AL-FARABI KAZAKH NATIONAL UNIVERSITY

Department of International Relations

Chair of Diplomatic Translation

**Translation business in the field of international and legal relations**

**“Translation of Scientific and Technical Documents”**

2024-2025 academic year, fall semester

Lecture 1

**Module 1: Introduction to scientific and technical translation**

**Lecture 1:** History of development of scientific and technical translation

Importance of translation in disseminating scientific and technical knowledge across cultures and languages.

Brief outline of the key historical phases we will cover.

A. Early Translations

- Civilizations: Ancient Mesopotamia and Egypt had the first translation practices, often translating texts for trade and administration.

- Bilingual Texts: The use of bilingual texts, like the Rosetta Stone, highlights early efforts to bridge language gaps.

B. Greek and Roman Contributions

- Greek Philosophy: Works of philosophers like Aristotle and Plato were translated into Latin, forming the backbone of European intellectualism.

- Roman Empire: Translations during this period facilitated the spread of knowledge across Europe, setting the stage for later developments.

II. Middle Ages

A. The Islamic Golden Age (8th to 14th Century)

- Preservation of Knowledge\*\*: Scholars translated Greek texts into Arabic, enhancing and expanding scientific knowledge in mathematics, medicine, and astronomy.

- Key Figures: Al-Khwarizmi and Avicenna made significant contributions, which were later translated back into Latin.

B. The Translation Movement

- Renaissance Recovery: The translation of Arabic works into Latin during the Renaissance reintroduced lost knowledge to Europe, fueling scientific inquiry and innovation.

III. Renaissance and Enlightenment

A. Scientific Revolution (16th to 18th Century)

- Emergence of New Ideas: The translation of seminal works by Galileo, Newton, and others was vital in disseminating revolutionary ideas.

- Terminology Development: This period saw the beginnings of standardized scientific terminology, necessary for clarity and communication.

B. Impact of National Languages

- Language Standardization: The establishment of national languages, along with specialized dictionaries, helped unify scientific discourse within countries.

IV. 19th Century

A. Industrial Revolution

- Technological Advancements: The need for precise translation grew as industries expanded, particularly in engineering and manufacturing.

- Specialization: The rise of technical fields led to the emergence of specialized translators.

B. Professionalization of Translation

- Establishment of Associations: The formation of professional translation associations began to legitimize translation as a profession, emphasizing the need for expertise.

V. 20th Century

A. Global Conflicts and Cooperation

- World Wars: The complexity of international relations during the wars underscored the necessity for accurate translation in scientific and technical contexts.

- International Organizations: Institutions like the United Nations highlighted the critical role of translation in diplomacy and science.

B. Machine Translation Emergence

- Early Experiments: Initial machine translation projects in the 1950s aimed to automate translation processes, paving the way for future developments.

VI. Late 20th Century to Present

A. Digital Revolution

Internet and Tools: The rise of the internet democratized access to translation resources, enabling collaboration among translators worldwide.

Computer-Assisted Translation (CAT): The development of CAT tools improved efficiency and consistency in translations.

Continued Demand for Expertise\*\*: As scientific fields expand, the need for translators with specialized knowledge continues to grow.

AI and Machine Learning\*\*: Modern advancements in AI are reshaping the translation landscape, enhancing both speed and accuracy while emphasizing the need for human oversight.

Conclusion

- Recap of key points: The evolution of scientific and technical translation reflects broader changes in society and technology.

- Importance of translation in fostering global communication and collaboration in science and technology.

- Final thoughts on the future of translation in a rapidly changing world, emphasizing the balance between human expertise and technological innovation.