

INTRODUCTION

Polish and Serbian are Slavic languages.

DP – Determiner phrase
PP – Prepositional phrase

- (1) *Mary sent a letter to Peter.* (DP-PP)
- (2) *Mary sent a letter to Germany.* (DP-PP)
- (3) *Mary sent Peter a letter.* (DP-DP)

Verb types:

1. Causative
 - *Show*
 - *Teach*
2. Locative Beneficiary
 - *Deliver*
 - *Send*
 - *Throw*
3. Animate beneficiary
 - *Give*
 - *Tell*
 - *Offer*
 - *Sell*

RQ₁: What is the frequency of use of **the DP-DP and DP-PP frame** in double object constructions in Polish and Serbian?

RQ₂: Does **the animacy** of the beneficiary influence **the case pattern** (accusative-dative / dative-accusative) in double object constructions in Polish and Serbian?

RQ₃: Does **the verb type** influence **the case pattern** (accusative-dative / dative-accusative) in double object constructions in Polish and Serbian?

Data and Methods

Corpus of Polish

- It is composed of 4,253,636,443 words.
- It covers different text genres and web sources. The corpus was built in January 2020.

Serbian Corpus

- It is composed of 565,311,513 words.
- It includes news articles from 2014 to 2021.

We created different queries for every research question in Sketch Engine.

1. To investigate the frequency of use of the DP-DP and DP-PP frame
2. To extract the double object constructions following the sequence accusative – dative case.
3. To extract the double object constructions following the sequence dative – accusative case.

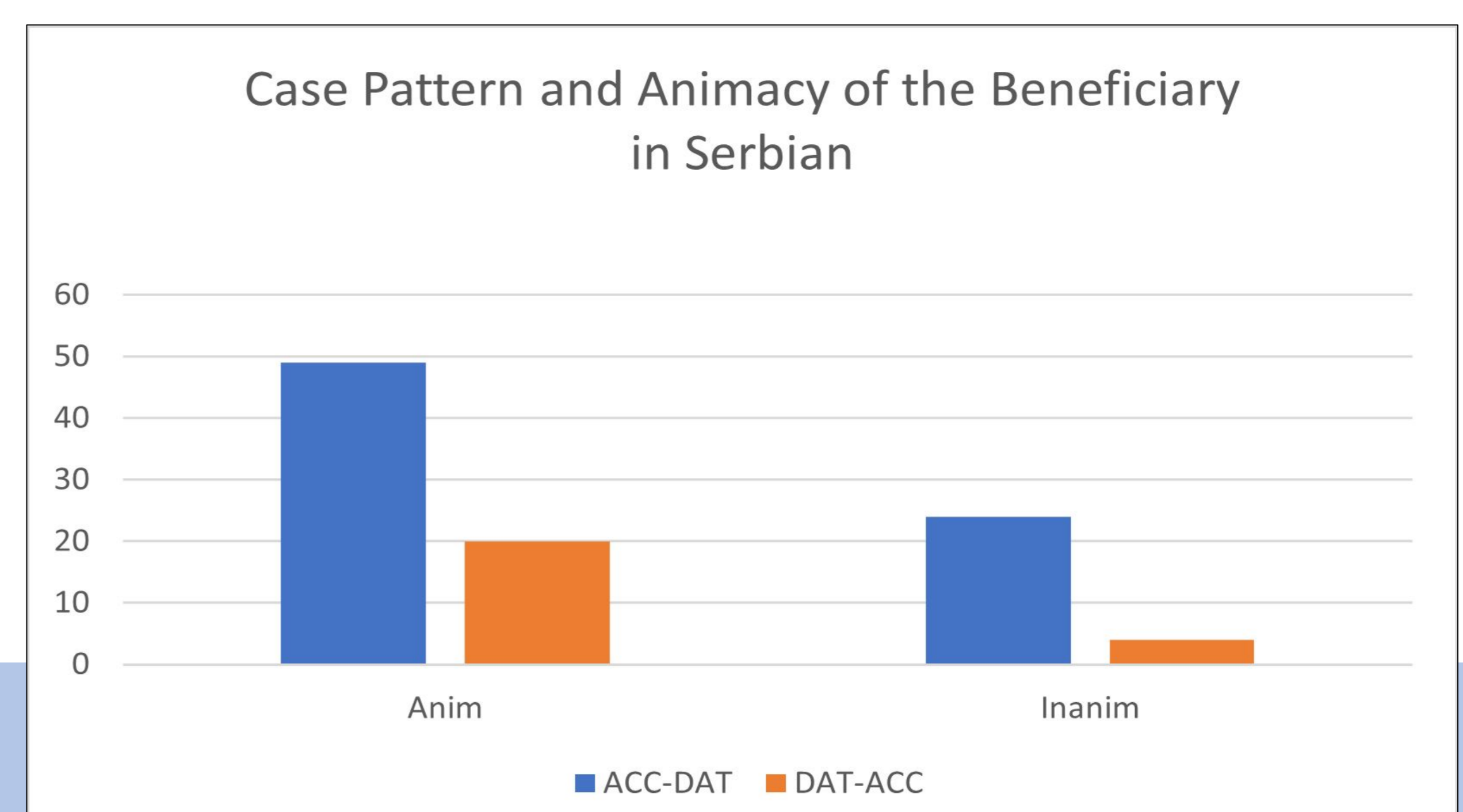
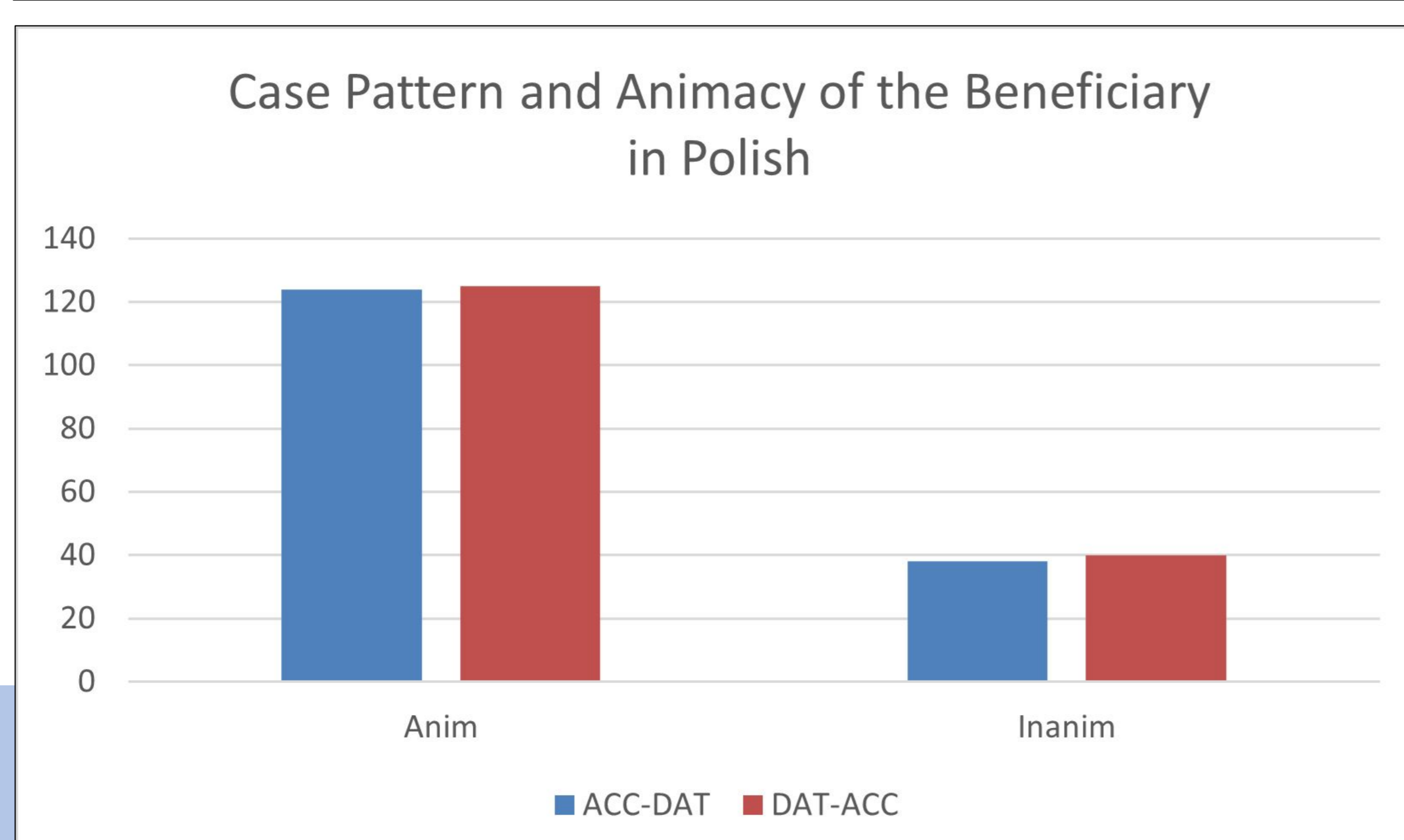
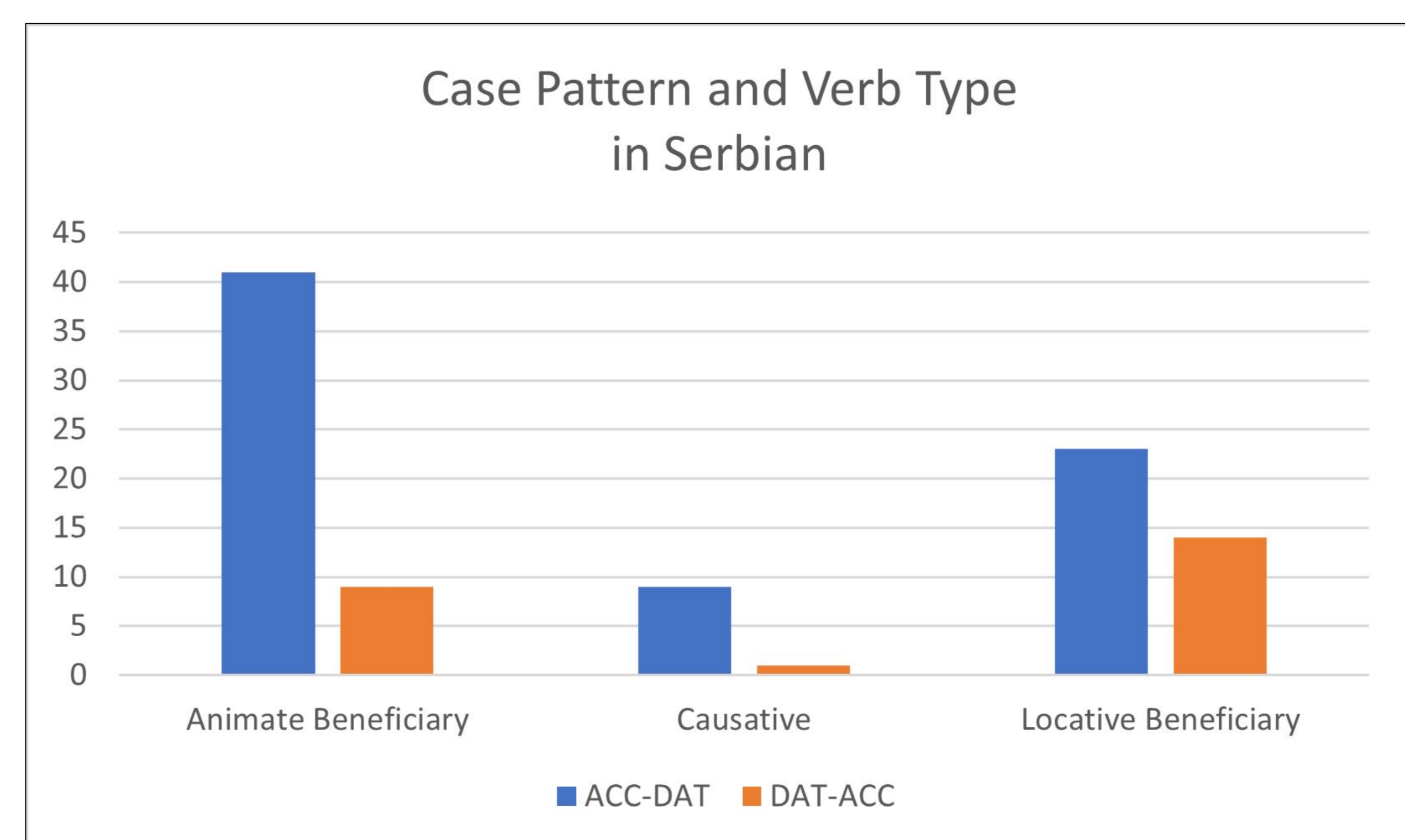
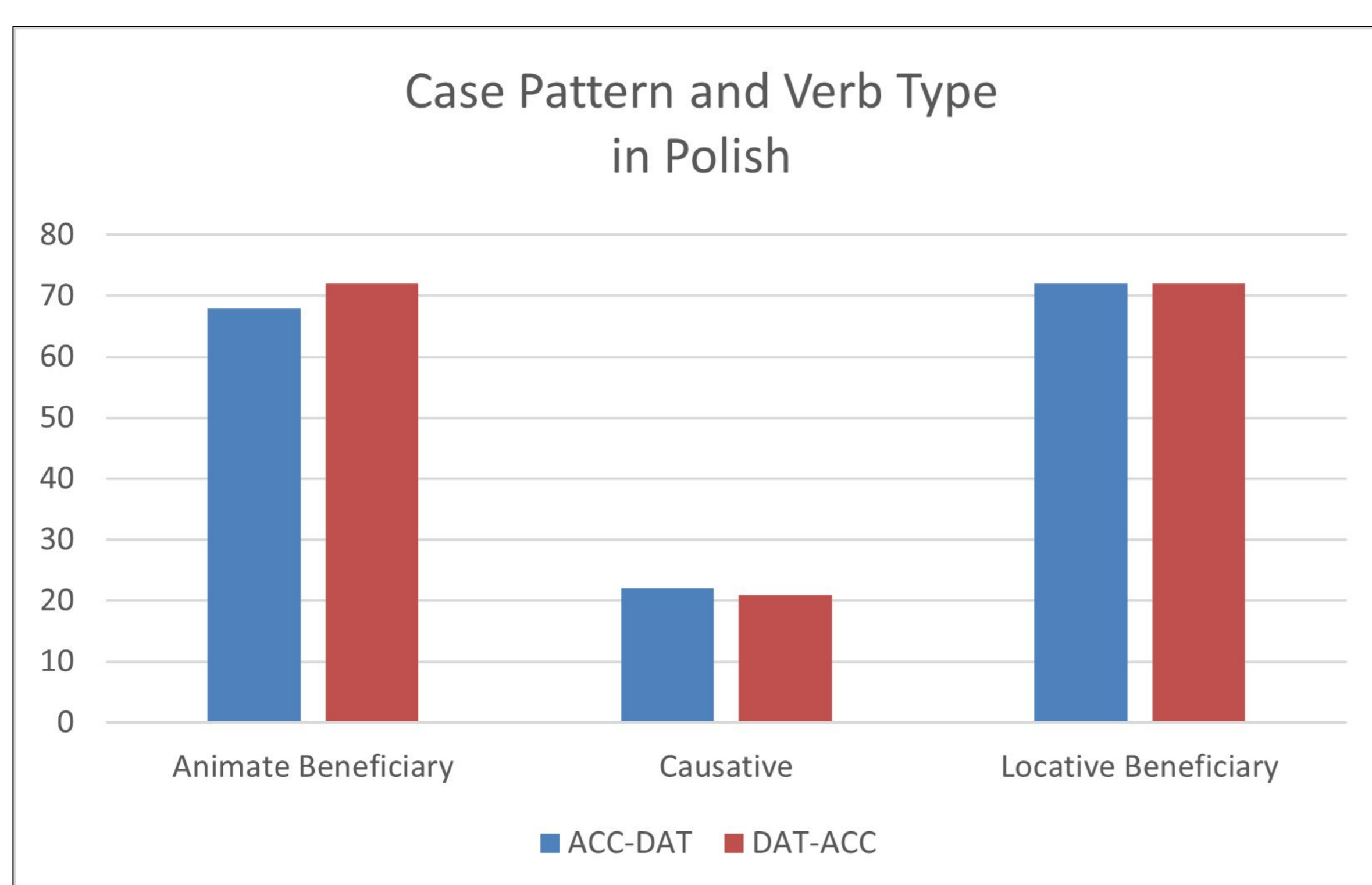
We extracted a random sample of 25 examples for every verb following both sequences.

After extracting the data, we put it in a spreadsheet and cleaned it. We annotated the data looking at the DP-DP / DP-PP frame, case pattern, verb type, animacy of the beneficiary and the frequency of the query in the corpus.

We constructed Pivot tables for both independent variables, verb type and animacy, in Excel. To check the significance of the results, we conducted the Chi-squared test.

Results

- Double object constructions in Polish and Serbian involve only DP-DP frame.
- In Polish, the p-value for the Chi-squared test investigating the relation between the animacy of the beneficiary and case pattern equals **p=1**.
- The animacy of the beneficiary does not influence the case pattern of a sentence in Polish.
- In Serbian, the p-value equals **p=0.2073**. Hence, the animacy of the beneficiary does not influence the case pattern of a sentence in Serbian.
- In Polish, the p-value for the Chi-square test investigating the relation between verb type and case pattern equals **p=0.9465**.
- Hence, the verb type does not influence the case pattern of a sentence.
- In Serbian, the p-value equals **p=0.055**. The verb type does not necessarily influence the case pattern of a sentence. However, it is visible that **the accusative-dative case pattern** is more frequently used in every verb type.



Conclusions

- Polish and Serbian only involve the **DP-DP** frame
- The animacy of the beneficiary does not influence the case pattern in neither Polish nor Serbian.
- In Polish, the accusative-dative and dative-accusative patterns are used interchangeably in double object constructions.
- In Serbian, **the accusative-dative case pattern** is used more frequently in the context of double object constructions.