially neural machine translation (NMT) and post editing (PE) recently (Leiva Rojo, 2018). The incorporation of AI into language services in the field of AVT translation has sparked considerable interest and discussions among translators (Deryagin et al. 2021; Contre-sommet IA, n.d.). AI technologies like Large Learning Models (LLMs) have advanced from grammar rules and dictionaries, to sophisticated systems capable of translating intricate phrases and contexts. Nonetheless despite these advancements there is a shared belief that no AI based translation tool can completely substitute for the nuanced comprehension and cultural sensitivity provided by translators (Mejías Climent & de Los Reyes Lozano, 2023). This perspective is based on the recognition that precise and culturally attuned translations necessitate a level of expertise and awareness that current AI technologies are unable to replicate.

Problem Statement

The incorporation of AI tools into AVT is revolutionizing the field introducing fresh opportunities for enhanced efficiency and precision. Yet there is limited exploration into how AV translators are embracing and leveraging these AI tools (Federeci et al., 2023). This research seeks to bridge the gap by investigating the impact of AI on the work of AV translators delving into their experiences, the obstacles they encounter and the ways in which these tools are simplifying their translation workflows.

The emergence of AI in translation has triggered a paradigm shift in the industry prompting concerns about the future role of human translators. While AI tools promise heightened productivity and accuracy there is a growing apprehension regarding the diminishing significance of translators in this process (Deryagin et al., 2021; Contre-sommet IA, n.d.). A recent example involving Duolingo, a language learning application illustrates this shift as the

tech company announced layoffs and reduced its contractor workforce by 10% while transitioning from human led translation to AI driven solutions (O’Sullivan, 2024). The underlying fear is that consumers may find machine generated translations satisfactory, potentially diminishing the demand for human translation services. Furthermore, the absence of regulations and quality benchmarks, for AI generated translations alongside challenges faced by translators in comprehending and effectively utilizing these tools adds complexity to this evolving landscape. Most of the current research papers are dedicated to evaluating the quality of output translation (Doherty, 2016; Karakanta, 2022; Karakanta et al., 2020; Rivera-Trigueros, 2022). Other researchers are looking at how to implement AI tools in academic programs to prepare translators, who will be prepared for the current market state (do Carmo, 2020; Pym, 2013). Ethics were also a topic for several articles (Federici et al., 2023; Herbert et al., 2023; Kenny et al., 2020). The role of the translator was also discussed by researchers (Y. Wang, 2023; Bolanos García-Escribano & Diaz-Cintas, 2023). However, there is a lack of research exploring the experiences of audiovisual translators with AI tools in Kazakhstan and Russia.

Understanding the impact of AI on translation processes and professional competencies is essential for optimizing tool usage and maintaining translation quality (Moorkens, 2018). A limited number of studies have discussed how these tools impact the experiences of AVT translators which leaves a gap for this research.

Purpose of the Study

The purpose of this study is to investigate the experiences of AV translators with AI-tools, their perceptions of these tools' effectiveness, and the challenges they encounter in their work. This research seeks to provide insights into how AI is reshaping the AVT landscape, offering a nuanced understanding of its benefits and limitations from the translators' perspective.

Research Questions

1. What are the experiences of audiovisual translators with AI tools?
2. How do audiovisual translators use AI tools?
3. What challenges do they face while using AI tools?

Significance of the Study

The importance of this study lies in its potential to add to the discourse of the impact of machine translation on AVT experiences. The significance of this topic lies in its contribution towards understanding how the widespread adoption of intelligence impacts the translation of content as well as how these differences influence translators' workflows and perceptions. This research aims to offer a nuanced understanding of how translators interact with AI tools. It aims to tackle the technical challenges posed by AI in AVT providing valuable insights, for both professionals and scholars in the field. By delving into the experiences of AV translators using AI tools this study seeks to illuminate the real-world obstacles and advantages linked to AI use in AVT. This research is set to guide advancements in AI supported translation ensuring that the needs and considerations of AV translators are properly taken into account during the development and deployment of these technologies.

Literature review

The purpose of this literature review is to examine the Human Experience with AI in AVT. The AVT is a comprehensive field which includes different translation methods of audiovisual materials. This literature review provides an overview of existing research, on the subject matter highlighting arguments, opinions and findings while analysing and evaluating existing knowledge. The main topics covered translation, audiovisual translation, machine translation, neural machine translation and artificial intelligence.

Audiovisual Translation and Modality

The terminology associated with AVT reflects its evolution due to advancements and the development of practices in the field. The term audiovisual translation is one of the multiple names which appeared during historical development of the field, while trying to understand what is the position of it in translation studies. The term audiovisual translation was decided to be picked up because it is more widespread, well-established and used in European countries and USA with some variants, which occurred while making sense of what is included in the field and how it works in the frame of the traditional translation studies (Chaume, 2013). Chaume (2019) defines Audiovisual translation as a separate translation mode with the main aim to translate audiovisual texts from one language to another or adapted to the one language for special needs. One of peculiarities of this mode is that it goes through two codified channels like audio and visual. Body language, eye contact, physical movement, visual representations, sound, color, spatial relationships, spoken and written language, and others can be assigned to visual or audio codes that participate in the meaning creation process and are presented in translation in some sort of way and this blend in case of audiovisual translation should be especially considered (Chaume, 2019). Pérez-González (2019) defines focus of Audiovisual Translation on conveying

multimodal content across different languages and cultures. Audiovisual text can be called multimodal, because it includes in itself various codes like language, images, music, colours and points of views to interpret (Baldry & Thibault, 2008). This showcases that audiovisual translation has a unique position in the field of Translation Studies due its dependency from translation studies and independence from it at the same time (Gambier, 2006). AVT, despite having an established definition, also includes a wide range of specialised techniques that are tailored to address unique challenges and cater to specific audiences which can be called as modes.

Modes of Audiovisual Translation

These modes can be described as types of translation between one and more languages or cultures with some types focused on accessibility. Translation is affected by its purpose where translation can be seen on screen or near it as a replication of the spoken language in the form of captioning. Another variant, can be described as replacing audio where original audio tracks are replaced in case of dubbing or overlaid for voiceover. Those two can be considered as two main types called revoicing and captioning from which variations are taking the same basis, but appeared with technological development and have some distinctive features that make them into separate sub-types (Chaume, 2013).

Revoicing modes

Translation of audiovisual text and adapting the text to lip movement called lip-sync is called dubbing. It is one of the most popular types of audiovisual translation and complex because it brought together work in linguistic, cultural, technical and artistic work together and those factors should be considered to make translation believable (Chaume, 2013). This type is created by replacing the original voice track with a target language involving voice actors. Its

aim lays at capturing all possible details in speech including pace of speech and how lips are synchronized with their movement. (Luyken, 1991).

Voice-over is another mode involving revoicing. In this technique, the original sound remains audible for a few seconds, before gradually decreasing in volume to make way for the prominent voice delivering the translated dialogue above the original audio whose volume is reduced, but not erased, so it can be heard by the viewers (Díaz-Cintas & Orero, 2006; Díaz-Cintas, & Orero, 2010; Chaume, 2013). This type of AVT has another subtype which is called partial dubbing, where voice-over is more elaborate where male reader reads the leading male's dialogues and female respectively with third voice for side characters and information (Chaume, 2013).

Captioning modes

Subtitling falls under the domain of translation involves creating written English text that appears on the screen as subtitles or captions while audiovisual content is being shown. It can be seen as a type of translation, where spoken communication is transformed into written form while being concise to the situation on the screen (Gottlieb, 1997). This creates limitations to this type by various means such as speed of reading which shows how technical factors should be considered by specialists (Chaume, 2013).

There are a great number of other different types of audiovisual translation represented by: dubbing, subtitling, surtitling, respeaking, audiosubtitling, voice-over and partial dubbing, simultaneous interpreting in film festivals, free-commentary, subtitling for the deaf and the hard of hearing, audio description for the blind and visually-impaired, fansubbing and fandubbing (Chaume, 2013). The focus of this work is not to overview all types of AVT, but to examine the experiences of audiovisual translators who mainly work with subtitling, dubbing and voice-over.

This choice can be explained further by the exposure those types get in terms of attention, finance and social-cultural made them most common.

The purpose of the AVT and challenges

These techniques in AVT have purposes. Contribute to enhancing multilingual communication in various audiovisual contexts. AVT plays a role in reaching audiences by ensuring that audiovisual media maintains its cultural and linguistic integrity while catering to a global viewership. It takes the role of transferring information about the culture of one country to others, which can be filtered due to various challenges, which makes the process of making original products accessible to various audiences more complex. Regarding being faithful to the original translation it makes it fall in constraint due to presence in visual and audio which limits translation. The term ‘constrained’ translation was assigned to audiovisual translation where external factors prevail in the work of the translator (Chaume, 2019). Those factors have semiological origin which should be noted by the translator. As mentioned, before they can be transmitted through visual and audio channels with further information for consideration. They can be overlaid in layers and share the same channel in different proportions in various media depending on genre. Another factor which should be considered is synchrony where signals for sender and receiver will be the same. According to Mayoral (2002) there are different types of synchrony depending on different aspects like time, space, content, phonetics and character. Important notion that should be kept in mind is that message can be shown and received in different ways at the same time, but usually it traces to one idea and multiplicity of signals does not mean multiplicity of ideas, but noise may appear due to translation being an act of intercultural communication between two or more cultures that brings act of communication itself with added noise from cultural differences (Chaume, 2019). Those cultural differences

contribute to the constraint of audiovisual translation which is dealing with multiple external factors. Those factors can be called noise and may have different origin because information is duplicated in multiple ways at the same time, noise as mentioned derived from different systems of culture, noise produced because there is a lack of synchrony in the original product which can occur in both main channels of perception (Mayoral, 2002). Those challenges bring to the question main aspects of Translation Studies.

Notable researcher Derrida (1988) provided a notion where equivalence is omitted with the following idea that translation is not derived subproduct of original, but as an extension of the original which helps to maintain existence of it. The peculiarities of audiovisual translation raise an idea of equivalence where a translation of the product for a new audience should be adapted with possible limitations of the product while losing some information to the inability of passing those integral for the product (Chaume, 2019).

Jakobson suggested (1959) three types of translation, which include interlingual, intralingual and intersemiotic translation, that can be referred for better understanding audiovisual translation, where idea of not restricting the translation process by linguistically and textual proper translation and refer to culture, communication and semiotics as necessary to reflect. Another trinity designed for evaluation of translation should be considered, it is called three Rs in types of reception divided into relevance, readability and reliability (Gambier, 2009). Also, necessity rises due to various inconveniences which occur during perceiving of an original material in means of cultural-linguistic peculiarities, pace of speech, overlapping music, noise, speech, humour. To be more specific how audiovisual translation deals with affected dialogues and implications of speech in subtext with additional rules of censorship or other limiting rules (Diaz-Cintas, 2009). All those factors should be considered by translators to make translation

works in a dynamic picture with audio accompanying it and words with specific meaning due to the situation occurring at the moment and many more interactions. To external factors can be added that work of audiovisual translation was and continues to be affected by technology and development in the field, which transforms working practices to make it more effective in terms of speed, labour and production. With the advancement in technology and growing demand for content, AVT has become a field that promotes exchange, breaks down language barriers and enriches media by showcasing diverse audiovisual content from around the world. This is because the field of AVT is expanding due to the development in the Artificial Intelligence (AI) which is resulting in the shift of the workflows to the hybrid models that incorporate the human input with the use of AI. This change is a two-edged sword as translators and AI systems figure out how to work together.

Technologies in Translation

Compared to other branches of translation, AVT is evolving rapidly due to technological advancements (Bolaños García-Escribano et al., 2021). The future of the AVT industry is influenced by technical advancements (Gavrilenko, 2019). The integration of technology in AVT has brought efficient and accessible professional transcription, subtitling and translation processes. Technological developments have led to change in how translators do their work. For example, Automatic Speech Recognition (ASR) is utilized in many subtitle applications like Subtitle Edit or Aegisub which helps to process audio into text rather than doing manual transcription (Jiang & Lu, 2021; L. Wang & Sun, 2023). However, it doesn't apply that it works flawlessly and can affect translation if not carefully reviewed (Alonso-Bacigalupe & Romero-Fresco, 2024; Radford et al., 2022). Another noticeable example is the project SCATE which stands for Smart Computer-Aided Translation Environment with the aim to show how

translations can be improved thanks to the usage of an array of tools like hybrid machine translation, translator memory integrated into one system and an adjusted fuzzy matching algorithm (Vandeghinste et. al., 2019). These innovations help translators by providing them recommendations while leaving the necessary human element for proper linguistic and cultural transference. Improved CAT enables translators using various functions including searching for the variant instance in the translation memories. As part of that speech are tags packed with syntax linguistic trees features (LeBlanc, 2013).

Using the SCATE quality framework of that translation. combines Such TMs features with statistical fuzzy MT match systems, repair one and get a pre-translation combined solution MT that outputs with TM data, thus enhancing the quality of the final translation (Vanallemeersch and Vandeghinste, 2014). Quality estimation (QE) systems in SCATE quantify the effort needed for post-editing, depending on the nature of the errors made changes, at and different thus levels increase of the translation productivity (Vandeghinste et. al., 2019). This enables translators to work without sacrificing quality and depicts the important change of the face of translators as editors wherein the use of technological tools to maintain translation quality is stressed upon. into the conventional Therefore, approaches like the SCATE translation project makes that modern workflow can advance with computational efficient methods solved. It will also enhance efficiency and quality and show how the role of humans in the translation process is changing as the most effective way to work in the future.

The influences of technological solutions presented by software, applications and others show how quality of translation and workflows can be improved if translators utilize those solutions with some solutions already being used in subtitling and dubbing.

Machine Translation, Neural Machine Translation and AI

It can be said that machine translation, neural machine translation and AI tools based on artificial intelligence will be a part of the next step of technological development of the audiovisual translation (Granell & Chaume, 2023). Machine translation can be explained as an electronic system which makes translation with variation of working independently or with human help. It is divided further into human-aided machine translation and machine-aided human translation which, represented by tools located on computers with access to online dictionaries, terminology databanks, translation memories with integrated resources which are called computer-aided translation (Hutchins, 2012; Hudinskiy, 2021). There are different means on which machine translation can operate like rule-based or statistical machine translation, but with the current development of deep learning of Artificial Intelligence (AI) will undoubtedly play a role in shaping the AVT industry. It holds promise for tasks such as transcription, subtitling and translation. The incorporation of AI into the field of AVT is transforming the way translations are produced (Hiebl & Gromann, 2023). This integration is significant as it has the potential to revolutionise the field by automating and enhancing translation processes' efficiency. One particular aspect that stands out is Neural Machine Translation, which has already demonstrated its ability to automate and expedite translation tasks significantly. By utilising deep learning algorithms this technology improves process efficiency. Also proves cost-effective, for AVT operations. For example, it can streamline subtitle translations and dubbing by automating them thereby increasing productivity levels.

The new paradigm appeared as a replacement of SMT which is called Neural Machine Translation. The main difference is that it uses a singular large neural network for translation with greater performance for the process of translation within this network, instead of previous

variants (Stahlberg, 2020). The major players throughout the globe integrated this type to their production systems like Google, Microsoft, Facebook, Amazon, SDL, Yandex and others (MarketsandMarkets, n.d.). For example, neural networks are used in an image recognition application called Google Lens, so the application was able to recognize items, written information and locations (*How Does Google Lens Uses Images?*, n.d.). Additionally, AI transcription tools were created for conversion of audio into text with aim to save time (Spiller et al., 2023). The field of AVT has embraced Neural Machine Translation due to its ability to improve the quality and efficiency of translations by leveraging deep learning algorithms Neural Machine Translation proves itself as a tool (Koponen et al., 2020; Wu et al., 2016).

It finds application in aspects of AVT such as dubbing films, translating TV news and creating subtitles for content. Embracing Neural Machine Translation does not enhance translation quality. Also streamlines the process and reduces costs (Vidal et al., 2022). However integrating AI into AVT poses challenges like handling sentence structure and rearranging language elements that require an understanding of meaning (Bentivogli et al., 2016), nevertheless due to advancements in technology and the rising demand for quality and easily accessible media content the trend of incorporating AI into AVT is expected to persist.

Perception of NMT and The State of the Field

However, it is important to state that the integration of AI systems with human workers in AVT raises some issues that cannot be overlooked. These challenges include biases, emotional factors and the risk of job loss to the workers. The translators have different views on the utilization of Neural Machine Translation (NMT) and how useful and appropriate it is to use in their work. The quality of the NMT output is not always constant as it depends on several factors such as the length of the segment to be translated, availability of reference materials, domain and

genre of the document and the translator's exposure to the source language and topic (Muftah, 2022; Koka, 2023). Some of the common mistakes that are identified in the NMT output are the translated sentences which sound reasonable but are not, inconsistency in the use of terminology as well as translations which are not contextual. Translation errors are represented by main error groups including spelling, lexical, grammatical, semantic, and discursive errors (Goncharov et al., 2019). These errors need the attention of the translators and revisers who may have to work on post-editing (Lesznyák, 2019). The evaluation of NMT conducted by Tan et al. (2023) showed several results including that implementing neural networks in machine translation complicated the understanding of how translation is formed with additional drawback of inability to download prepared data into the NMT, which hinders machine ability to consider work with continuous materials.

Another study also observed that NMT research focusing on factors is still limited. It often prioritises advancements in technology rather than ensuring its practicality for translators. The impact of NMT on translators' workflows has been more noticeable in terms of changes to the editing process and associated challenges than shifts. The authors recommend expanding research to explore perspectives on productivity involving end users and addressing ethical and social concerns linked to NMT (Ragni, & Vieira, 2021). From their paper suggestions can be drafted for future studies should delve into topics such as: In studies, it is important to consider not only the speed and accuracy of Neural Machine Translation (NMT) but also its impact on productivity in terms of cognitive effort, user satisfaction and the overall translation process and workflow. To ensure that NMT is truly useful for translators researchers should actively involve end users in the development and evaluation of NMT systems. This can be achieved through user studies, surveys and interviews with translators who rely on NMT for their work. Thanks to a

survey by Koponen (2016) we now know that high quality machine translation is capable of increasing productivity in terms of translation speed but it is relevant only for top-notch models, but it can be hindered easily with poor machine translation, which will make post-editing of such output ineffective. This raises concerns about ensuring quality but AI is playing an increasing role in evaluation and error detection. Koka et al. (2023) facilitated a survey of 450 stakeholders which included various translation demographics that showed that over 75% positively expressed about AI capabilities in translation quality assessment.

As NMT continues to grow in popularity it becomes imperative to address social concerns. These include job displacement among translators, the quality of machine-translated content as privacy and security issues related to translation data. While much of the research focuses on evaluating NMT at a sentence level it is equally important to assess its ability to accurately and coherently translate texts by considering the context and overall coherence of documents. Therefore future research should include document-level evaluation. The satisfaction of users plays a role in determining the adoption of NMT systems. In order to enhance user satisfaction and improve the user experience of NMT it is important for research to explore the factors that influence these aspects. Additionally, there is a need for investigation on how NMT can be integrated into professional translation workflows. This includes looking into editing practices, translator training and the development of new tools and interfaces specifically designed for NMT.

Machine Translation is an area that shows promise despite not reaching the level of quality as human translation. It serves as a tool for overcoming language barriers and increasing translation productivity. To accurately evaluate MT systems it is recommended to involve

individuals with expertise in translation or related fields who can combine both human evaluation methods (Rivera-Trigueros, 2022).

AI Subtitling and AI Dubbing

AI subtitling is presented by the automated process of subtitling utilizing technologies like ASR, machine translation, auto-spotting, synchronization and automatic segmentation for production of subtitles with minimal human involvement (Karakanta, 2022). Several studies evaluated the quality of automatic subtitling. Yao (2022) examined generated subtitles of TED Talks, which found that speed of subtitle production greatly increased, nevertheless, there is a need for post-editing to deal with created errors. Other researchers discuss that human expertise is still necessary for creation of high quality subtitles, so the final output was free of generated mistakes and handling creative aspects of translation, which cannot be dealt with at the current state of artificial intelligence (Alonso-Bacigalupe & Romero-Fresco, 2024).

AI dubbing is also designed to automate the process of dubbing with the aim of not involving humans, but due to it being a more complex process due to several features of audiovisual translation. Bigioi and Corcoran (2023) outlined a pipeline for automatic dubbing which incorporated ASR, machine translation, text-to-speech and deep fake that in theory might lead to automated dubbing process which still is a challenge to make it happen. Additionally, the same researchers noted that the key difficulty is making output natural and expressive for the viewers. Amazon scientists have worked on more controllable output length, so the result would fit into a limited audio timeframe (Lakew et al., 2021). Meanwhile, Brannon et al. (2023) evaluated viewers' perception that led to the conclusion where audiences prefer for more natural voices and translation accuracy, while lip sync could be less prioritized in favour of the former. This automated process is already being used in specific market domains such as e-learning or

corporate videos to cut costs. Multiple companies emerged with this technology offering automated dubbing for corporate and customer use.

This showcases the emerging trend of automated audiovisual translation, which is still in its infancy, but already showing promising results and found its niche in the market while quality is still a matter of concern but results are acceptable enough to be provided as a unique service. These technologies continue to push boundaries of audiovisual translation with hints to the new services for customers and emerging trends for audiovisual translators.

AI Chatbots and translation

The recent popularity of Artificial Intelligence tools started with the introduction of ChatGPT by OpenAI to the general public which spurred a lot of discussion and probing application in various fields including translation industry (“Large, Creative AI Models Will Transform Lives and Labour Markets,” n.d.; *Introducing ChatGPT Search*, 2024; Chakraborty et al., 2023; Vlad, 2022).

The main aim of chatbots is to answer questions, provide request information, perform tasks incorporated into chatbots tasks and engage in conversation which in some occasions enhances with AI to provide human-like level of responses (Chakraborty et al., 2023). The other tech companies also presented their own chatbots known as Grok, Gemini, DeepSeek using their own technologies sharing technological cornerstones of chatbots. The necessary elements of chatbots are User Interface, Natural Language Processing, Machine Learning, Deep Learning, Dialog Management and Integration, tokenization, part-of-speech tagging, entity recognition with incorporation of AI and Natural Language Generation in more modern chatbots (Chakraborty et al., 2023).

Rousan et al. (2025) examined translation of Arabic literary work generated by ChatGPT which showcased shortcomings of AI-generated translation more specifically inability to translate cultural-related terms in consistent matter, identification of the characters which leads to mixing actions of separate characters and changing locations and directions. Overall, this study concluded that ChatGPT is not yet to be suited for translating in Arabic-English language with the notion that translators will benefit from more in-depth control on the process, nevertheless it should not omit translators in any case. Another research examined movie translation generated by ChatGPT in a Korean-English pair with similar results. It concluded that ChatGPT lacks perceiving capabilities while answering users' prompt, which makes the process more difficult and human-like translation is possible, but requires a lot of time adjusting received results (Koh, 2023).

Perception of AI in the Translation Industry

The defining factor of AI adoption lies in perception of audiovisual translation including tools which utilize artificial intelligence. Various studies showed mixed attitudes among translators. Survey conducted by Guerberof (2018) discovered that translators with prior experience in post-editing are positively aligned to usage on tools based on variants of machine translation. One of the studies came to the conclusion which proposed that the future of translation will lay in combination of human expertise with AI-powered machine translation where each contributor will play their own distinctive role with enhanced results at the end (Yang et al, 2023). Professional associations expressed their concerns regarding using machine translation, post-editing and AI with the following implications of faster and cheaper translation (Vlad, 2022;). They pointed out that machine translation outputs are not elaborate enough to

deliver true meaning of the original or visual information, leaving translators and post-editors to pick up the pieces (Les mirages de la post-édition, n.d.).

The integration of intelligence (AI), in translation is a subject that elicits both optimism and apprehension. According to Kirov and Malamin (2022) many translators view AI as a threat expressing concerns about job security and the possible decrease in translation quality. Bouguesmia (2020) also acknowledges a discussion regarding the impact of AI on the landscape of translation. Despite the reservations Vercauteren et al. (2021) proposes that AI could serve as a tool in translating descriptions albeit requiring significant post-editing. These research findings collectively highlight the dynamic interplay between translators and AI technology.

This backlash highlights ethical and economic concerns regarding AI adoption. Translators are worried about fair payment, recognition of their work and maintaining quality and integrity of translation. Also, AI is a topic which brings a lot of concern due to various fears like losing their job by being replaced with robots. Another point of concern can be drawn from the legal system in particular of copyright infringement, respecting rights of the authors, regulation of AI-generated works, attributing authorship and responsibility between humans and machines for generated content (Frosio, 2020). The neutral pragmatic approach seems applicable for the significant part of translators in the industry (*AVTE Statement on Generative Artificial Intelligence*, n.d.). The younger generation of translators including students are more open minded to the notion of using AI, seeing it as a part of translator's skillset (Ogea Pozo, 2025). The best outcome lies in empowerment of human translation by technology and not for bypassing them (Hyder, 2019; Les mirages de la post-édition, n.d.).

User Experience

Defining experience is a challenging task, which should incorporate the needs of performed research. The user experience (UX) was introduced to be dedicated for examining the interaction of humans with a system that includes interface research and application (Norman et al., 1995). The researchers continued to delve into the concept of UX and expand knowledge on this topic. Berni and Borgianni (2021) conducted research with the aim to find a uniform definition of UX and its key components. The main components of user experience includes the user, the system and the context of use with following categories of experience which is presented by ergonomic experience, cognitive experience and emotional experience (Berni & Borgianni, 2021). Each component has their own respectable boundaries while the user involves everything related to the person who is involved, while the system is more like an umbrella term which incorporates interfaces, technologies, services, interactive products and artefacts and followed with more uniform term of the context of use due its influence on user experience that might involve space and time, social and cultural context and environment or physical space (Law et al., 2009). The categories of experience reside in their own domains like ergonomic experience covers usability, effectiveness and affordances or cognitive experience which incorporates perception of a system and emotional experience which obviously connected to the experience of the user (Berni & Borgianni, 2021). The user experience is a comprehensive term with great background on examining usability of technological solutions and assessing human experience using said technologies.

Kazakhstani and Russian profile of Audiovisual Translation Market

Kazakhstan is a bilingual country with changing language regulations. The media system of Kazakhstan is rather compound as the state language is Kazakh, while Russian language is prevalent in business, media, and generally speaking, in people's interactions (Press Reference,

n.d.). This leads to a rather complicated setting in which audiovisual translators have to consider linguistically and culturally.

Kazakhstan adopted a new law In 2019 which states that any movie to be screened in the cinemas has to be either dubbed in Kazakh or subtitled in Kazakh (Aitzhanova, 2019). This is to enhance the use of the Kazakh language; however, it poses a problem. Dubbing of films is expensive; it varies between 30-50 million tenge and is therefore not as often used as subtitling for foreign films (Kamzabek, 2020). Most of the movies shown are in Russian language and subtitles are usually provided in Kazakh language.

In comparison Russia for dubbing and subtitling are conditioned by the historical practices and the present state of media consumption. Dubbing has always been popular, especially for Russia's television media market as well as animation films and has plenty of home-made products in addition to a large import of media from the US and European countries (SPG Studios, n.d.).

Dubbing is still the most widely used type of AVT in Russia, especially for children's programs and feature films. It is very well established and developed, that is, sometimes several voice actors are used to dub in order to copy the lip-sync and the intonation of the characters from the original version (Schroeder, 2018). Humour, cultural aspects and emotional nuances should be recognized in order not to lose the meaning behind original work, which presents considerable challenge in case of dubbing.

Russia has a strong relation with dubbing and the dubbed content which helps their audiovisual market and their translators and translators from nearby countries, but practice of subtitling in Kazakh in Kazakhstan is becoming more common due to changes in policies of media content and economic factors. (Kamzabek, 2020). It should be noted that audiovisual

translation is a relatively new phenomenon, which can be proven with adoption of professional standards both in Kazakhstan and Russia. The main difference is that the Russian professional standard recognizes audiovisual translator as a separate profession, while Kazakhstani standard views audiovisual translation just as an additional skill of the ordinary translator (Ministry of Labour and Social Protection of the Russian Federation, 2021; Ministry of Science and Higher Education of the Republic of Kazakhstan, 2025). In this market, dubbing is still the dominant force while subtitling is emerging as a additional obligatory option due to language policies conclude that the analysis of combination both of countries' linguistic, specificities, cultural, and economic possible factors that define the work of AVT, and translators as key figures in providing the link between the world and local consumers.

Future Development of Audiovisual Translation

The technological advancements in the world affect the audiovisual sector with greater need of translation services and lead to greater accessibility with the developed tools. (Georgakopoulou, 2012; Pagano et al., 2021). Another factor is that production of various types of audiovisual content continues to grow and becomes more popular to consume such content. (Piñero, 2015). However this increased demand is coinciding with reduced budgets and tighter deadlines presenting obstacles, for the industry (Georgakopoulou, 2012). Specialized translation approaches which are required to deal with peculiarities of audiovisual materials also contribute to the factors complicating the industry. (Diaz-Cintas, 2019). Thus, new workflows in AVT arise from the collaboration between Artificial Intelligence and human expertise. These workflows utilise the strengths of both AI and translators to create a precise translation process. AI takes care of tasks allowing human translators to focus on the intricate and creative aspects of translation. However, ensuring collaboration between AI systems and human workers in AVT

poses challenges that require consideration. To fully harness the potential of AI in AVT it is crucial to navigate through these complexities. The role of translators has evolved in the era of Machine Translation (MT) necessitating the acquisition of skills and competencies to adapt to the challenges and opportunities presented by editing. The skillset and extent of translators' role should be updated to the growing use of Machine Translation in language industry and academia. The next article provides information on how machine translation affects the translation process, the translation as a product and its quality. (Cetiner, 2021).

In summary, integrating AI capabilities with AVT revolutionises our work practices by combining expertise with AI advancements. This integration brings about efficiency, accuracy and cost-effectiveness, within the AVT process. However, a balance between AI and human expertise is required to ensure that challenges which may occur will be dealt by a person with translation skills and technologies will help with this task, but not to replace him. Looking ahead, the future of AVT looks promising as AI technologies continue to improve and workflows evolve. As translators navigate through these complexities it can be expected new opportunities in the AVT industry due to the increasing demand for high-quality media content. The shift in the field represented in the field of audiovisual translation through integration of AI offers improvements both in efficiency and accuracy. Translators who will overcome these challenges are likely to witness growth and innovation in the industry.

Problems and Gaps in the Literature

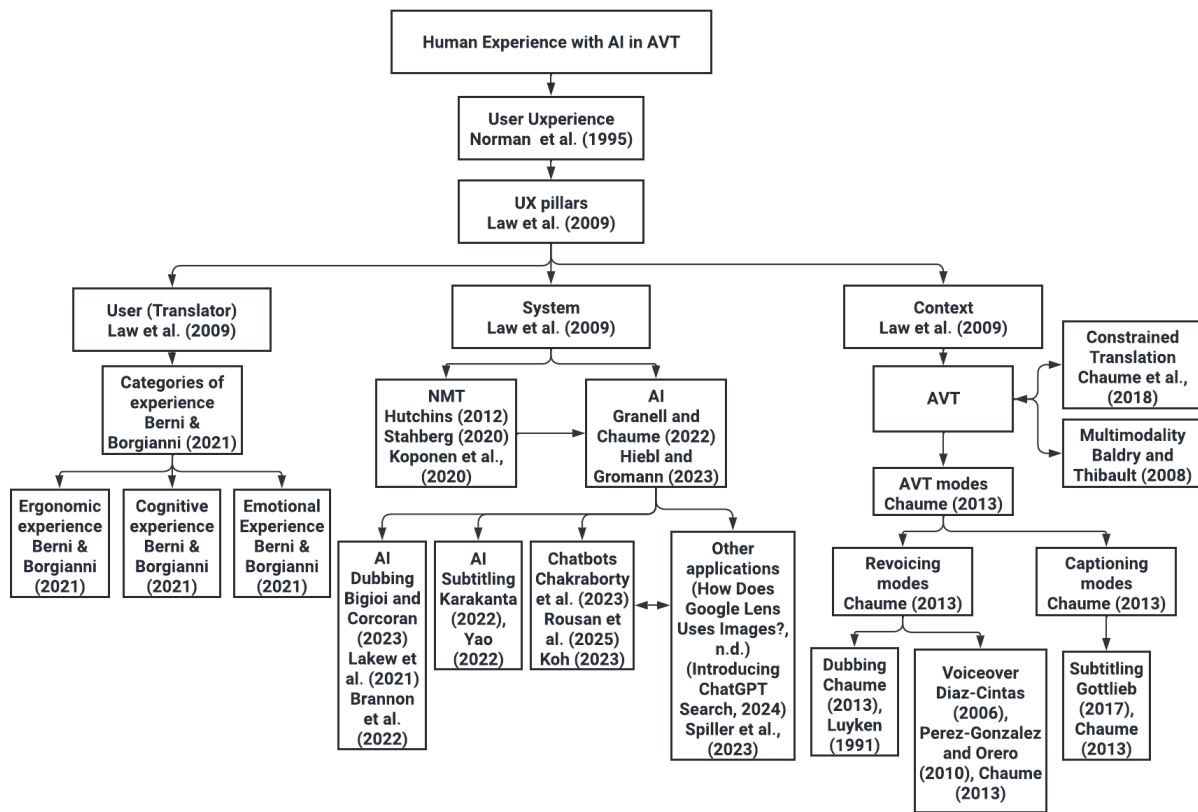
While the body of literature dedicated to AI is growing exponentially both in number of papers and examined applications, there is still predominant focus on the functionality and assessing quality of work while not including translators' experiences, omitting one of the key stakeholders in the field of translation (Ragni, & Vieira, 2021). Specifically, the field of

audiovisual translation has unique features which should be considered while assessing adequacy of translation and making translation process more demanding from the translator (Chaume, 2019; Mayoral, 2002). Examining experiences of audiovisual translators through the prism of user experience may shed light on new information and add to the body of existing research including use cases of AI tools, challenges which appeared working with said tools and their perception on AI-generated translation.

Conceptual Framework

Figure 1

Conceptual Framework



The conceptual framework was created on the basis of this literature review for the sake of data analysis and was specifically designed to examine human experience with AI in

audiovisual translation. It includes User experience with its pillars presented by user, system, context and followed by categories of experiences which incorporates ergonomic, cognitive and emotional experience. Artificial Intelligence and Neural Machine Translation were also examined with existing extensions of these technologies like AI dubbing and subtitling, chatbots and other applications. The audiovisual translation also examined its features and modes. This conceptual framework contributes to the analysis of this research.

Summary

This literature review has tackled the array of fields related to human experience with AI in audiovisual translation, while separate areas of user experience, artificial intelligence and audiovisual translation have a great coverage while professional associations show their concern about AI-adoption on larger scale, researchers examine efficiency and evaluate quality of generated translations, companies implement neural networks into their products and expansion of their toolkit. There is still limited knowledge on translators' experiences with AI in audiovisual translation due to the complex nature of this type of translation explained by that requires a more complex approach to audiovisual translation.

The information provided in this literature review support researcher's intentions of further examination of human experience with AI in audiovisual translation including how they use said AI tools and what challenges they face while using them.

Methodology

The research is being conducted in the field of AVT to study the experiences of audiovisual translators with artificial intelligence-powered tools. The rapid changes in the world, including technological advancements, are impacting the work of translators, who are experiencing a new step of technological development in the translation field now and in the coming years. The study's focus is on the Kazakhstan and Russian markets, as they are growing markets for translation services. Technological development is a significant factor in the development of professional competencies among translators. The role of AI in translation is likely to open a new chapter in the field of translation (Granell & Chaume, 2023). AI tools can handle repetitive tasks and provide quick translations, allowing translators to focus on more complex aspects of translation that require human intuition and understanding. However, the human translator's role remains critical in ensuring the translated content's accuracy, context, and nuances (Herbig et al., 2019). Translators might use AI tools for initial translations and then review and edit the output to ensure it meets the highest quality standards. This approach combines the efficiency of AI with the expertise of human translators, creating a more effective and reliable translation process. The research findings can provide valuable insights for translators on how to integrate AI into their workflows while maintaining their competitive edge in the market. This could involve understanding the limitations of AI and finding ways to work collaboratively with AI to enhance translation quality and efficiency. Thus, the research questions are: “What are the experiences of AV translators with AI-assisted translation?”; “How do AV translators use AI tools to make their work easier?” and “What challenges do they face while using AI tools?”.

This part of the thesis outlines the approach to be employed for the study. It covers aspects such as the structure of the research, how participants were chosen, methods for gathering data, the process of analyzing that data, ethical concerns, and any limitations that may impact the study.

Research Design

The research was participant-based and utilizes a basic qualitative research approach focusing on the translators' experience with AI in AVT. According to Merriam & Simpson (2000) qualitative study aims to understand the experiences of individuals, how they form their world and how they perceive their lived experiences. Saldanha and O'Brien (2014) states that participant-based research can be used when there is a need to involve agents who perform translations or work in the field. The study explored the lived experiences of audiovisual translators with artificial intelligence-powered tools, capturing their experiences and the challenges and benefits they encounter when integrating and while using AI tools into their translation working processes. The qualitative research approach is chosen for this study as it offers a means to explore and understand the firsthand experiences, perspectives, and viewpoints of translators concerning the integration of artificial intelligence into their work processes.

Semi-structured interviews served as the primary method of data collection, facilitating a comprehensive exploration of participants' experiences and subjective viewpoints. As highlighted by Turner (2010), interviews offer a platform to uncover and understand the expressed experiences and emotions of participants consistently across all interview phases. Rather than merely uncovering knowledge, the interviewing process, as emphasized by Kvale & Brinkmann (2008), is a dynamic interaction that generates understanding between the interviewer and interviewee. Semi-structured interviews provide a space for translators from

diverse professional backgrounds to articulate their individual experiences and perspectives regarding the use of artificial intelligence tools. Through these interviews, insights into the translators' experiences with AI-powered tools and their perceptions of critical elements in translation work can be gleaned.

Sampling Strategy

The approximate number of participants is limited to 5-10 people due to the novelty of this topic among audiovisual translators in Kazakhstan and Russia. It should be noted that it focuses on expert purposive sampling, which omits a considerable amount of regular translators. The rationale behind opting for a sample size ranging from 5 to 10 individuals in studies is backed by various research works. Crouch and McKenzie, (2006) posit that having a sample size enables an exploration and close interaction with participants thereby enhancing the credibility of the study. Vasileiou et al. (2018) stress the importance of justifying the chosen sample size emphasizing data sufficiency and criteria. Boddy (2016) also advocates for the utility of sample sizes highlighting their potential to offer significant insights especially in detailed qualitative investigations. Taken together these studies indicate that employing a sample size of 5 to 10 individuals can be suitable and reliable, in research particularly when aiming for profound comprehension. The sample size can also be explained due to the novelty of AI technologies in the field of AVT and in chosen regions. In this study, an expert purposive sampling strategy employed to select audiovisual translators with prior exposure to AI-driven translation tools. This sampling approach allows for the selection of participants based on their specific experiences, expertise, or other characteristics pertinent to the research (Palinkas et al., 2015). The participants were chosen based on their expertise in AVT and their familiarity with AI technologies. By utilizing purposive sampling, I aim to secure participants possessing the

requisite background and expertise to offer in-depth insights into the experiences of translators in Kazakhstan and Russia. This approach enabled me to gather comprehensive and informative data from individuals with firsthand knowledge relevant to the study's focus. Participants for the interviews chosen based on specific criteria: they are individuals from the AVT sector who are actively engaged in translating audiovisual content using AI-powered tools or possess significant expertise in this area. Selection also considered their practical experience and reputation within the field, ensuring a robust understanding of AI and AVT practices. The quality of data collected through semi-structured interviews relies heavily on the expertise of the interviewees (Dorussen et al., 2005). Moreover, a snowball sampling technique is employed, whereby some participants may recommend additional experts meeting the criteria. Snowball sampling, commonly used in research, includes finding and enlisting participants based on referrals, from those already involved. This method proves useful when studying populations that are hard to reach or when conventional sampling approaches do not work well for reaching the desired population (Johnson, 2014b).

The final selection criteria requires bachelor degree in translation, linguistics or special certificates from respectable organizations with at least one year of experience in AVT and three years in other fields of translations located in Russia and Kazakhstan and may include AVT translators and researchers, university lecturers, translation agency directors and high-level management representatives from translation agencies or departments. Such criterias were designed with notion of the Kazakhstani and Russian AVT markets and their peculiarities.

Data Collection Instrument

Semi-structured interviews undertaken with audiovisual translators to gain a deeper understanding of their encounters with AI within translation processes. Initially, 14 questions

have been devised for each participant, which underwent testing in pilot interviews. Based on the findings gathered during these pilot interviews, the questions were refined to ensure they effectively address the research inquiry and enable a comprehensive discussion of the interview responses in relation to existing literature. The interviews included questions about their experience with AI tools, the challenges faced, the benefits experienced, and the impact on their work processes. The questions were designed to probe into the nuances of using AI in AVT, including technical aspects and the human element. All questions were included into the interview protocol (Appendix A).

The interview instrument was structured to encompass various aspects of participants' experiences with AI tools in AVT. It includes questions tailored to elicit insights into the challenges encountered, benefits realized, and the overall impact on their work processes. The questions were carefully crafted to delve into the intricacies of integrating AI into AVT, covering both technical considerations and the human dimension. The interview structure comprises several key components. It begins with an introduction, providing a brief overview of the participant's background in AVT and outlining the interview's purpose. Following this, the discussion delves into the participant's experience with AI-powered tools, including specific tools used and their influence on the translation process. The conversation then shifts to challenges faced when utilizing AI tools, their impact on workflow, and the benefits observed from their use. The integration of AI into work processes is explored, along with any resulting changes in roles or responsibilities. Technical considerations and limitations associated with AI tools are discussed, as well as methods for ensuring the accuracy and reliability of AI-generated translations. The human element is emphasized, examining the role of human translators alongside AI tools and the balance between automation and human expertise. The interview

concludes with closing remarks, inviting the participant to share any additional insights or experiences regarding AI tools in AVT.

The interview instrument was designed to encourage participants to provide detailed and nuanced responses, enabling a comprehensive understanding of their perspectives on AI integration in AVT.

The process of data collection was performed by conducting a semi-structured interview with each participant which was audiotaped if a participant agrees to this and it has been transcribed, after completion of the interview.

Data Analysis

The semi-structured interviews were transcribed by hand and subsequently refined to remove any extraneous information or filler words. These cleaned transcripts underwent thematic analysis to uncover significant themes and patterns concerning the integration of AI in AVT. Braun and Clarke (2008) assert that thematic analysis is an effective method for identifying key themes and patterns within qualitative data. The transcriptions of the interviews served as the basis for analysis. Utilizing the constant comparative method developed by Glaser and Strauss (1967), the interview data was systematically analyzed. This approach involves initially open-coding each transcript to identify pertinent data relevant to the research questions. These coded segments were then synthesized through axial coding to establish themes or categories that provide insight into the phenomenon under investigation.

Ethical Considerations

Participants received information through a consent form explaining the study's purpose, their rights, potential risks and benefits, the option to withdraw and the confidentiality of their responses before the interviews commence (Appendix B). Once they agree, participants can ask

questions. They were asked to sign the consent form. Once a consent form was obtained, privacy is ensured through pseudonyms and secure data storage. The study upholds participants' professional integrity and ethical standards in translation. Participation was voluntary with the freedom to withdraw at any time without consequences. Throughout both the consent process and the study, participants were consistently informed of their right to withdraw at any point. They were informed about risks and benefits involved in participating. Measures were taken to alleviate any discomfort or risks during interviews. The study was conducted respectfully and professionally with a focus on wellbeing and dignity, throughout. The study findings are shared in a manner that respects anonymity and confidentiality.

Findings

Introduction

The purpose of this section is to present the results of thematic analysis conducted on 10 semi-structured interviews with audiovisual translators regarding the topic of this research. The geography of participants is the next: nine participants are from Russia and one from Kazakhstan. The interviews were conducted in English and Russian languages for the latter they were translated into English. This analysis led to highlighting open codes, which then were examined and named into relative axial codes with finishing part of creation themes which covers translator's experiences. The study paid attention to all emerging insights and included them into themes. Four themes emerged as a result of this analysis: Minimal Impact on Core Translation Work; AI as a Support Tool for Technical and Routine Tasks; Mixed Attitudes Toward AI Adoption. The following material of this section is dedicated for explanation of each theme in great detail including quotations from interviews. In order to keep confidentiality of the participants, a letter alphabetically from A till J is assigned to each participant.

Minimal Impact on Core Translation Processes

Despite the buzz around AI, an intriguing theme from the interviews is that the core workflows of these translators have not drastically changed. This theme encapsulates participants' reflections that, beyond some peripheral efficiencies, AI has had a minimal impact on how they fundamentally approach and execute audiovisual translation. They still rely on their standard processes and skill sets. In some cases, using AI even made their work slower (due to the editing burden described earlier), which further discourages overreliance on these tools. Moreover, participants consistently assert that the central creative and decision-making parts of translation remain human endeavors. In short, the human-centered workflow endures largely

intact. This theme is explored in three subthemes: limited practical integration of AI into daily workflows, instances where AI outputs have slowed work down, and the continued primacy of human creativity in the translation process.

Limited Practical Integration

A striking finding is that many participants have integrated AI tools only sparingly into their daily translation routines, if at all. In practice, their end-to-end workflow from receiving a translation assignment to delivering the final product still looks much like it did before the recent wave of AI tools. AI is used for certain tasks but not as an overhaul of the translation process. Several participants made it clear that they do not routinely use AI for the translation act.

Participant A provided a summary of how she views AI in general. “So this is a little instrument, which can help a little with something, but does not change anything drastically for a good translator” Participant A also noted “it will not make your work, this is not a silver bullet”. “If you are capable of making a good translation on your own, it will be faster to make by yourself”. Also participant D expressed “They are more like general tools for general use that can be used in translation”. The reasoning for it is a case was explained by Participant D. “They (AI tools) can not analyze them (audiovisual content) the way people analyze them and select scenes and conflicts to pinpoint characters and use this information to create audiovisual translation”. Other participants express the unnecessary use of using AI tools in translation including Participant G “I mostly do everything manually. I do not use any automatic instruments because they cannot help to do my job properly”. And Participant H “AI translation takes too much time to edit it. So, it is better to translate myself”. Followed by Participant I “I cannot say that AI-powered tools are intellectual enough to provide good translation”. Participant

J concluded “At the current state of AI technologies it is better to translate audiovisual content by yourself”.

In summary, implementation of AI tools into translation key work processes is still limited. The participants preferred selective choice of AI-tools for additional tasks without engaging AI in their work if it was not a part of their initial work like in case of post-editing AI-generated text and working on automated solutions requested by clients. This showcases that translators are free to use AI-tools when necessary but it did not change how translations are made before introduction of the AI tools.

Slower Processes due to Low-Quality Outputs

An important nuance that emerged is that, in some instances, attempts to use AI have actually made the translation process less efficient, not more. This is a counterintuitive outcome: one would expect AI to speed things up, but as participants explained, the extra work of correcting AI mistakes can outweigh the initial speed gains. Many translators tried AI with the hope of accelerating their workflow, only to find that the revision workload dragged them down. This realization has reinforced a cautious approach to integrating AI. If it cannot demonstrably save time or effort, many choose to avoid or minimize its use in such scenarios.

All participants expressed that using AI-generated translation only led towards increased time of fixing errors comparable with their translation creation. Participant A explained “This draft will prolong the work, because usually you look at English then translate it into Russian and with additional text you will look at English text, then look at AI-generated text and then translate”. Also Participant J expressed “Using AI for translation does not influence at all besides making the process slower because I had to redo everything from the scratch”. Participant C stated “It’s actually difficult to work with neural networks editing, because sometimes the new

translation would be easier”. Participant D mentions that AI-tools like chatbots can hallucinate and provide wrong information, so it takes time to double check everything. The limitations of AI output were explained by the next participant:

Participant E “Since they are trained, the materials they are being trained on are not very good. The output material is also not very good. So I guess that sometimes it just is not worth using it with certain projects. Just rely on human translation and human editing. This makes the process of working on fully automated dubbing and subtitling even more tiring as in the case of Participant H and her colleagues who are working in an IT firm which started doing automated translations of the educational content which prolongs her work and makes her feel frustrated due to limitations of AI.

Participant H “My colleague has the same issues as me to dedicate hours and hours on aligning everything, merging the text, breaking the text in some uncharacteristic places because no one would ever in their sane mind break the subtitle after an article”.

According to expressed displeasure of using AI tools in their work, particularly the problem of slowing their work which makes the process more tedious and less enjoyable for translators. Further proving the point that main components of translation work are not changing.

AI Limitations in Context, Cultural and Emotional Sensitivity

One of the most recurring remarks was that AI tools are not good enough for translating audiovisual content in most of the cases of their work. A key issue expressed by participants is that AI tends to be overly literal and misses context, which results in errors undermining meaning.

Participant A highlighted “It will not get what person addresses who, at what direction does person look and what book he saw and is talking about now. Even regarding text, it will not

understand where one scene started and ended”. Additionally multiple participants pointed out that AI has problems with creativity in terms of wordplay and rhyming. Like Participant B “I tried to translate poetry with AI like cartoons which used poetic texts with some wordplay and it cannot deal with them”. Another example of lacking understanding of the context. Participant C provided examples where he said during their work AI translated Rubik’s snake as Snake Game which undermined the context. Another example is that they perceive name variations as separate names like Dasha and Dashka and other similar nicknames. Many participants concluded that AI has serious limitations while working with audiovisual content. Participant D concluded “AI is not of much help to you because it cannot analyze all that (characters, scenes, video), It’s not taught at least for now”. Similarly Participant H said “So, the biggest limitation so far is that in audiovisual translation, it will not consider cultural diversity and cultural codes of the country. It does not work with the image, cannot possibly align the text with the image, the age of the speaker and so on”. Further elaborated Participant J there are plenty of proverbs, slang, cultural codes, catch phrases which AI fails to translate. calque, inconsistent AI, nuances and cultural references.

Overall, participants are saying that translation is not just about words, it’s about people - their stories, culture, emotions, expectations and current AI technologies cannot be utilized for working with such nuanced content because if used that might lead to overlooked context, nuances, subtexts and this may affect audience unless, the material would be polished by human expert.

Necessity of Human Post-Editing

Given the error-prone nature of AI output discussed above, the need for human post-editing and oversight have risen. While AI is used to generate or partially generate translation a

human translator has to invest substantial effort to review and correct the received information. Many interviewees expressed that this process can be as demanding as translating from scratch, which showcases the current state of AI quality.

All participants expressed that caution should be used when working with AI. Like Participant C said “You should check AI tools for sure, because especially when we work with some real matters, real phenomena or stuff like that”. Many factors were mentioned but the most mentioned were trained data, hallucinations and inconsistency of AI responses and outputs. The great summary of why human is needed was provided by one of the participants:

AI cannot replace a human being. Like, because even if it does, maybe sometimes or maybe if it can do like the majority of the work. You still need some kind of human interference because we translate other human beings, it should be human. (Participant E)

Additionally participants expressed that translators should be concise of when to use AI. For example Participant F pointed out “I think that people should know that no matter whether it is machine translation or as it used to be or AI, still we need to very carefully check and double-check on the work done with AI”. Following this many participants mentioned that translation audiovisual content should be matching multiple guidelines and be natural for a viewer. Such as a statement by Participant H “So, if we do some AI-translations or if we do anything by AI and we need to verify it and check so that it actually is aligned with the video”.

The profound limitations of AI shows that it cannot be entrusted to work on the final product due to possible problems presented by overlooked context, nuance, subtext and it may affect the audience until a person will be involved. This further proves that AI is not suitable for translation of nuanced content.

Human-Centered Creativity Remains Central

Even with AI in the picture, human creativity and decision-making remain at the heart of the translation work. Participants repeatedly indicated that the most important, value-adding aspects of their work: interpreting meaning, choosing the best phrasing, adapting humor, and so forth are still done by humans. AI has not encroached on this creative core; rather, it handles peripheral or mechanical tasks while translators continue to exercise their creative judgment and linguistic artistry. All participants expressed the central role of humans in translation or handling processing AI-generated or proceeded texts. The next participant highlighted importance of creative element of the work:

So, the creative process is like the person who operates with the eyes. It should, you know, like to have a creative vision and not delegate it to AI because all creative work should be done by people, of course. (Participant C)

The clear line between translators and AI is established. As Participant D told “Humans play all the roles that can be played in the audiovisual translation. AI tools are merely tools or maybe sometimes clutches that may help or not”. Followed by Participant G saying “Human expertise is the key element and AI is obviously a supplementary tool”. Human expertise is also about providing human charm to the translation. Like Participant F shared “Ensure quality so that is the role of a human translator and maybe to add a bit of heart, a bit of a human side of the story”.

In practical terms, then, the workflows described by participants still have the human translator driving the project from start to finish. AI may come in at points to provide data or perform small tasks, but the translator is orchestrating the entire operation, especially the creative choices that define the translation. No participant suggested a workflow where AI takes over major sections of translation autonomously. If anything, they all described workflows where AI

is embedded as a minor component, with the translator's creative process reading, interpreting, translating, adapting, reviewing remaining largely as it has always been. This underscores the notion that AI has augmented, but not fundamentally transformed, the craft of audiovisual translation as practiced by these professionals.

AI as a Support Tool for Technical and Routine Tasks

One of the dominant notions was about using artificial intelligence not as a primary tool, but as a support tool for handling routine aspects of their work. The participants explained why they preferred such use instead of allowing AI to make translations which are explained in the next subthemes: Technical Optimization, Brainstorming and Creative Support.

Technical Optimization

A significant part of the participants expressed their efficiency boost of implementing AI tools for technical subtasks of audiovisual translation. For instance, several translators pointed out automatic transcription and time-coding as major time-savers. Participant E talks about initial creation of subtitling using in-built features to convert audio to text. Participant G mentions creation of background dialogues, transcription and understanding of local accents as her scenario of AI usage. Participant H noted that she uses image recognition apps, transcription and sound recognition. Participant I subtitle creation, transcription, image recognition, language identification. While others mentioned transcription tools and chatbots for document formatting. Like The following participants shared their scenarios of document formatting:

Scripts which are sent to me were of varying quality and sometimes they are really hard to work with, so I sent them into it (ChatGPT) and asked to make it into an editorial script with three rows and it is working without any hiccups. I really like it and it saves me a lot of time. (Participant A)

We had a spreadsheet with all different lines, so there was a problem that we needed to send to translators without unnecessary stuff and we asked the Chinese AI tool

(DeepSeek) to provide python code, so it could delete automatically and it worked!

(Participant C)

Another popular option among translators was transcribing the original text. Participant B shared “There was a need for me to generate arabic script due to the absence of the original script, so I used an AI transcription site to generate it”. Participant B “Recently, I learned that I can use a photo application utilizing AI to detect the text from photos.

Additionally some translators used image recognition apps for their. Participant D told “The Google Lens, it allows me to translate some Chinese and Korean characters.” Further explaining the reasoning behind such use: “So I get the general gist of the TV series, but for inscriptions and titles in the film or series”.

Overall, it can be stated that AI is good at reducing routine and tedious work. Multiple tasks such as transcribing, document formatting, timecoding and others were utilized by AI which allowed translators to spend more time on their creative processes like translation. This scenario of use found positive feedback and removed heavy lifting from some of the technical steps.

Brainstorming and Creative Support

Artificial intelligence is used not only for optimization work, but some participants are using it for brainstorming and creative support at such moments like expressing writer’s block or challenging translation problems. They referred to Ai-powered chatbots for idea generation or so-called “assistant” which can provide some options for their work. The next example showing how AI can be utilized for creation of filling dialogues:

So my colleague worked on a film where she was tasked to translate every sound including background yet they cannot be heard to deal with this situation. She asked AI to generate 5 minutes about basketball then edited it quickly, so it can be used in such scenarios too. (Participant A)

Additionally, AI is used as an assistant to whom translators may refer for such tasks as gathering information, providing reference information which then can be used in the process of idea generation. Such as Participant B expressed “It allows me to make the process of gathering information easier and generate some ideas”. Also Participant E told “Chatbots can give you an idea about how certain characters could say something like pirates and bandits”. Participant E uses chatbots to get a grasp with unfamiliar topics which are related to his projects, but still he still checks the information. Sometimes participants used AI to pinpoint ideas while searching for inspirations. For example, Participant D said “Sometimes you lose inspiration and you want to just look at the sentence you do not know what to do with it. You know that it can be translated, but your mind is blank and in that case I come to ChatGPT”. Combination of previously scenarios was expressed by the next participant:

Sometimes when the thinking process is not going well, I can talk with it. Well, I doubt it can provide me a ready-to-use version immediately and there was no such case yet, but while talking with it something will eventually pop out. Also, sometimes I need to understand from a couple of words the reality of American politics, so when googling does not show results, I can refer to AI as an additional tool. (Participant A)

Overall, this theme depicts AI as a helpful assistant enabling translators to delegate handling file formatting, generation of transcripts and generation of ideas during tricky situations leading to more time spent on translation avoiding routine parts of work or making them less

tedious for them. This emphasizes the role of AI tools as a support tool which doesn't diminish the role of translator in any rate. This allows translators to pay more attention to nuances of their work, while being less concerned with more mechanical tasks which don't require any creative thought.

Mixed Attitudes Toward AI Adoption

Despite loud headlines of the news outlets the process of translation still belongs to translators without any drastic changes. AI has had minimal impact on how they fundamentally approach and translate audiovisual content. They still rely on their standard processes and their expertise. This theme is divided into three subthemes: Limited Practical Integration; Human-Centered Creativity Remains Central.

Optimism About Selective AI Integration

A number of participants highlighted the positive potential of AI tools when used in the right ways. Their optimism centers on AI as an enhancer of their productivity and creativity essentially, a power tool that, if properly handled, can make their job easier or their translations better. These participants are generally enthusiastic early adopters of useful AI features and look forward to further improvements in AI that could benefit their work. While expressing optimism the translator express that the knowledge how these work will be beneficial for translators:

This is not a silver bullet, just another instrument. It won't do your work, nobody will think instead of you. Nevertheless, to keep up with time, there is a need to look how it can help you without hope that it will make your work for you. (Participant A)

Following this information, AI tools are great as an additional tool which provides exactly what translators want and provides more opportunities in the future. Participant C stated that "A good translator can use AI. This person has more opportunities. Also Participant D

expressed the usefulness of the AI tool in the overall process “It does help you sometimes get translation faster or with higher quality, but it is still far from becoming the one tool that you can use all the time”. Also Participant G confirmed usability of AI tools “AI can provide the tools that we need”. Participant I mentioned that while AI tools are not good enough for translation it can provide a basis from which translation can be made. As well, translators expressed their desire to learn more about specific AI tools and how AI tools are working, so they can better utilize them more efficiently in targeted tasks. One of examples is Participant B saying “Just a very convenient tool, which I want to learn to its full potential”

In summary, translators are satisfied with targeted use of AI in their work while being open and willing to experiment including selected scenarios into their work which allow them to work with greater amounts of work in less time. This optimism highlights the notion of AI as an additional work element rather than a replacement of them which leads to processes where a person controls AI tools and uses them in their own tasks.

Skepticism About Full Automation

Hand-in-hand with targeted optimism, participants voiced substantial skepticism about the idea of fully automated audiovisual translation or the notion that AI could (or should) take over the translator’s role entirely. This skepticism is grounded in both current reality (the quality issues and workflow inefficiencies we’ve discussed) and a principled stance on the limits of technology in a creative domain. Essentially, while translators are open to using AI as a tool, they are not convinced by any narrative that AI will replace human translators in their line of work and many doubt that day will ever come.

Realistic scenario was provided by Participant B who told “Well, it might be a drawback, by the way that employers look at AI as a replacement for translators but as a result they redo

work twice because they need a translator anyway”. This implies that the idea of replacing translators might come to the clients, but nevertheless they have to employ somebody to post-edit the text which they generated, so translators are still relevant in changing the market landscape. Moreover, replacement is not viewed among translators as a possible variant while not undermining technological changes like Participant C said “We should not get into that kind of narratives, but we also need to learn how it works, how we can use it and it can be a useful tool or even colleague in some kind of tasks”. Participant D mentioned multiple limitations which hinders AI ability to automate audiovisual translation. Among challenges are the audio, context, relations and “recreation of the world” or little details. Additionally, participants pointed out of features of audiovisual translation as one of main barriers expressed by Participant G “I do not think that they will ever substitute a real translator, at least in audiovisual translation, because I do not think that they will learn how to recognize emotions and some additional context as well as humans”. Participant H states the translation of movies and tv series will still be more involved with human translators, while educational and other simple video formats can be AI-generated where translators will play roles of the post-editors. Simple conclusion was provided by Participant I “It cannot see what I see. So it is completely up to me to analyze all the visual context”.

In conclusion, participants expressed strongly that AI automation is not a case due to complexity of audiovisual translation and any attempts to force this process will make the final result not pleasant to watch due to lower quality of output and miss details which makes the work of the human special and interesting for the viewers. This creates a balanced view where healthy skepticism is presented without omitting future opportunities. The mentioned AI-tools throughout interviews divided into their respective categories are presented in the table below.

Table 1*Mentioned AI-Tools*

Chatbots	Transcription	AI-subtitling	AI-dubbing	Image recognition
ChatGPT	Riverside	veed.io	rask.ai	Google Lense
DeepSeek	FTW transcriber	lovo.ai	veed.io	Yandex Photo
Gemini	speech2text.ru	rask.ai		
	Whisper			

Discussion

This chapter is dedicated to discussion of information which emerged in the findings section. The aim of this research was to find out experiences of audiovisual translators with artificial intelligence. How AI technologies affect them and how they work in their field. Uncovered information shows that translators encounter persistent quality challenges and therefore necessity for human expertise for information received from AI and fully automated solutions, while technologies fail to perform translations of audiovisual content there are other usage scenarios used by participants to handle mundane and technical work. Overall, attitudes among translators are mixed indicating skepticism of AI usage with the main notion that the translator is not replaceable and humans remain in control of the whole translation process. These findings are discussed through three categories of experiences and divided into ergonomic, cognitive and emotional experience in the realm of audiovisual translation and further presented in this chapter.

Ergonomic Experience

According to Berni and Borgianni (2021) ergonomic experience is represented by the next aspects like usability, effectiveness, affordances. Most of the participants described their work stayed the same with AI simply inserted into pre-existing routines. For example, a subtitler might now start by running an automatic speech recognition to get a raw transcription, but then proceed with the usual process of time-cuing and translating the subtitles manually, using the transcript as a reference. In effect, the sequence of activities and the cognitive process comprehension, translation, adaptation, revision follow the traditional pattern outlined by Diaz-Cintas & Remael (2014) years before AI was prevalent. The main difference is some steps are accelerated by tools, but the translator still must carry out most of the work.

This finding is illuminated by looking at how new technologies have slotted into how translations are made rather than overturning them. Similar happened with Bolaños García-Escribano and Díaz-Cintas (2020) who described the implementation and increased use of cloud-based platforms that provided more opportunities for people located in different parts of the globe and making working processes easier through online work. Additionally, it was concluded that AI technologies and automation have potential to accelerate changing working environments. My participants' experiences reflect this partial automation. In practice, what we see is augmentation of the workflow, not replacement: a "semi-automated" workflow might involve an AI-generated initial draft and a post-editor, whereas a "fully manual" workflow is the classic translate-and-edit by a human, and a "fully automated" workflow is virtually never used for final output due to quality issues (Tam et al., 2023). One recent pilot study (Massidda & Sandrelli, 2023) comparing these modes in subtitling found that even a fully automated pipeline required a human reviser at the end to fix errors, and the best quality in tight deadlines was achieved by a hybrid approach. This aligns with what our interviewees conveyed: the presence of AI has added new branches or loops in the workflow, but the core translation step remains indispensable (Koponen, 2020). A translator still must interpret meaning and choose the right words; whether they start from scratch or from a machine draft, that cognitive act is central. Thus, the essence of the workflow human translation and revision persists (Vercauteren et al, 2021).

From the perspective of translation process research, this continuity suggests that the cognitive processes and decision-making of translators remain robust against the influx of AI. The translators still engage deeply with the source text, exercise creative problem-solving, and apply quality checks as they always have; the main difference is potentially in the mechanics.

This is consistent with observations by Chaume (2019) that, while new tools have emerged, the translator's core professional ethos and tasks have not fundamentally changed. It also resonates with Diaz-Cintas & Massidda's (2019) remark that technology has introduced new roles like subtitle template editors or MT post-editors but these roles still revolve around the same translational competencies. In our study, some translators noted they now sometimes act as "post-editors" or "quality controllers" for AI-generated translations. However, they emphasized that those roles still demand full translation skill; a post-editor must have the same linguistic and cultural acumen to identify what's wrong and how to fix it. In effect, the nature of the work crafting a good translation remains steady, even if the work labels and tools diversify. The continuity observed here can be seen as a form of resilience of the translation workflow. It suggests that claims of a revolution in translation should be tempered by an understanding of the slow rate at which core practices evolve.

The persistent quality challenges mentioned by the participants specifically were mentioned idiomatic errors, incorrect cultural references, poor handling of humor and wordplay. This aligns with the previous research which stated that machine translation, neural machine translation and AI tools lack understanding of context and nuance due to multimodality of AVT (Goncharov et al., 2019;). Audiovisual translation involves interpreting meaning that is conveyed through images, sound, and situational context layers of meaning that go far beyond the textual content. As Baldry and Thibault (2008) insist, a multimodal text entails "a much wider and more complex vision of meaning-making than the language-only perspective". Current AI simply cannot grasp those layers. The AVTE manifesto explicitly notes that in AV content the meaning of words is affected by the sound and image yet MT engines do not understand context and

merely reproduce existing translations, making them inherently “less suitable for audiovisual translation”(Deryagin et al. 2021).

Even on the purely textual level, machine outputs often fall short of professional standards, requiring human revision. Participants consistently stressed that raw AI translations could not be used as is. This mirrors the consensus in post-editing research: MT output may be useful as a draft, but must be carefully reviewed and edited by humans to ensure acceptability (Rivera-Trigueros, 2022). Studies by Bentivogli et al. (2016) and others have indeed found that while neural MT has improved fluency and reduced certain error types compared to earlier systems, it still produces errors that only a human can adequately catch or fix. Our data echo this translators recounted how even advanced systems made mistranslations that were subtle but serious. Thus, the post-editing effort remains substantial. In some cases, participants noted that correcting an AI-produced translation demanded almost as much time as translating from scratch (Koh, 2023). Tellingly, the AVTE manifesto warns that “fixing a poor translation can take longer than translating the same text from scratch”, an experience our informants also described. In scenarios where MT output was of low quality, they often opted to discard it entirely and translate anew, rather than wrestle with awkward machine-generated phrasing (Deryagin et al. 2021).

This insight reinforces a key post-editing principle: MT should only be used when it actually saves effort, and if the MT output is too flawed, human translation is more efficient (Rousan et al., 2025). It also highlights the importance of human judgment knowing when NOT to use the machine is as critical as knowing how to use it. Another persistent issue is that AI lacks the creative adaptability that human translators bring to AVT. Audiovisual translators frequently have to transcreate jokes, adapt dialects, or find creative solutions for songs and

wordplay tasks well beyond the current reach of AI. Chaume (2013) famously detailed how dubbing and subtitling require creative problem-solving under strict constraints, which machines are ill-equipped to handle automatically. Our participants reinforced this: they viewed creative translation decisions as firmly their domain, often noting that MT “doesn’t get the joke” or fails to reproduce a catchphrase elegantly. In sum, quality control remains a human stronghold. AI can churn out content, but evaluating and elevating that content to meet professional quality is squarely in the hands of translators. Dubbing professionals in our study, for example, noted that automatically generated synthetic voices or lip-sync approximations still require a human touch to sound natural; this corresponds with Bigioi and Corcoran’s (2023) review of AI dubbing technology, which found that fully automatic solutions are acceptable only for low-stakes contexts “for projects where quality is not as important” whereas high-quality productions still demand human voice actors and editors for a truly satisfying result.

These ongoing quality challenges underscore why human expertise is irreplaceable. Far from rendering translators obsolete, the influx of AI has, if anything, highlighted the unique value of professional translators. Humans provide contextual understanding, cultural literacy, and quality assurance that AI cannot emulate (Guerberof, 2018). In the words of Diaz-Cintas and Orero (2010), AV translators are not mere linguists but also intercultural experts in roles that require sensitivity and creativity. Our study’s findings bear this out: when AI tools falter, it is the human translator who must step in to prevent nonsense or nuance loss from reaching viewers. It also speaks to the importance of maintaining translator accountability and agency. Ultimately, it is the human expert who signs off on the final subtitles or dubbing script, ensuring they meet quality expectations (Chaume, 2019). Thus, while AI offers new tools, it also introduces new potential points of failure that professionals need to monitor. The take-home message is clear:

quality in audiovisual translation still hinges on human expertise, and current AI serves best as an assistant that must operate under human supervision. Uncritical reliance on AI, as several respondents cautioned, risks a drop in quality that could “detract from the user experience”, a scenario no stakeholder in the industry desires.

One prominent theme is that translators are leveraging AI primarily as a support tool for routine, technical tasks rather than for the creative act of translation itself. Participants described using AI for ancillary processes for example, generating draft subtitles, transcribing dialogue via speech recognition, or pre-translating straightforward segments essentially offloading laborious or time-consuming steps to the machine. This aligns with the broader industry trend identified by Granell and Chaume (2023), who note that translation technology has evolved “from being merely a clerical aid for transcribing digital texts to automating tasks and integrating machine translation into human translation processes”. Indeed, the AVT sector itself embraces this collaborative ideal: the Audiovisual Translators Europe manifesto advocates for an augmented translator that puts the human front and centre and uses technology to enhance their capabilities (Deryagin et al. 2021). Similarly, Federici et al. (2023) argue that translation automation should be deployed in support of human experts rather than as a standalone solution (Hyder, 2019). At the same time, our results temper the more optimistic predictions about AI revolutionizing translation.

Participants did not report AI fundamentally changing what they translate or how they approach complex translation problems; they reported it as a tool, not a partner in creativity. This cautious integration reflects the consensus in recent AVT studies that full automation is still a “pipe dream” and that realistic progress lies in human-machine convergence (Frosio, 2020). Notably, translators are aware of which tasks benefit most from AI assistance and which require

human talent. For example, automatic subtitle generation tools can now handle chores like line segmentation or format conversion in the cloud, part of what Bolaños García-Escribano and Díaz-Cintas (2020) term the “cloud turn” that has streamlined many workflow logistics. Yet, these advances, while “hugely impactful” for project management, have not obviated the translator’s core work, a point we return to in. In summary, AI is embraced insofar as it serves as a labor-saving device. This reaffirms an emerging principle of human-machine collaboration in translation: leverage machines for what they do well (speed, consistency, recall), and rely on humans for what they do well (creativity, context-sensitivity, critical judgment). Our participants’ experiences support this principle and suggest that, at its best, AI can function as a supportive colleague handling the busywork of translation, thereby enabling human translators to concentrate on the skilled, value-added aspects of their profession.

Cognitive and Emotional Experiences

According to Berni and Borgianni (2021) the cognitive experience refers to users’ perception and emotional experience covers all emotional aspects. The mixed attitude of translators toward AI is a combination of cautious optimism, pragmatic acceptance, and concern. There is no single stance among practitioners; instead, attitudes vary from enthusiastic early adoption to skeptical caution. Many participants acknowledged a sense of inevitability about AI in their field and were willing to embrace its benefits, especially for reducing routine work. These translators saw AI as “just another tool” , an evolution of the MT tools and translation memory systems they have long used. Such an attitude aligns with what Alonso-Bacigalupe & Romero-Fresco (2024) describe in their study of subtitlers: a contingent of professionals who view AI as an opportunity to increase productivity and are eager to learn how to incorporate new tools effectively. These individuals often spoke of AI in neutral or positive terms, emphasizing

that it is the translator who wields the tool. In line with human-machine collaboration theories, they tend to believe that a good translator can use AI to their advantage without sacrificing quality (*AVTE statement on Generative Artificial Intelligence, n.d.*). This pragmatic optimism reflects a translator identity that is adaptable and tech-savvy seeing oneself not threatened by technology, but empowered by mastering it. It is worth noting that even those with positive attitudes generally stopped short of uncritical enthusiasm; they praised AI for what it can do, but also remained clear-eyed about its limits, echoing the common statement that AI is not going to replace us, but translators who use AI might replace those who do not. In other words, they feel a professional responsibility to keep up with technology, while maintaining a healthy skepticism.

On the other hand, a significant number of practitioners expressed ambivalence or concern about AI integration. Some of the wariness stems directly from the quality and workflow issues discussed earlier frustration with poor MT outputs, or anxiety that reliance on AI could erode translation quality over time (Deryagin et al. 2021; *Les mirages de la post-édition, n.d.*; *Contre-sommet IA, n.d.*; Kirov and Malamin, 2022). However, our findings suggest that much of the concern is rooted in broader issues of professional identity and conditions. Several participants voiced fears about becoming “post-editing machines” themselves, relegated to cleaning up AI output rather than crafting translations creatively. This resonates with the concept of automation anxiety (Vieira, 2018) in the translation profession, where the worry is less about the technology per se and more about one’s role and value diminishing. Indeed, Vieira’s research found that translators’ negative perceptions of MT often have more to do with economic and status implications than with a literal fear of robots.

Our study reflects this: translators are concerned about being deskilled or losing the authorship of their work. The AVTE manifesto captures this sentiment, warning that

indiscriminate use of MT can make “translators lose their unique translation style, and the language becomes more bland and homogeneous” (Deryagin et al., 2021). This points to a fear of loss of individuality and creativity, core elements of a translator’s identity. In AVT, where style and adaptation choices are a signature of the translator’s craft, the idea of being reduced to an invisible post-editor is indeed troubling to many. Furthermore, there are ethical and professional reservations contributing to mixed attitudes. Some interviewees mentioned the lack of transparency when MT is used and the fact that translators often aren’t compensated for the time they spend correcting machine output or for the use of their translations as training data (Frosio, 2020).

These concerns are reflected in industry discussions; for example, AVTE (2021) highlights that translators are “often not aware that their work is used to train MT engines, nor are they remunerated for this”. There is a sense of injustice that fuels resentment towards AI adoption not because the technology is inherently bad, but because the way it’s implemented can undermine translators’ rights and working conditions.

The manifesto even links reckless MT use to a potential “brain drain and talent crunch” in the profession, as top translators may leave rather than see their work devalued (Deryagin et al.). Our participants echoed these sentiments in their own words, indicating that if AI is used merely as a cost-cutting tool by companies, it will be met with resistance. On the flip side, when translators feel included in decisions about AI and see it used to actually enhance quality or turnaround, they are more open to it. This nuance explains the conditional acceptance we observed: many translators adopt a “wait and see” or “use with caution” approach, embracing AI when it clearly helps, but pushing back when its use seems detrimental to quality or fairness.

The voluntary nature of AI adoption noted by many participants. They indicated that using AI is a choice if it helps, they'll use it; if it hinders, they will bypass it. This selective use means that on some projects, especially creative or high-stakes ones, they might deliberately exclude MT and follow a fully human workflow identical to pre-AI days. The freedom to revert to conventional methods ensures that the introduction of AI does not always translate to a changed process. In cases where machine output was judged too unreliable, translators would stick to their standard practice of human translation and editing, effectively nullifying AI's impact on their work. What this reveals is an important perspective often lost in discussion: professionals are not uniformly adopting AI at every step, but rather adapting their workflows pragmatically on a case-by-case basis. As one industry manifesto notes, "efficiency gains are [not] guaranteed" with MT, and if not used wisely, "the effort is merely shifted from the translator to the reviser"(Deryagin et al., 2021). The workflow stays the same as it ever was, with the translator drafting and perhaps a colleague reviewing, and no machine in the loop at all.

Conclusion

In summary, translator attitudes toward AI are heterogeneous and conditional. They range from forward-looking acceptance to critical skepticism, often depending on personal experiences and the context of use. The community's mixed feelings are also evident in the broader professional discourse. On one side, we have tech-positive voices and early adopters; on the other, collective pushback such as the AVTE's Machine Translation Manifesto (Deryagin et al. 2021) which, while acknowledging AI's inevitability, advocates a much more nuanced and controlled integration of MT in AVT workflows. The very existence of such a manifesto backed by 22 national associations underscores that a significant portion of professionals demand a human-centric approach to AI, where translator expertise and well-being are not sacrificed for automation. This tug-of-war between innovation and preservation is a defining feature of the current era. It speaks to the heart of translator identity in the age of AI: translators want to be seen not as obsolete or mere cogs feeding a machine, but as knowledge workers who collaborate with technology. The mixed attitudes documented in our study suggest that the trajectory of AI adoption in AVT will be heavily influenced by how well the industry addresses translators' legitimate concerns. In the next section, we consider what these findings mean in practical terms for AVT professionals and outline directions for future research to navigate this human-AI nexus. In essence, the practical way forward for AVT professionals is to integrate AI thoughtfully: use it, but do not become over-reliant; improve productivity, but never at the expense of quality; and insist on conditions that allow technology to be a tool for empowerment, not a tool of exploitation. The findings of this study suggest that when used wisely, AI can indeed alleviate tedious tasks and serve as a helpful assistant. However, translators must remain vigilant guardians of quality and advocates for their professional value. Human expertise is

creativity, cultural insight, quality control and it is the decisive factor in successful audiovisual translation, and maintaining that focus will be key to sustaining both excellence and professional satisfaction in the AI era.

Research Questions

Each research question was created to tackle and learn about the experiences of audiovisual translators with AI. The research involved 10 participants from Russia and Kazakhstan who provided information regarding their experiences, scenarios of use and encountered challenges. The first question showed that generally translators are not satisfied with translation results which AI provides. While they might be grammatically correct, there are a lot of drawbacks which are not acceptable as stated by participants that AI-generated translations are not good enough yet and lacks mechanisms to work with audiovisual translation due its inability to perceive visual, context, interpersonal realms. Nevertheless, translators found a satisfactory side of AI in helping them with mundane tasks which take a lot of time that could be spent on translations. Now, they can delegate part of their work to AI-tools which saves plenty of time that leads to more time on tasks which translators want to be engaged with. This leaves us with a mixed conclusion that translators are not using AI-tools and not satisfied with their quality, but in non-translation tasks they found praise. Yet there is still skepticism regarding some aspects of AI-tools like market dynamics, privacy and cost of subscription. Among these concerns is not presented fear of automation because after interaction with AI-tools translators understood that AI cannot subdue them yet and they feel themselves safe but some cases emerged when company or clients came with generated translation and asked for post-editing which requires significant time expenses as much as for normal translation but yet cheaper marking possible new trends in market.

The second has uncovered that translators are not using AI-tools in core translation processes due to quality issues but AI-tools found place as supportive tools in tasks which are not requiring creativity and human awareness like script generation and manipulations or information reference and idea generation with the need to double-check received information.

The third questions tackled encountered challenges while using AI tools which are presented by issues of inability to perceive visuals and continuity with additional problems of understanding context, interpersonal relations, style, emotional sensitivity, rhyming and inconsistency of AI-tools which leads to prolonged work which requires as much time as translation. Other aspects include limited knowledge of how AI-tools works, unfamiliarity with dedicated AI-tools for specific use, inability to edit created translation of automated translation solutions and ranging quality of AI-tools.

Limitations of the study

The research acknowledges that there are limitations to consider such as the nature of participant responses and the challenges in applying the findings to the broader AVT field. Moreover, the research will address the difficulties in capturing a range of experiences with AI in translation processes given the changing landscape of AI technology. The impact of AI on translation has been significant introducing tools and approaches that can streamline and improve translation tasks. However, as AI technology progresses so do the obstacles linked to its implementation. Moreover, the study acknowledges the significance of sample size in research. The size of the sample can significantly impact the reliability and validity of the study's findings (Boddy, 2016). A smaller sample may not accurately represent the population. For instance, in this context encompassing projects, languages and AI applications within the AVT sector. Additionally, audiovisual translators are hard to reach due to the limited number of AVT

associations in Russia and none in Kazakhstan while there is the professional standard that elevates audiovisual translation to an independent profession in Russia that is not the case for Kazakhstan where audiovisual translation is added to the list of complementary skills, thus reducing possible participants from Kazakhstan. The similarity of those two markets can help to mitigate less number of participants from Kazakhstan. This could constrain the study's ability to offer an understanding of experiences involving AI in translation processes. Acknowledging these constraints highlights the significance of analysis and transparency to uphold the credibility of conclusions.

Researchers need to be transparent about the constraints of their study, such as the chance of bias in how participants respond to the complexities in applying findings. The hurdles linked to the ever-changing landscape of AI technology. This openness is crucial, for ensuring that the results are comprehended and used correctly without exaggerating their importance or consequences.

Contribution of the Study

This study makes contribution to the realm of AVT by describing the experiences of audiovisual translators with AI which provides insights of how AI-tools can be used in audiovisual translator work, what challenges can be encountered while using said tools and how translators view AI-tools providing nuanced understanding which shows how AI influence AVT landscape.

Recommendations

This study's findings point to several avenues for future research at the intersection of audiovisual translation and AI, particularly as the field navigates human-machine collaboration

and its ramifications. Building on the insights and limitations of the current research, future studies should consider the following directions:

Impact on Translator Identity and Job Satisfaction: Given the mixed attitudes observed, researchers should explore how the incorporation of AI influences translator identity, job satisfaction, and status. Qualitative interviews and discourse analysis (following on Vieira 2018 and LeBlanc 2017) could shed light on whether translators feel deskilled or empowered by their new roles as post-editors or AI managers. Does calling someone a “post-editor” instead of “translator” affect their professional self-image or how others perceive them? Moreover, how do these changes affect attraction and retention in the profession? Will new graduates embrace AVT if it involves heavy AI use, or shy away? They would also contribute to the sociology of translation by examining how technological shifts reconfigure professional identities.

Audience Reception and Quality Perception Studies: Another critical direction is to study the audience’s perspective: How do end-users perceive translations that have been produced or assisted by AI? In AVT, the target audience’s experience is paramount. Reception studies e.g. comparing audiences’ comprehension and enjoyment of content translated fully by humans vs. content with heavy machine assistance could reveal if there are noticeable differences.

Improving AI for AVT Multimodal and Custom Solutions: Future research should also aim to improve AI systems themselves to better suit AVT needs, and translation studies scholars have a role to play in this development. This includes pursuing multimodal MT that can account for visuals and audio context. Collaboration between translation experts and AI engineers could yield insights on what contextual information machines would need to produce more context-aware translations. Finally, building on calls by Chaume, Díaz-Cintas and others, research should investigate educational interventions to prepare future translators for an AI-enhanced landscape.

In conclusion, the intersection of AI and audiovisual translation offers a rich agenda for future research, spanning practical, cognitive, social, and technological domains. Pursuing these directions will not only deepen our theoretical understanding of human-machine collaboration in translation, but also provide actionable insights to guide the industry. The ultimate goal of such research should be to foster a sustainable synergy between AI advancements and human translator expertise, one that preserves the art and craft of audiovisual translation while harnessing the benefits of innovation. By proactively investigating the challenges and opportunities outlined above, researchers and practitioners can work hand in hand to ensure that the evolution of AVT in the era of AI is a positive one for all stakeholders.

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APPENDIX A

Interview Protocol

Human Experience with AI in Audiovisual Translation

Hello, thank you for your participation in this research. Before we start with the interview, I want to explain the purpose of my research. The purpose is to study the experiences of translators in audiovisual translation with artificial intelligence. I'm looking forward to our interview and if you have any questions, you can ask me. Let's start!

1. Can you tell me about yourself? About your education, occupation, preferred type of AVT for work.
2. Can you describe your experience with AI-powered tools in audiovisual translation?
3. What specific AI tools have you used in your work?
4. How have these tools influenced your translation process?
5. In what scenarios do you use AI tools to help yourself during the translation process?
6. How has the integration of AI affected your overall work processes?
7. Have there been any changes in your role or responsibilities due to the use of AI tools?
8. What challenges have you encountered while using AI tools in audiovisual translation?
9. How do these challenges impact the process of your work?
10. Can you discuss any technical considerations or limitations associated with AI tools in audiovisual translation?
11. What benefits have you observed from using AI tools in audiovisual translation?
12. In what ways have these tools improved efficiency or quality in your work?
13. How do you ensure the accuracy and reliability of AI-generated translations?
14. What role do human translators play alongside AI tools in audiovisual translation?

15. How do you balance the use of AI with human expertise in your work?

16. Is there anything else you would like to share about your experiences with AI tools in audiovisual translation?

That is all for our interview. Thank you for your participation and shared experiences. Have a nice day!

APPENDIX B**Written Informed Consent**

Introduction. You are invited to participate in a research study entitled “*Human Experience with AI in Audiovisual Translation*”. Before agreeing to participate, please read the following information carefully to understand the purpose of the study, the procedures involved, and your rights as a participant.

Procedures. The purpose of this study is to investigate the experiences of AV translators with AI-assisted translation tools, their perceptions of these tools’ effectiveness, and the challenges they encounter in their work. This research seeks to provide insights into how AI is reshaping the AVT landscape, offering a nuanced understanding of its benefits and limitations from the translators’ perspective. The research will be participant-based and utilizes a basic qualitative research approach focusing on the translators’ experience with AI in AVT. If you agree to participate, you will be asked to take part in an interview lasting approximately 60 minutes. The interview will cover topics related to “Human Experience with AI in Audiovisual Translation”. With your consent, the interview may be audio-recorded to ensure the accuracy of the data collected.

Risks. While this study has been designed to minimize risks, there are potential risks of participating in this study: Every effort will be made to protect the confidentiality of your information. However, there is a minimal risk of unauthorized access to identifiable data; Discussing certain topics may involve sharing personal information.

To minimize these risks, the following measures will be taken: Personal information will only be collected if absolutely essential to the study; Any personal data collected will be coded as early as possible and securely stored. Only the researcher will have access to this information. Identifiable information will not be released without your express written consent. If the researcher wishes to use the data for a purpose other than the original intent and the data remain identifiable, your consent will be sought before proceeding.

Benefits. Anticipated benefits from this study add the potential benefits to the discourse of the impact of AI on translation in the experiences of AV translators. Furthermore, it will allow us to understand how the widespread adoption of artificial intelligence impacts the translation of content as well as how these differences influence translators’ workflows and perceptions. The participants will receive access to the study after it is concluded. Also, they will receive a list of the AI-tools which might help in their work.

Results of this research might be used in an educational setting incorporated in the learning process to prepare students for their future work in the field of AVT.

Compensation. No tangible compensation will be given. A copy of the research results will be available at the conclusion of the study and will be sent to the subject upon their request on their email as a pdf file. Also, they will receive a list of the AI-tools which might help in their work compiled in google documents as a list of tools with links to their websites.

Confidentiality & Privacy. Any information that is obtained during this study will be kept confidential to the extent permitted by the law. All efforts, within reason, will be made to keep your personal information in your research record confidential but total confidentiality cannot be guaranteed. Confidentiality of identifiable information is presumed and must be maintained unless a permission is obtained from the subject to do otherwise. Subjects have the rights to be protected against injury or illegal invasions of their privacy and to preservation of their personal dignity. The research material, the greater the care that must be exercised in obtaining, handling, and storing data. In order to minimize the risk for loss of confidentiality, the researcher should only collect personal information that is absolutely essential to the research activity. If personal data must be collected, it should be coded as early in the activity as possible and securely stored so that only the researcher may access it. Identities of individual subjects must never be released without the express consent of the subject. In addition, if the researcher wants to use data for a purpose other than the one for which it was originally collected and the data are still identifiable (e.g. a code list for the data still exists), then I need to obtain consent from the subjects for the new use of the data.

Voluntary Nature of the Study. Participation in this study is strictly voluntary, and if agreement to participation is given, it can be withdrawn at any time without prejudice.

Points of Contact. It is understood that should any questions or comments arise regarding this project, or a research related injury is received, the researcher should be contacted. Any other questions or concerns may be addressed to the The Research and Ethics Committee, info@kazguu.kz.

Statement of Consent.

I, _____
_____,

Give my voluntary consent to participate in this study.

The researchers clearly explained to me the background information and objectives of the study and what my participation in this study involves.

I understand that my participation in this study is voluntary. I can at any time and without giving any reasons withdraw my consent, and this will not have any negative consequences for myself .

I understand that the information collected during this study will be treated confidentially.

Signature: _____ Date: _____

Researcher:

Signed _____ Date _____