Abstract. The paper presents an overview of machine translation (MT), its paradigms, and the differences between two machine translation systems: Google Translate and VDU Translate. Google Translate applies statistical techniques to learn translation models from different translated texts, bilingual or multilingual texts. Statistical machine translation (SMT) is the application of previously used algorithm, adopted from parallel corpora, parallel texts, bilingual texts or multilingual texts, to translate other completely new translation units. VDU Translate is a rule-based (RB) bilingual unidirectional MT system implementing linguistic rules in text translation. For the most part a range of morphological, syntactic, and/or semantic analyses are being applied, as well as the structural text transformations.

Two texts (a scientific paper and a newspaper article) translated by Google Translate and VDU Translate have been compared in terms of 7 standards of textuality to find out their acceptability to the reader. The seven standards of textuality include cohesion, coherence, intentionality, acceptability, informativity, situationality, and intertextuality proposed by R. A. Megrab. The findings of the research demonstrated that the newspaper article and the scientific paper translated by both MT systems comply with standards of text cohesion. However, they do not comply with the standards of coherence, acceptability and informativity due to numerous semantic mistakes, therefore, translations of this quality cannot be informative or acceptable to the reader.