ASSESSING THE CAPACITY OF THE MACHINE INTERPRETING TECHNOLOGIES: THE RUSSIAN EXPERIENCE





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The Focus of the Curriculum

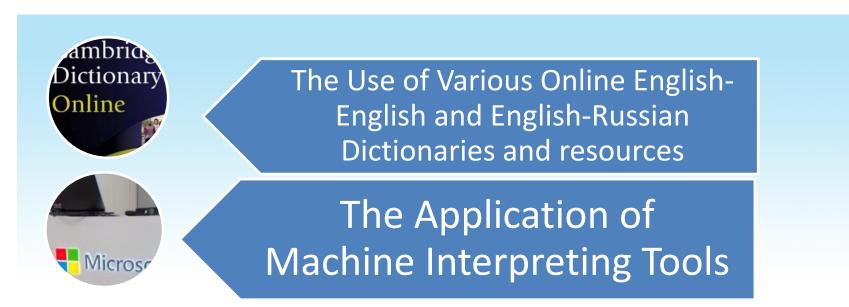


COMPUTER AIDED TECHNOLOGIES

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ICT FOR LANGUAGE LEARNING





Purpose



to learn how to use machine interpreting tools in practice

The chain of two gadgets "a speaker" in a source language

"an online interpreter"



Online Interpreting Tools under Test



- Google Interpreter
- API Microsoft Interpreter
- Yandex online interpreter

The Material to be Tested



 videos from YouTube with the recordings of people from Africa, Latin America, Asia, East European countries (1-minute long extract)

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The Output



NO: recognition of the source language

NO: interpretation into the target language

NO: generation on the target language

Modification of the Experiment



The sample

semantic segments

I have to do this (3.2) because this is not just me speaking, (3.3) there are the people (3(A), who want to etcl, the world (3,5), what they want to say. (3.6) North Korea is an unimaginable country. (3.7) There is only one channel on TV. (3.8) There is no internet. (3.9) We aren't free to sing, (3.10) say, wear, or think (3. 11) what we want. (3.12) North Korea is the only country in the world (3.13) that executed people (3.14) for making unauthorized international phone calls. (3.15) North Koreans are being terrorized today. (3.16) When I was growing up in North Korea, (3.17) I never saw any love stories...

Error Analysis



Segments of the Utterance in the Source Language	Microsoft Translator Speech API	Google Translator	Yandex Speech Interpretation system
3.1. I have to do this	I have to give the list		l keep.
	Я должен дать список	Я должен сделать сегодня.	Я держу.
3.2 because this is not just me	Process this is not on speaking.	it's not the Queen of Spades	Became.
speaking	процесса это не разговор.	это не Пиковая дама	Ставший.
3.3 there are the people	This	No text generated	The?
2.4	Это.	I have to do this is	Что?
3.4 who want to tell the world	who want to tell	I have to do this is not	Tell
	кто хочет сказать	Я должен это делать это не так	сказать

Data Generalization



Segmen : N	Microsoft Translator Speech API		Google Translator		Yandex Speech Interpretation system	
	Lexical	Grammar	Lexical	Grammar	Lexical	Grammar
3.1	3	0	1	0	5	1
3.2	3	2	7	2	6	2
3.3.	4	2	4	2	3	2
3.4	2	0	6	2	5	2

Average	3,3	0,7	4,2	1,5	5,2	1,9

CONCLUSION



- Microsoft Translator Speech API had the highest level of fidelity and less mistakes made in speech recognition and generation. Whereas the Yandex Speech Interpretation system has the worst results.
- The experiment should be continued on the other pair of languages.
- The interpretation systems should be tested not only on the samples of the general language, but also of the language for specific purposes.
- These issues can be the subject of the students' projects and experiments.
- The integration of such research into the practice of studying foreign languages in higher education institutions increases the students' motivation.





