



DEPICTIONS OF WOMEN IN CROATIAN *DUGA* AND *TENA* - A COMPUTATIONAL ANALYSIS

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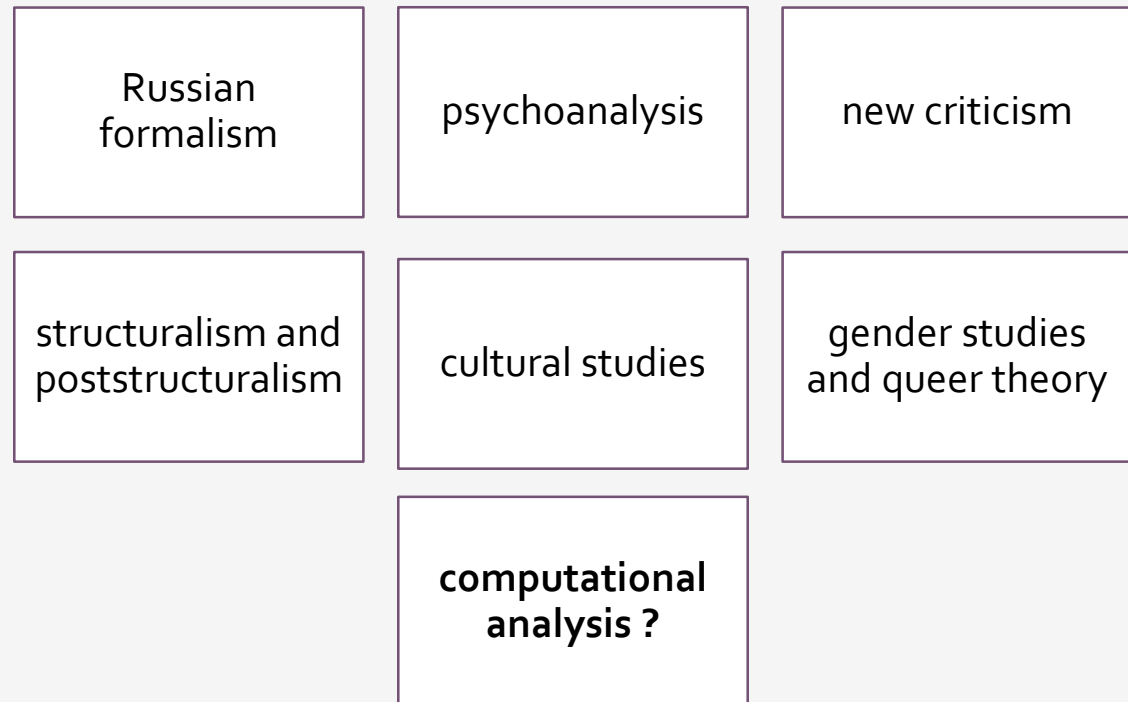
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CONTENT

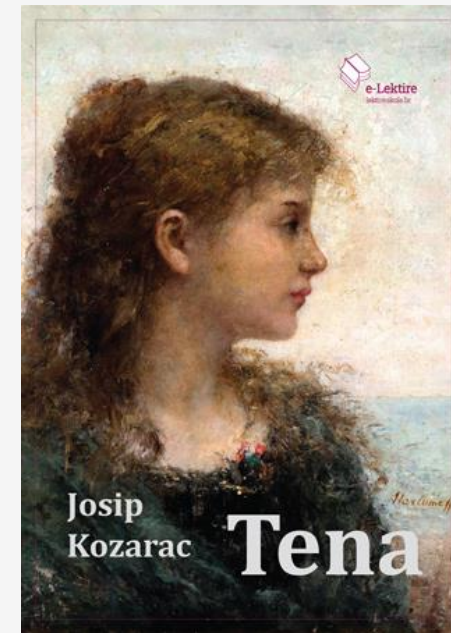
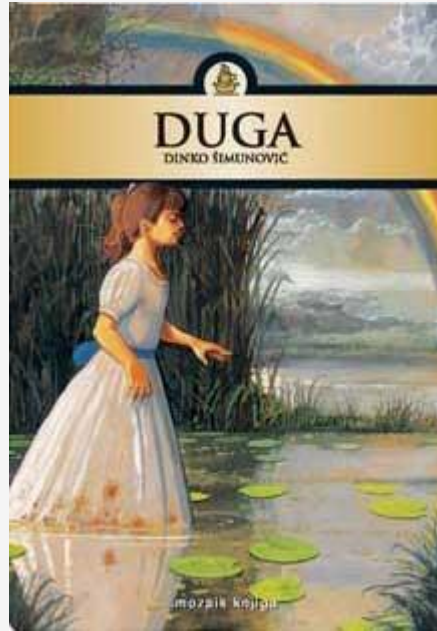
- INTRODUCTION
- DATASET
- METHODOLOGY
- RESULTS AND DISCUSSION
- CONCLUSION AND FUTURE WORK

- **INTERPRETATION** – main type of analysis of a literary work
- Qualitative vs. quantitative approach

INTRODUCTION



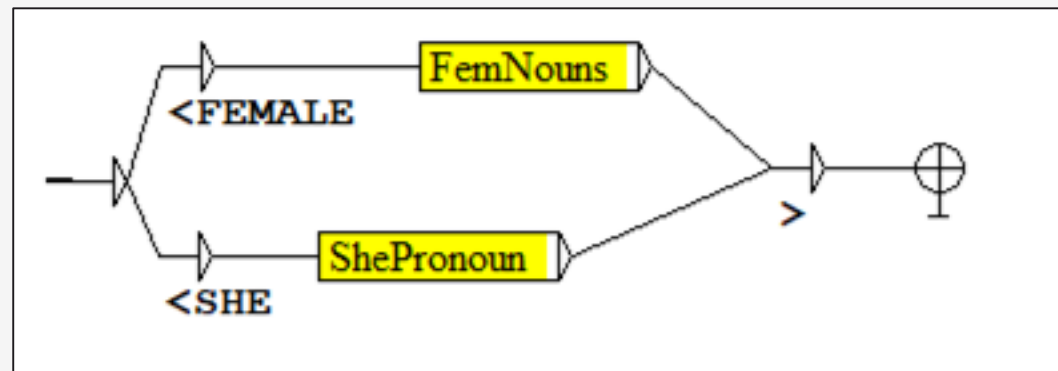
DATASET



	<i>DUGA</i>	<i>TENA</i>
author	Dinko Šimunović	Josip Kozarac
year	1907	1894
literary period	modernism	realism
literary genre	short story	short story
no. of tokens	8850	17929
no. of annotations	32098	67384

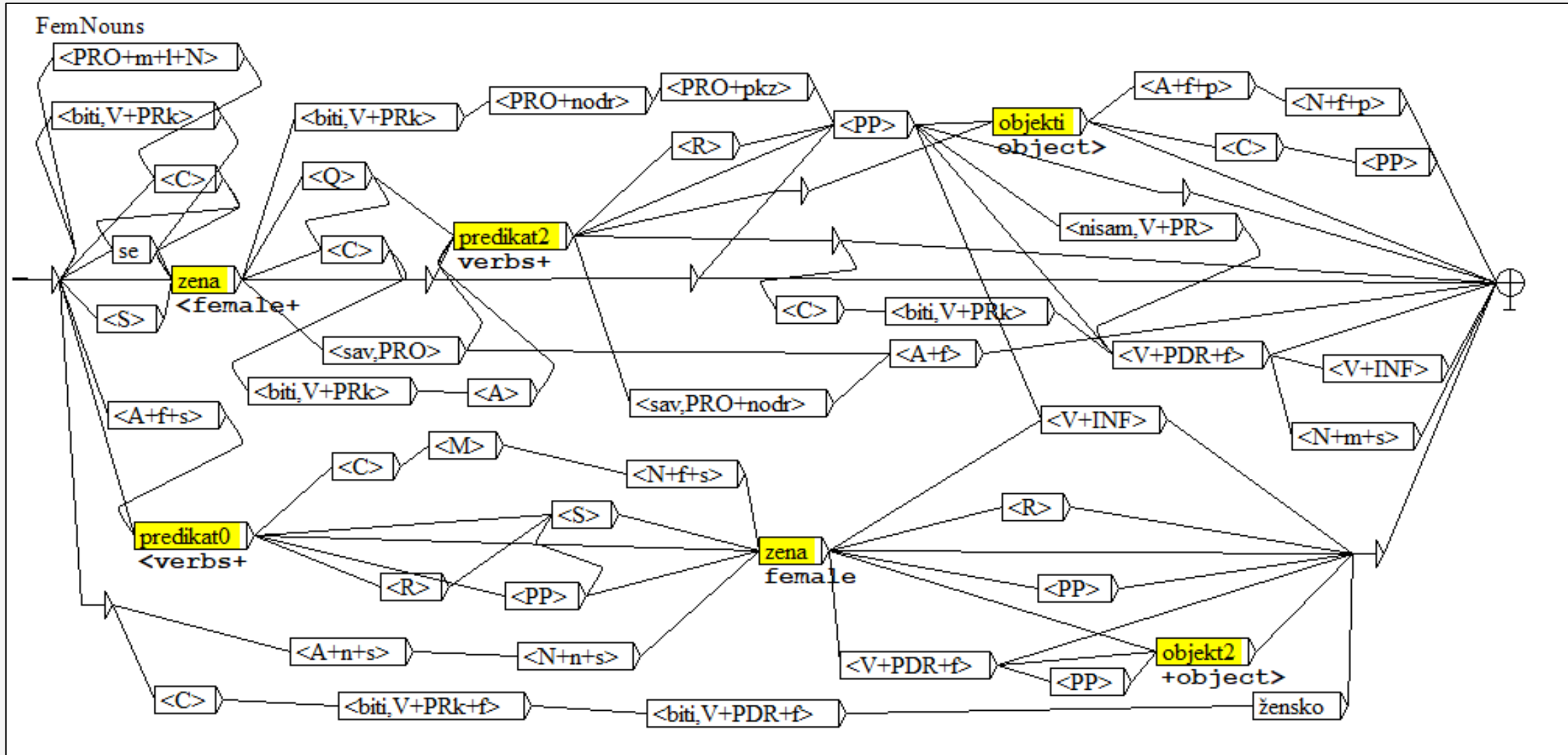
- Texts were downloaded from a platform *eLektire* in .pdf format
- Manual annotating (intersubjective approach)
- Nooj dictionary of female personal names and other names that refer to female characters
- Lexical analysis in Nooj
- *Female* and *She* parts of syntactic grammar

METHODOLOGY



METHODOLOGY

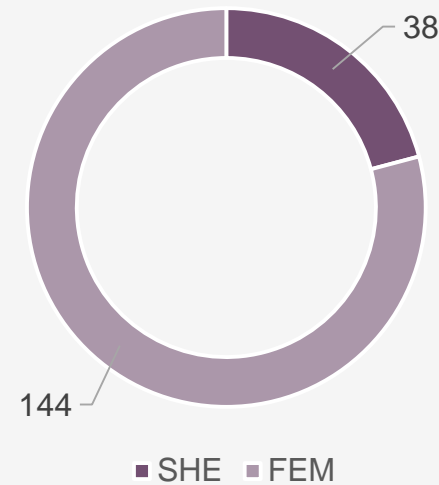
- Making specific paths for selected phrases
- 2 bigger subgraphs: objects and verbs
- Additional node for *She* part – possessive pronoun
- Additional syntactic grammars for cleaning wrong annotations
- calculating precision, recall, f-measure, ratios



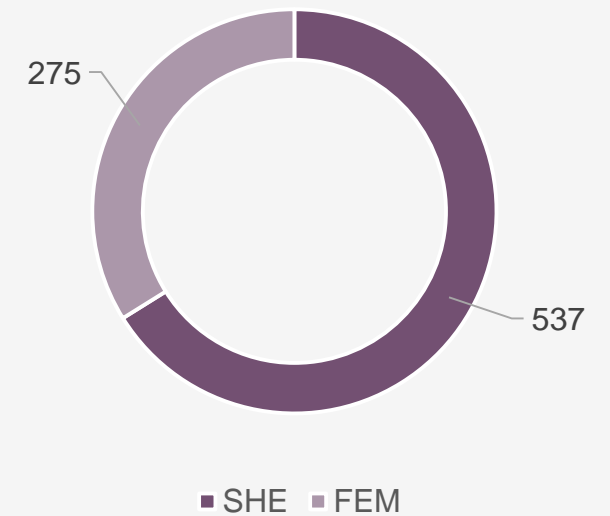
RESULTS AND DISCUSSION

	<i>DUGA</i>		<i>TENA</i>	
	<i>SHE</i>	<i>FEM</i>	<i>SHE</i>	<i>FEM</i>
precision	0.5	0.883	0.689	0.939
recall	0.864	0.883	0.704	0.956
f-measure	0.633	0.833	0.696	0.948

Duga



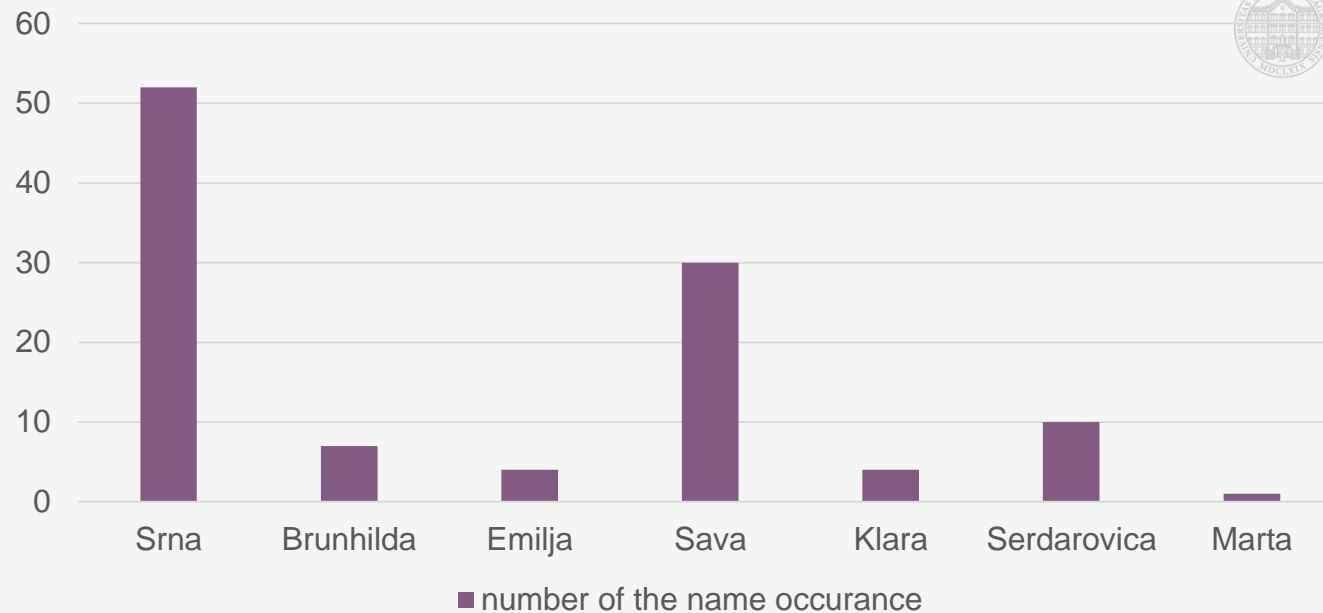
Tena



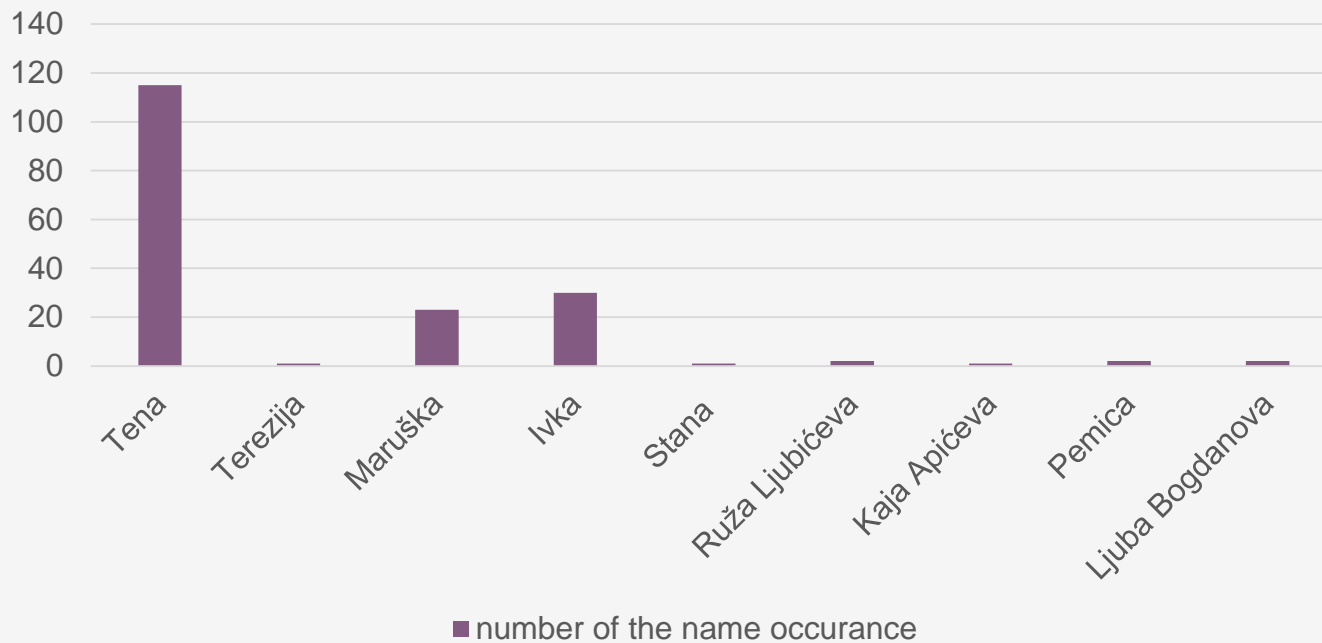
SHE/FEM ratio for each literary text

RESULTS AND DISCUSSION

Duga



Tena



CONCLUSION

- **ambiguity** - example: *Sava*
- **complex syntactic structure**
- **texts from diverse historical periods**
- **unsolved problems**

FUTURE WORK

- a general model for characters
- attempt to integrate computational method in literary science



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