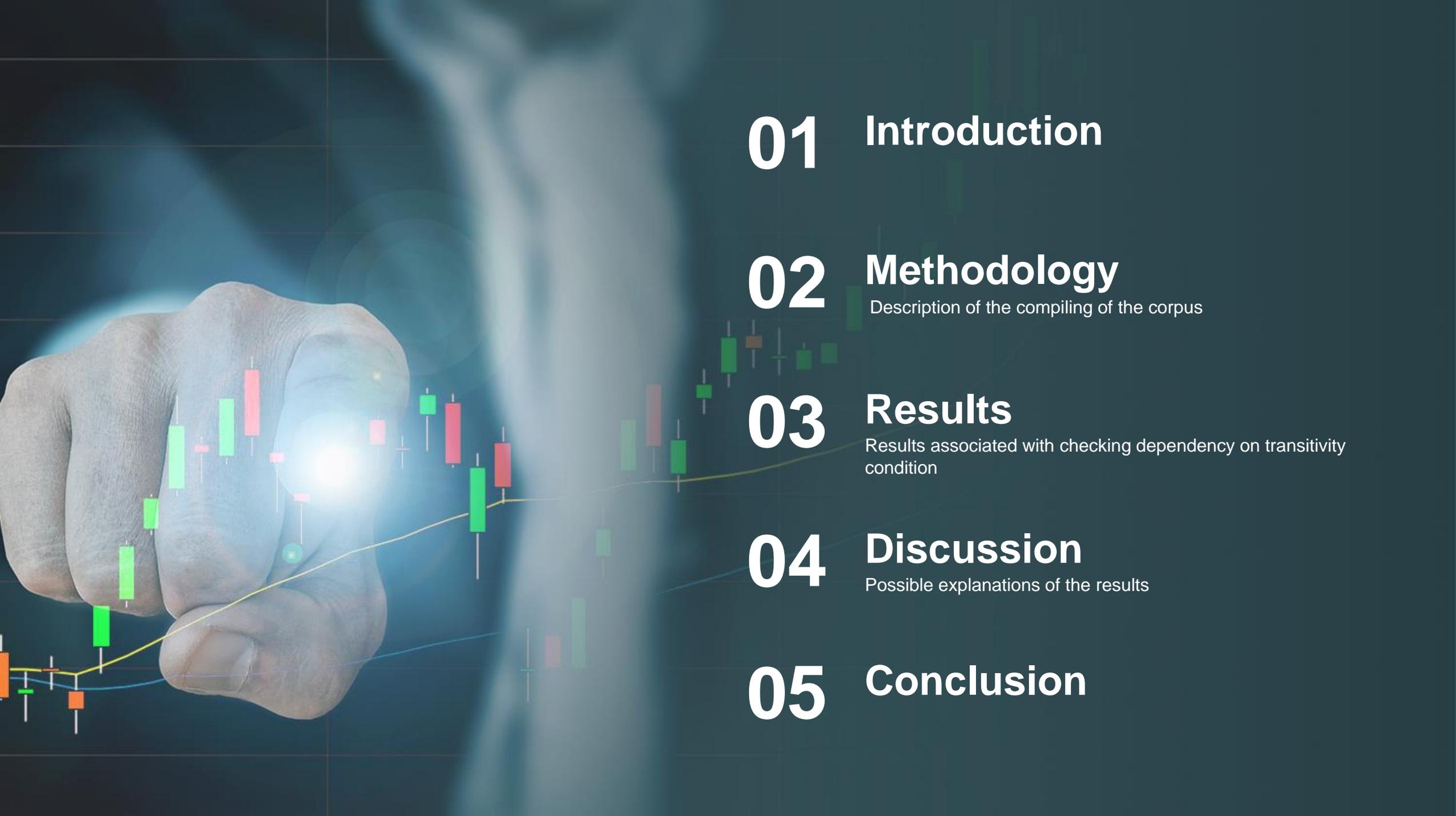


Checking Case assigning dependency on transitivity condition

19.06.2020

Doctoral Colloquium,
Ilia State University

Fieldwork Results



01 Introduction

02 Methodology

Description of the compiling of the corpus

03 Results

Results associated with checking dependency on transitivity condition

04 Discussion

Possible explanations of the results

05 Conclusion



Introduction

Data collection

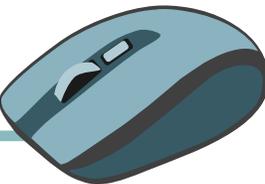
Dissertation: *Differential Subject Marking in Georgian*

Topic

The dissertation is focused on the issue of differential subject marking in Georgian Language. In a broad sense DSM is a linguistic phenomenon that exists in a language if some subjects have a different case, agree differently or occur in different position than others. In a narrower sense such differences are regarded as DSM effects only if they depend on the features of the subject in some way.

Data

- Elicitation of data from already existed corpora
- Creation of sustainable data collection



Corpora



ქართული ენის ეროვნული კორპუსი
The Georgian National Corpus

GNC მთავარი პროექტის შესახებ კორპუსის გამოცემა დოკუმენტაცია პუბლიკაციები

კორპუსები ტექსტების სია

მიზეზი კონკორდანსი კოლოკაციები სიტყვათა სია ტექსტი მამოხილვა გრამატიკული მახასიათებლები

ქართული ენის ეროვნული კორპუსი

Comenius University in Bratislava
UNESCO Chair in Plurilingual and Multicultural Communication

Aranea Project Main NoSketch Engine Site

Language
Arabic (not tagged yet)
Bulgarian
Chinese (simplified script)
Czech
Dutch
English
English (African TLDs)
English (Asian TLDs)
Finnish
French
French (African TLDs)
French (Canada)
Georgian
German
Hungarian
Italian
Latvian
Polish

LANGUAGES

- > English
- > Georgian

Monolingual corpus

- > New and Modern Georgian Corpus
 - > Sub-corpus selection
 - > Queries
- > Old and Middle Georgian

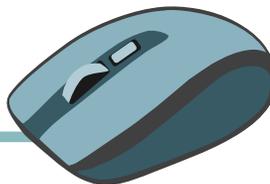
The Knight in the Panther's Skin



<http://gnc.gov.ge/gnc/page>

<http://unesco.uniba.sk/aranea/>

<http://corpora.iliauni.edu.ge/>

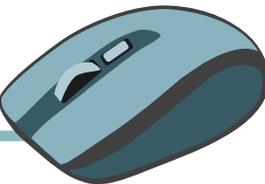


Data Creation

The sustainable data is a spoken corpus of 21 native-speaking informants which includes spontaneous speech. The aim of this data collection was not the documentation of language use in any communicative situation, it simply had to be informative for the research questions.

The main **objectives** of the creating a spoken corpus were:

- to carry out the study that will shed light on the use and properties of DSM in spoken Georgian
- to identify the main features of DSM, based on different diagnostic tests.



Outline

Compilation of the corpus

- (a) stages of the creation of data collection;
- (b) annotation of the data;
- (c) software used for the compilation of corpus

Results

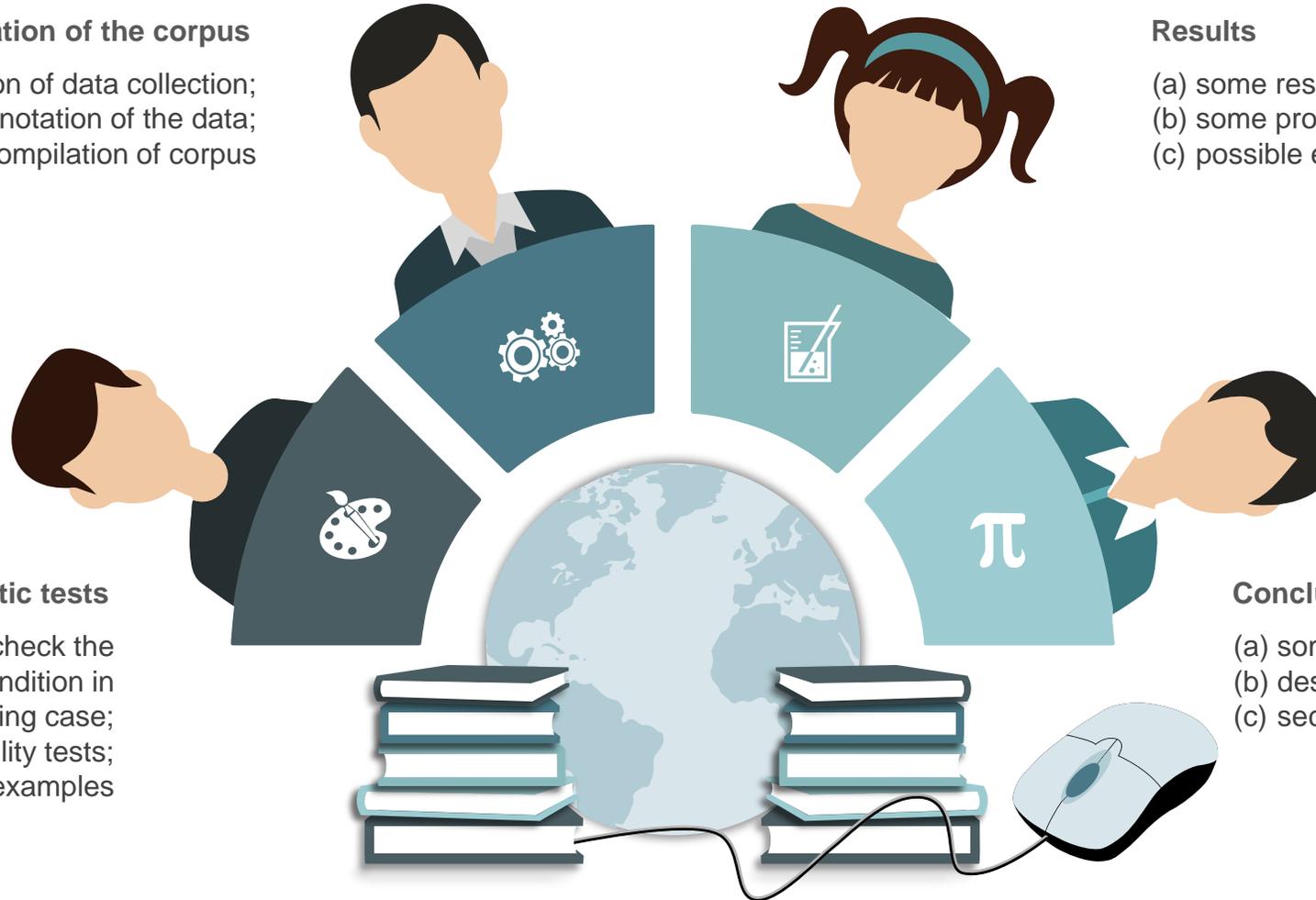
- (a) some results on tests;
- (b) some problematic issues;
- (c) possible explanation and discussion.

Diagnostic tests

- (a) diagnostic tests used to check the importance of transitivity condition in assigning case;
- (b) acceptability tests;
- (c) examples

Conclusions

- (a) some conclusive remarks
- (b) desiderata of work
- (c) second stage of fieldwork

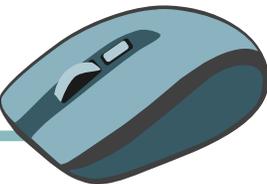




Methodology

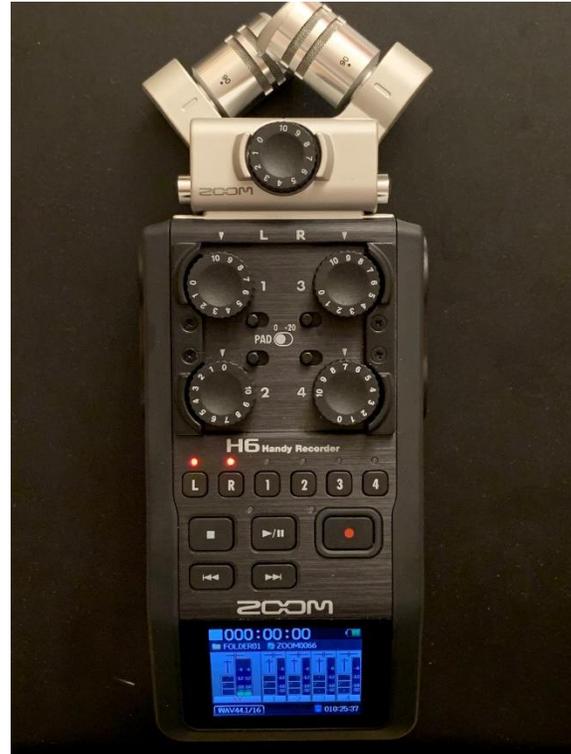
Data Creation

The corpus includes data of 21 native-speaking informants. The average word count per speaker is approximately 3000 words. The native-speaking informants include different age and professional groups. There are 4 groups mainly: (a) group of linguists; (b) group of bilinguals; (c) group of the informants associated with humanitarian studies, and (d) group of the informants associated with technical studies. The age range of informants varies from 16 to 74, to observe if there are any differences between generation answers. All informants answered the same tests, hence the data are maximally comparable.



Data Creation

The data has been created by using H6 Handy Six-Track Portable Recorder



Data Creation

<https://software.sil.org/toolbox/>

The data has been annotated using Toolbox software following Leipzig Glossing Rules

Search...

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FIELD LINGUIST'S TOOLBOX

LANGUAGE TECHNOLOGY

Texts.txt

Reference	Fish.007
Text	Din todn sezgonsi, "Detn klimen blo doshuse tn eh?"
Morpheme Breaks	d -i -n tod -n sez -go -ns -i d -et -n klime -n blo doshus -et -n eh
Gloss English	the -1 -Nom frog -Nom say -DPst -Punct -1 the -3 -Nom weather -Nom under good -3 -Nom Ques
Part of Speech	det -g -case n1 -case v -tns -asp -g det -g -case n3 -case postp adj -g -case part
Free Translation	The frog said, "How is the weather down there?"
Reference	Fish.008
Text	Don jlyn sezgonso, "Dukyetch! Dukyetch joy me!"
Morpheme Breaks	d -o -n jly -n sez -go -ns -o duky -et duky -et -j joy -me
Gloss English	the -2 -Nom fish -Nom say -DPst -Punct -2 wet -3 wet -3 -Obj like -1s
Part of Speech	det -g -case n2 -case v -tns -asp -g adj -g adj -g -case v -pers
Free Translation	The fish said, "Wet, just the way I like it!"

Language Data Management and Analysis

DOWNLOADS

Toolbox is a data management and analysis tool for field linguists. It is especially useful for maintaining lexical data, and for parsing and interlinearizing text, but it can be used to manage virtually any kind of data. Toolbox is free to download and use.

Although Toolbox is very powerful, it is designed to be easy to learn. The user can start with a simple standard setup and gradually add the use of more powerful features as desired. The Toolbox downloads include a training package that is usable for self-paced individual learning as well as for classroom teaching



Data Creation

<https://software.sil.org/toolbox/>

The data has been annotated using Toolbox software following Leipzig Glossing Rules

```
Texts.txt - Notepad
File Edit Format View Help
\ft Ok
\nt

\ref KAT-DLG-TEST-001-A01.005
\tx nik'as      mosts'ons      nik'as      moets'ona      da      nik'as      mosts'onebia
\mb nik'a -s   mo-   s-      ts'on -s      nik'a -s   mo-   e-      ts'on -a      da      nik'a -s   mo-   s-      ts'on -eb   -i
-a
\ge Nika -DAT PR- 3.OBJ- like -3SG.SBJ Nika -DAT PR- APPL- like -3SG.SBJ and Nika -DAT PR- 3.OBJ- like -THM -
INFL -3SG.SBJ
\ps NPRP -case pref- pers- V -pers NPRP -case pref- pref- V -pers C NPRP -case pref- pers- V -suff -
suff -pers

\ft Nika lilkes, Nika liked, Nika used to like
\nt

\ref KAT-DLG-TEST-001-A01.006
\tx nik'as      mosts'onda      droshia      skhvaoba      am
\mb nik'a -s   mo-   s-      ts'on -d   -a      dro -shi   -a      skhvaoba      am
\ge Nika -DAT PR- 3.OBJ- like -IPFV -3SG.SBJ time -in.DAT -COP difference:SG.NOM this:NNOM
\ps NPRP -case pref- pers- V -suff -pers N -P -V N PN

\tx ts'inadadebashi
\mb ts'inadadeba -shi
\ge sentence -in.DAT
\ps N -P

\ft
\nt

\ref KAT-DLG-TEST-001-A01.007
\tx nik'as mosts'ons aris akhlandeli dro nik'as moets'ona ts'arsuli moets'ona nik'as moets'ona esets sheidzleba ts'arsulad
```



Data Creation

DSM Database

Recordings

Informant 1

Resources

MediaFile	Format
Type:	audio
Format:	audio/x-wav
Size:	332,709,120 bytes
Play & download:	

WrittenResource	Format
Type:	dialogue (dlg)

Contributors

S. Berikashvili

Country

Georgia

Genre

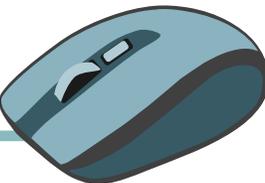
Tests & Dialogues

Size

399 soundfiles

Total duration 21 hours

Approximately 63000 words



Data Creation

The spoken corpus data with interviews and different kind of diagnostic tests consisted of 19 exercises. Each of the exercise has been designed to test different kind of features and properties associated with DSM, for instance, dependency of case assigning on animacy feature of the subject, on transitivity of the verb, on aspect, or more precisely on perfectivity of the verb, etc.



Method

The method used for the study was the manipulation of different sentences and constructions

Three manipulating tests have been designed to test transitivity condition, namely:

- Alternation of verbs in tense;
- Alternation of verbs in aspect;
- Alternation of transitivity of verbs

In each case seven sentences have been compiled testing dependency of Case on:

- Animacy feature;
- Transitivity;
- Perfectivity.





Results

Testing Diagnostics

1. Animacy

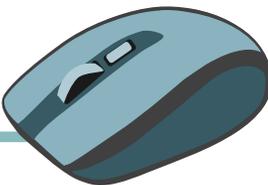
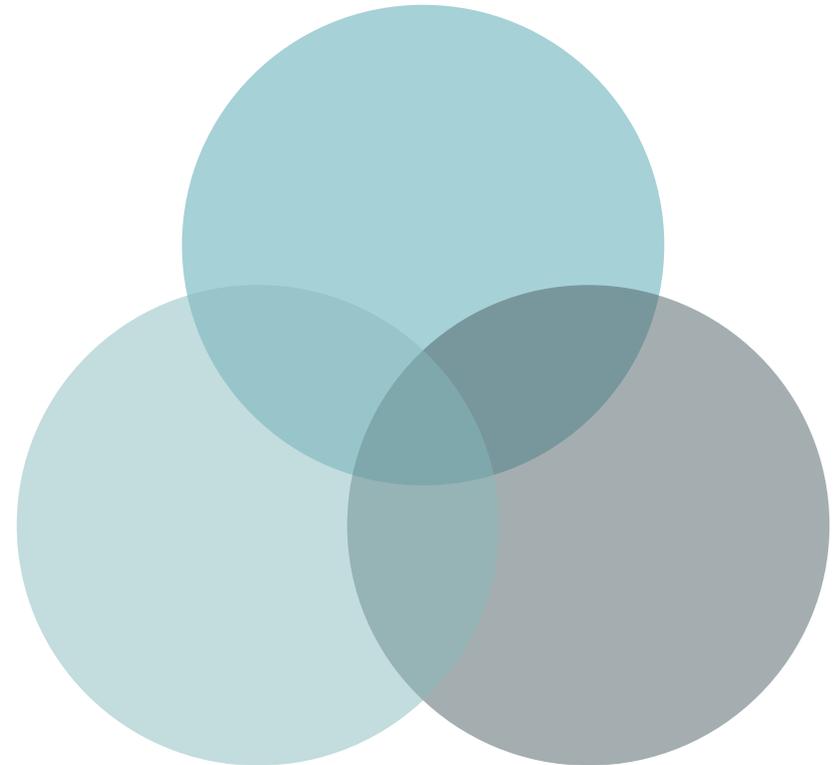
Checking whether the assigning of ERG case depends on the animacy feature

2. Transitivity condition

Checking if transitivity is decisive for assigning ERG case

3. Perfectivity

Checking the role of Aspect in assigning ERG



Results

The results are given for 15 informants' answers. Group of bilinguals is not accounted this time, as additional issues, like use of NOM where ERG generally is accepted (which is the result of interlingual/transfer errors) have to be taken into account.

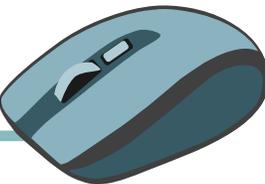
The examples were chosen in such a way that transitive/indirect transitive/intransitive verbs were mixed, so that the informant could not follow just one structure. There were also some problematic intransitive: unaccusative verbs, which do not possess all forms. The main idea was to see if there is any problem in assigning ERG with intransitive verbs and to test where the problems in producing occur.



Results

The task was to produce the same sentences in the past tense forms: (a) IPFV.PST; (b) PFV.PST; (c) PRF.PST. No hint was given to which form had to be mentioned first. The ratio of this test was:

- to see which form with which verb is picked first (testing the **intuition** of informants for more productive use);
- with which verbs **problems** occur and informants have trouble in producing the appropriate form;
- which **strategy** is used when there is no relative form in the language formed from the same verb, but is replaced by other form.

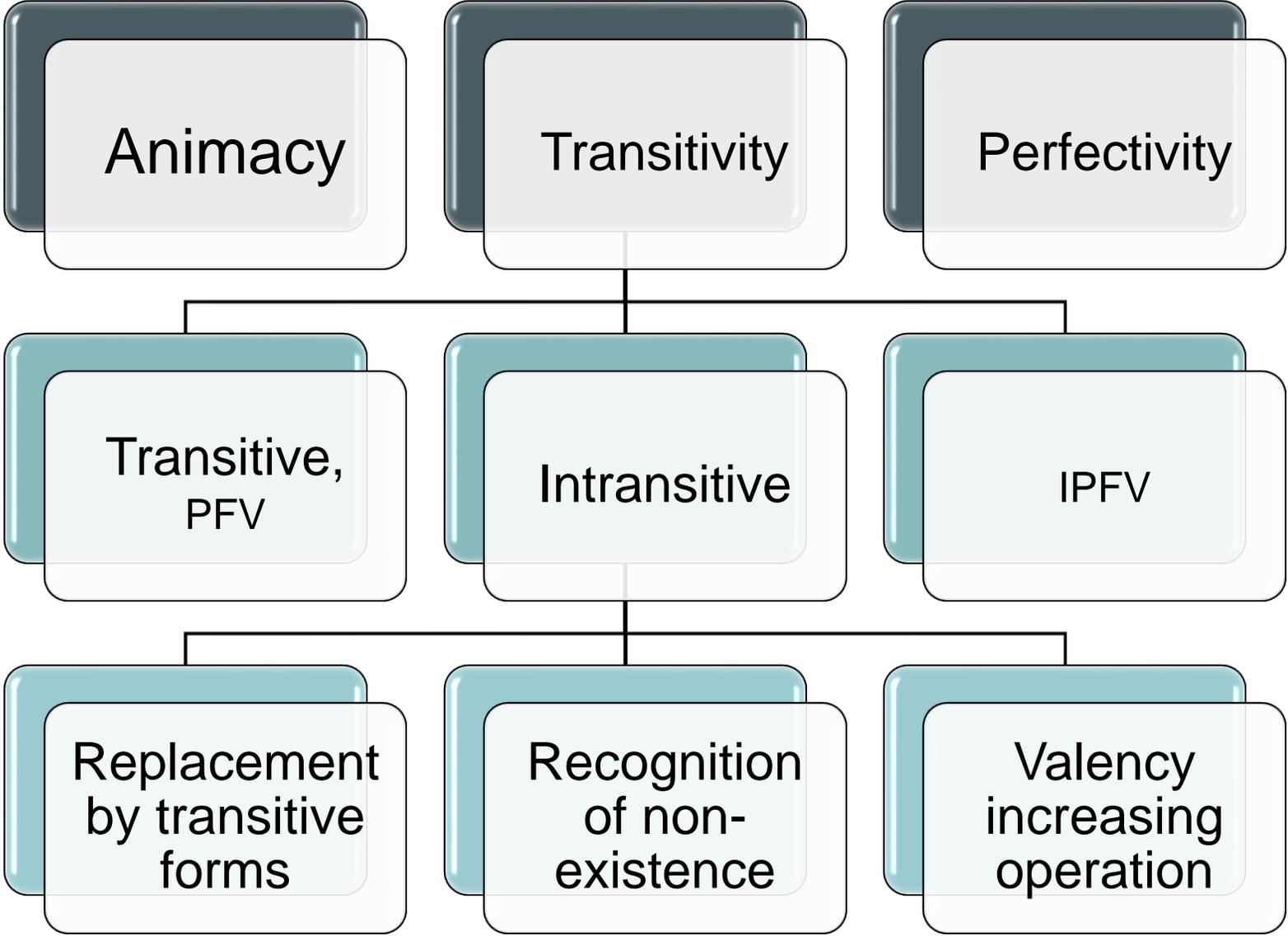


Results

Diagnostics

Intuition

Strategy



Example

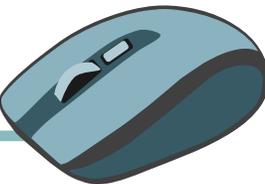
Alternation of transitive and intransitive verbs in different tenses and aspects

(1) *kal-i* *a-chven-eb-s* *surat-s*
 woman-NOM PR-show-THM-3SG.SBJ:PRS picture-DAT
 'Woman shows a picture'

Feature of the subject: +human; verb: transitive, active; subject case:NOM

(2) *kal-i* *dard-ob-s*
 woman-NOM PR-show-THM-3SG.SBJ:PRS
 'Woman shows a picture'

Feature of the subject: +human; verb: intransitive, unergative, medioactive; subject case:NOM



Example

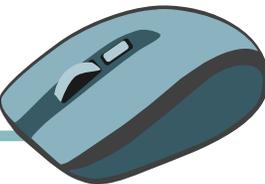
Alternation of transitive and intransitive verbs in different tenses and aspects

(3) *av-i* *dzaghl-i* *kben-s* *bavshv-eb-s*
 unkind-NOM *dog-NOM* *bite-3SG.SBJ:PRS* *child-PL-DAT*
 ‘Angry dog bites children’

Feature of the subject: -human; verb indirect transitive, voice active; subject case:NOM

(4) *av-i* *dzaghl-i* *i-kbin-eb-a*
 unkind-NOM *dog-NOM* *PV-bite-THM-3SG.SBJ:PRS*
 ‘Angry dog bites’

Feature of the subject: +human; verb intransitive; subject case:NOM



Example

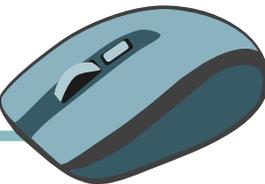
Alternation of transitive and intransitive verbs in different tenses and aspects

(5) *uamrav-i* *khe-∅* *i-chr-eb-a*
lots-NOM tree-NOM PV-cut-THM-3SG.SBJ:PRS
'A lot of trees are cut'

Feature of the subject: inanimate; verb intransitive, voice passive; subject case:NOM

(6) *khe-∅* *i-skham-s* *potol-s*
tree-NOM PV-cover-3SG.SBJ:PRS leaf-DAT
'Tree covers with leaves'

Feature of the subject: inanimate; verb transitive; subject case:NOM



Example

Alternation of transitive and intransitive verbs in different tenses and aspects

(7) *mer-i* *i-tsin-i-s*
lots-NOM PV-smile-THM-3SG.SBJ:PRS
'Mary smiles'

Feature of the subject: inanimate; verb intransitive, unergative; subject case:NOM

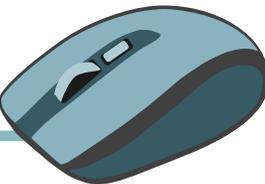


Example

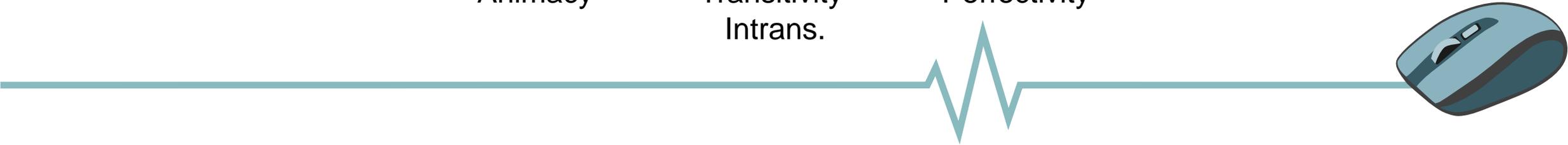
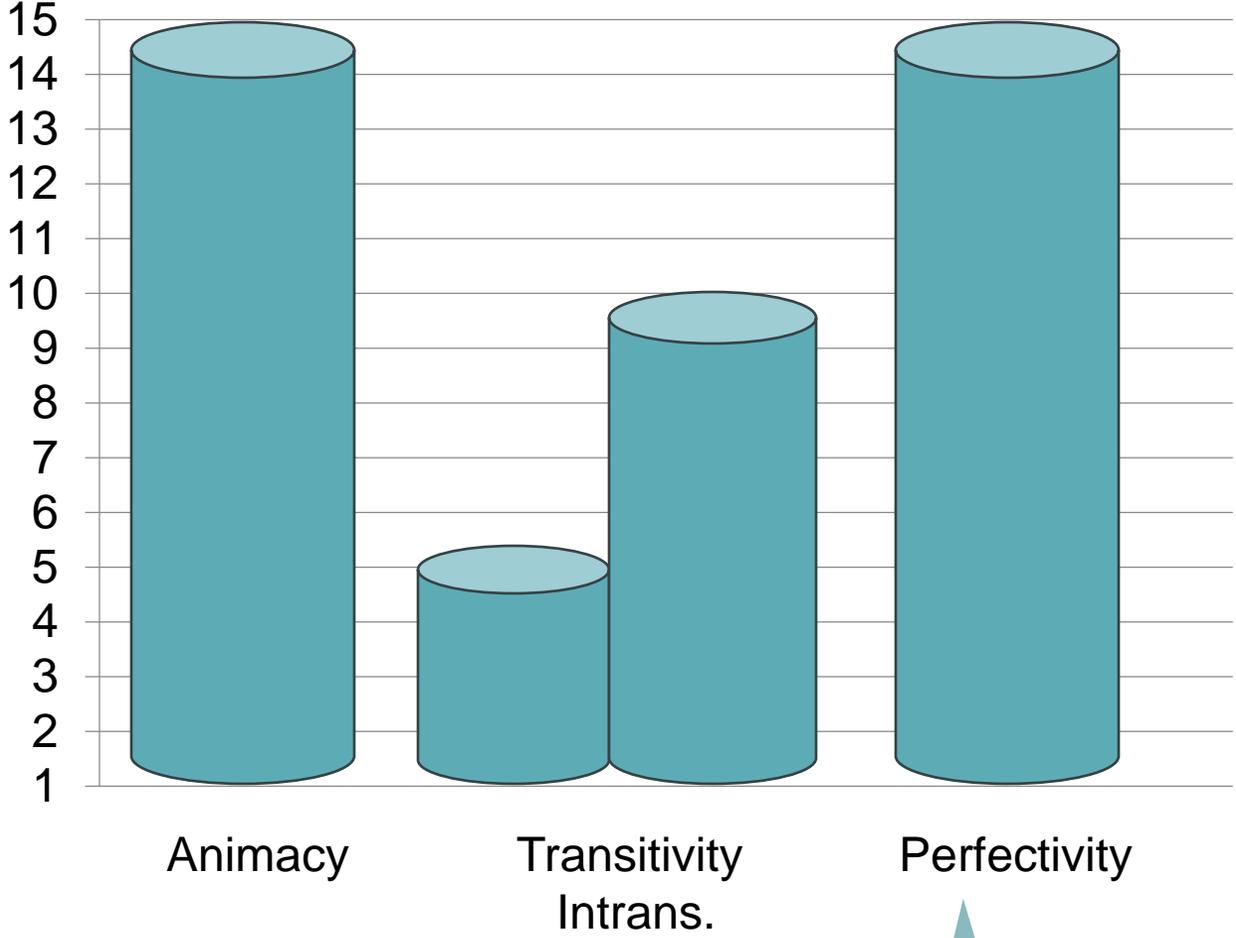
Alternation of tense gives subject case variability in transitives and unergatives, and case preservation in intransitive unaccusatives

EXPECTED ANSWERS:

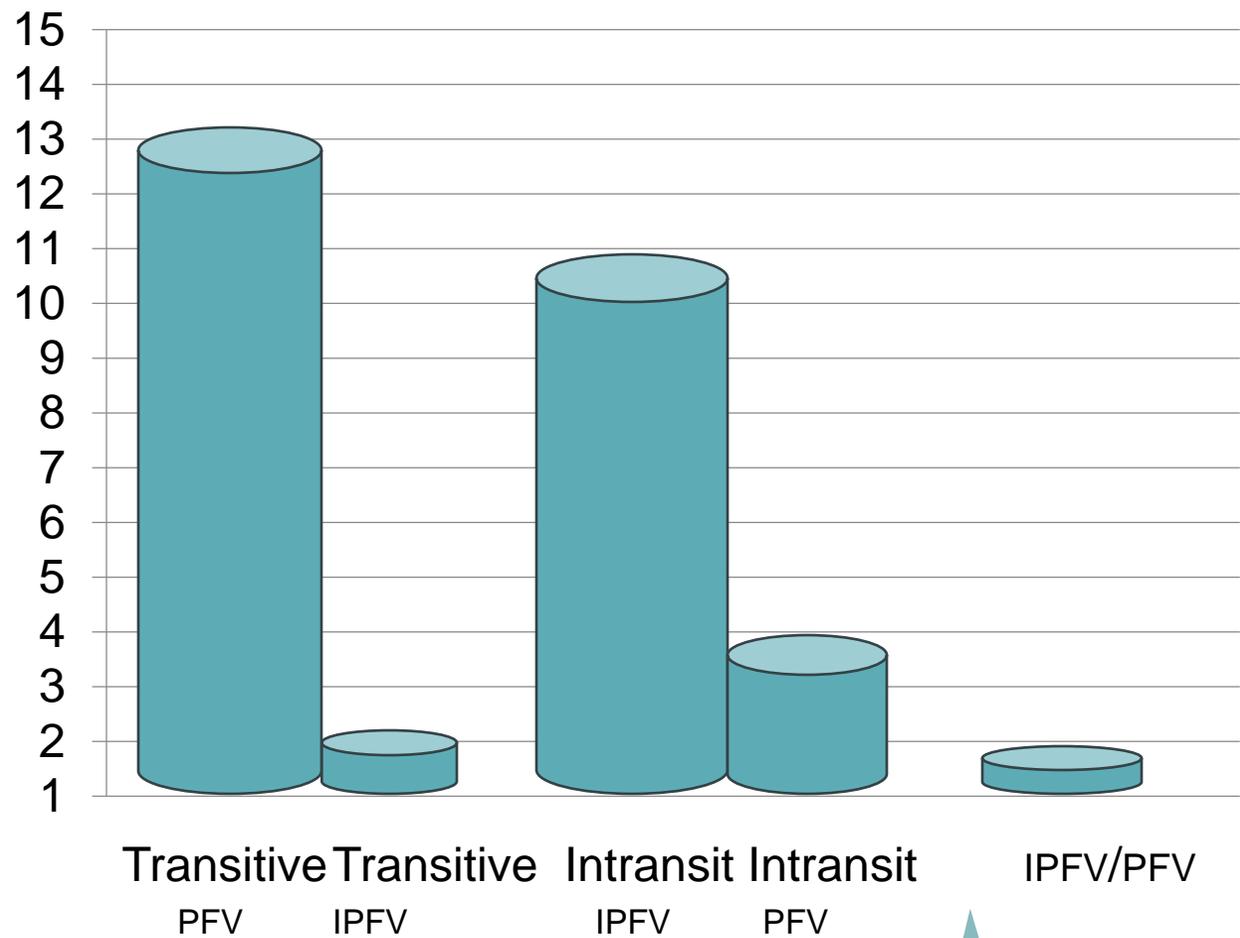
- (1) b. *kal-i* *a-chven-eb-d-a* *surat-s*
 woman-NOM PR-show-THM-IPFV-3SG.SBJ:PRS picture-DAT
 'Woman was showing a picture'
- c. *kal-ma* *a-chven-a* *surat-i*
 woman-ERG PR-show-3SG.SBJ:PFV.PST picture-NOM
 'Woman showed a picture'
- d. *kal-s* *u-chven-eb-i-a* *surat-i*
 woman-DAT PV-show-THM-PRF-3SG.SBJ:PST picture-NOM
 'Woman has showed a picture' etc.



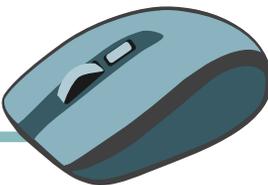
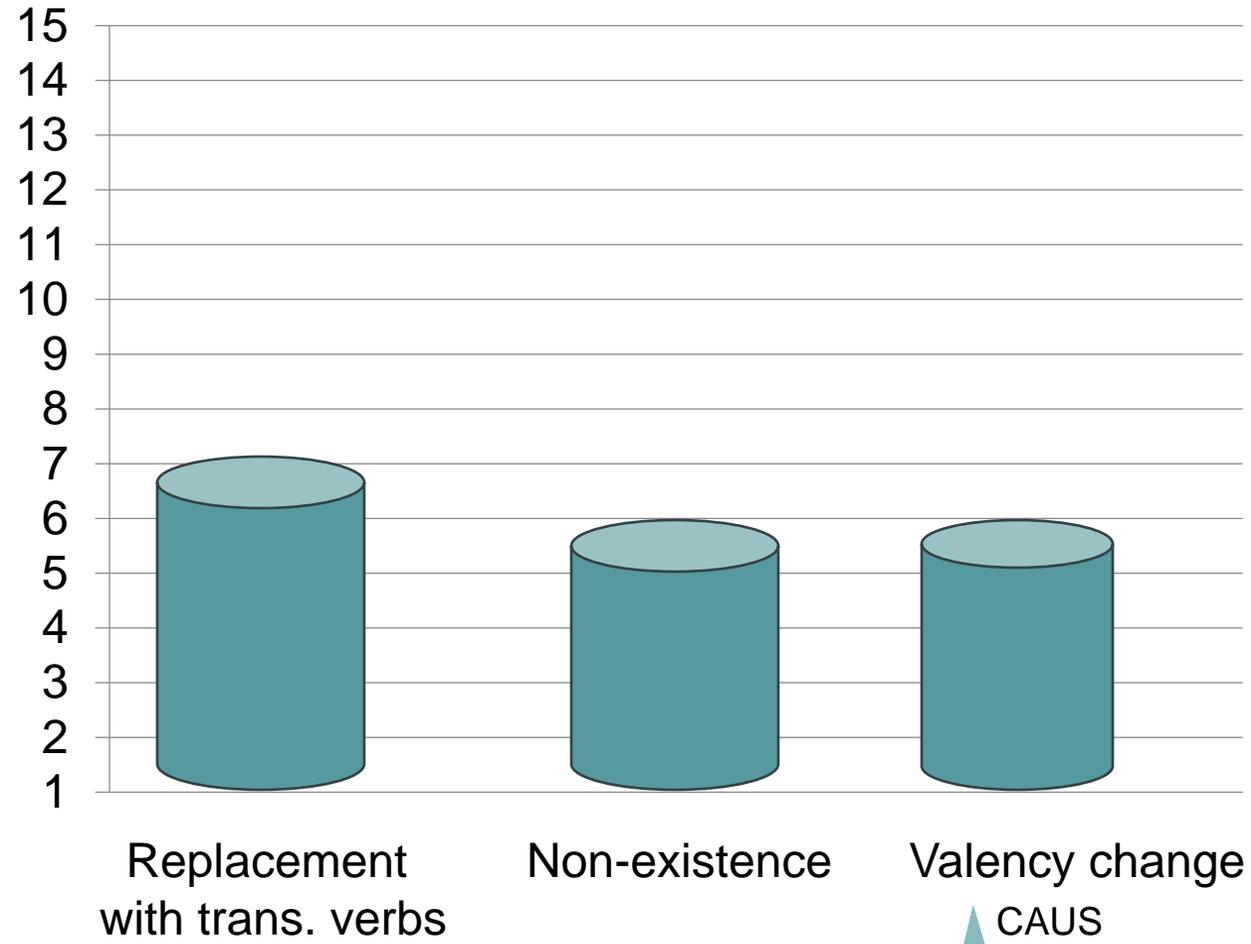
Test Diagnostics



Intuition



Strategy





Discussion

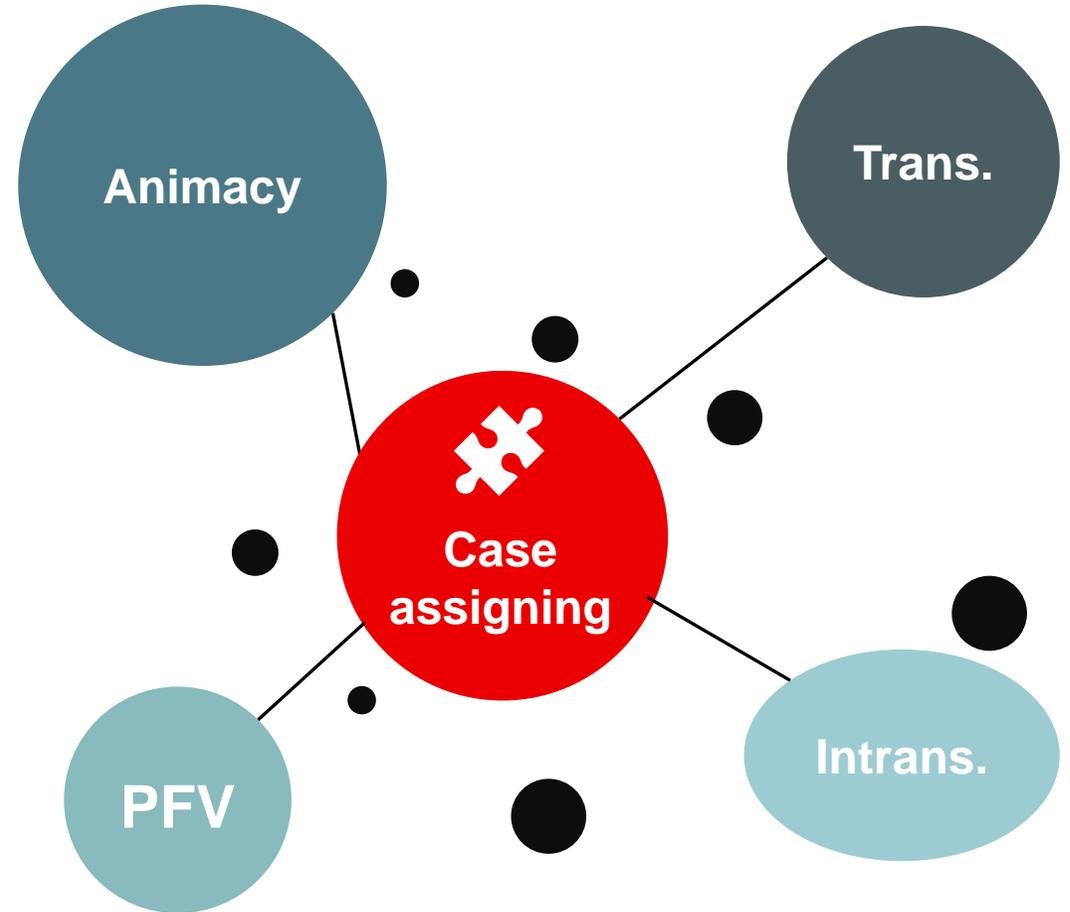
Diagnostics

Discussion

Animacy: Native speaking informants have no problems of using ERG with transitive verbs with subject properties: \pm human/inanimate. The difficulties occur in intransitive verbs, which do not depend on the nature of the subject. (15)

Transitivity: Problematic are intransitive verbs: unergatives and unaccusatives, where native-speaking informants encounter problems while producing the forms. (5/10)

Perfectivity: No problems in productions occur in the case of PFV Aspect, ERG is assigned to the external argument wherever all other morphological conditions are met. (15)



Intuition

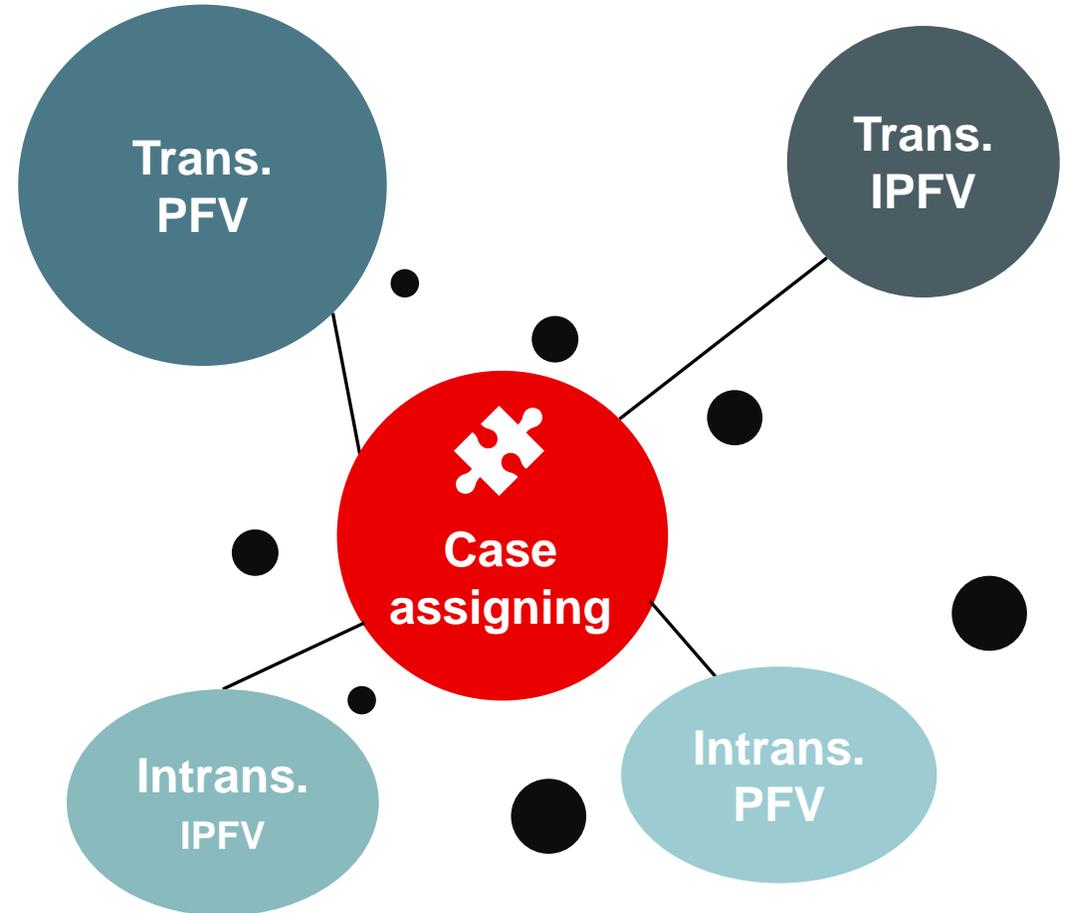
Discussion

Which form is picked up first in Transitive and Intransitive verbs?

In transitive verbs the first form which is picked up is PFV.PST, i.e. the form which is potentially used with ERG (13/2)

In intransitive verbs the first form which is picked up is IPFV.PST, i.e. the form which is potentially used with NOM (11/4)

Two informants have the strategy to say everything in one aspect and then change it to the other.



Strategy

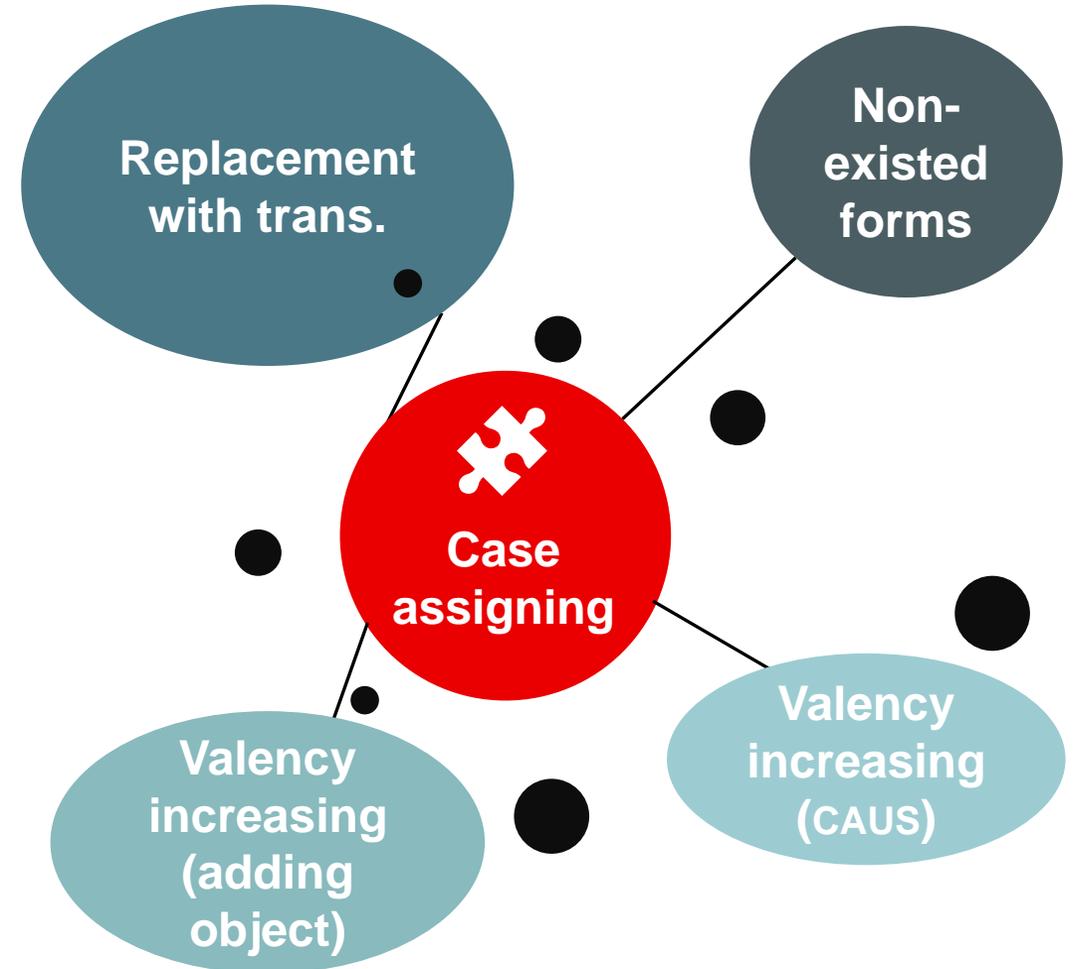
Discussion

What strategies have been used by informants with intransitive verbs, which do not possess forms of PFV.PST and subsequently, cannot assign ERG to the external argument?

Replacement with transitives (7) is important strategy as it shows that decisive must be the existence of both arguments in the structure.

The same can be stated for the **valency increasing operations** (6). Both: adding object and formation of causatives indicate that there is a need of inserting the internal argument, so that the structure does not crash and ERG can be assigned.

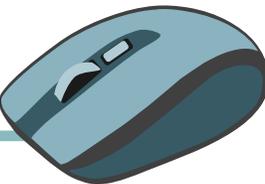
The acknowledgment of the fact that **the forms of PFV.PST do not exist** (6) highlights also, that intransitive forms encounter problems while assigning ERG.



Summary

The results highlight:

- The problematic for assigning ERG are intransitive verbs;
- Intuitively native-speaking informants feel that transitive forms are more natural with ERG, than intransitive ones;
- All strategies used for formation of problematic forms in PFV.PST include **valency increasing** operations, so that the internal argument is inserted and the structure behaves like transitive.



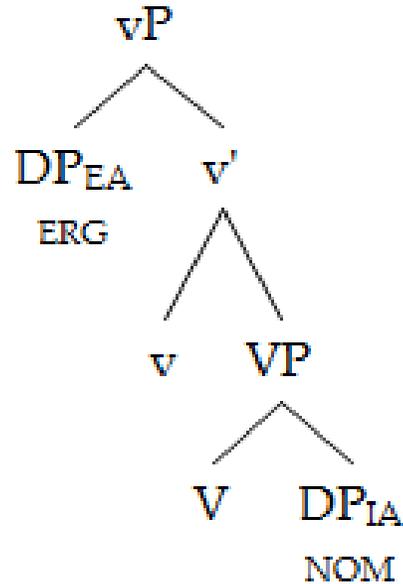


Conclusions

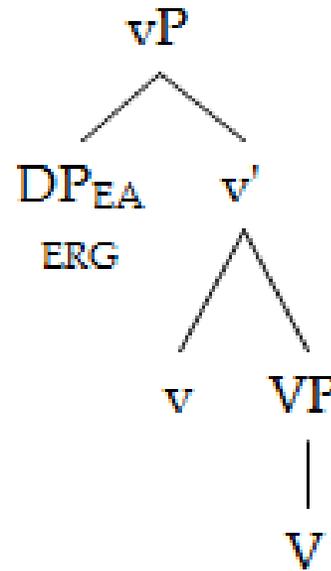
Conclusion

This empirical evidence shows that **transitivity condition** is decisive for assigning ERG case to the external argument.

transitive

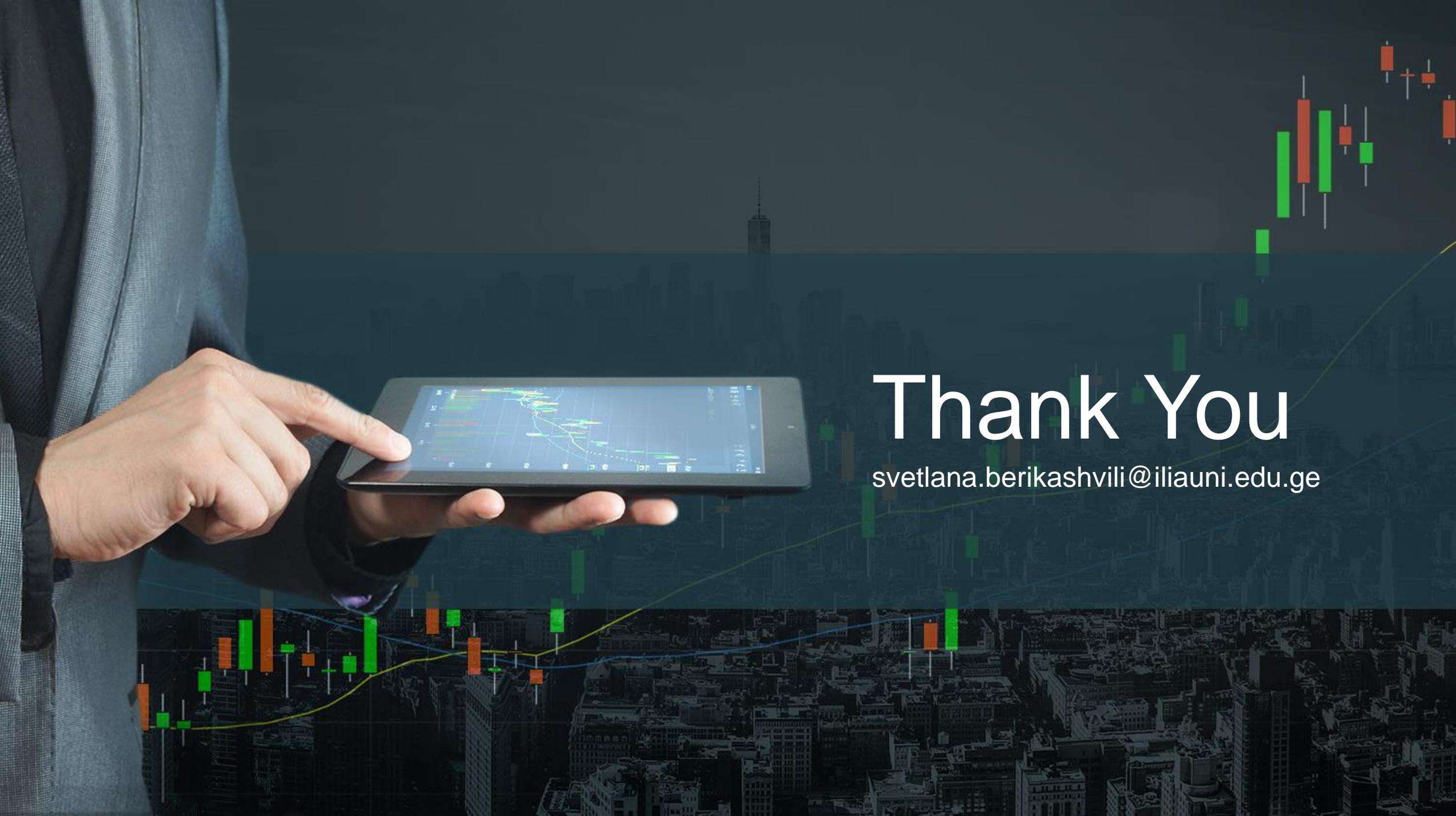


unergative



The next step in the empirical argumentation is to manipulate sentences with unergative verbs to test whether they have implicit object as such.





Thank You

svetlana.berikashvili@iliauni.edu.ge