

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



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The Focus of the Curriculum



COMPUTER AIDED
TECHNOLOGIES



The Use of Various Online English-English and English-Russian Dictionaries and resources



The Application of Machine Interpreting Tools

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)

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 (3.4) who want to tell 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 Я должен дать список	I have to do today Я должен сделать сегодня.	I keep. Я держу.
3.2 because this is not just me speaking	Process this is not on speaking. процесса это не разговор.	it's not the Queen of Spades это не Пиковая дама	Became. Ставший.
3.3 there are the people	This Это.	No text generated	The? Что?
3.4 who want to tell the world	who want to tell кто хочет сказать	I have to do this is not Я должен это делать это не так	Tell сказать

Data Generalization

Segment 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.



Thank you for your
attention!