

Argument Omission between Valency and Construction

Evidence for Sentence Type Effects from Acceptability Rating Studies



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Argument omission (AO) is defined as the non-realization of arguments that are governed by the verb in non-elliptical contexts.

Central Hypotheses

H1 The possibility to omit arguments, (also) depends on the verb which selects the arguments [1].

[Context: Klara's phone is ringing.]

Klara nimmt (den Hörer) ab.

'Klara picks up (the receiver).'

[Context: Udo hands Klara the shopping basket.]

*Sie nimmt *(den Korb).*

'She takes (the basket).'

H2 The possibility to omit arguments, (also) depends on the sentence type in which they should be realized [2].

[Context: Udo hands Klara the shopping basket.]

*Udo: "Sofort *(den Korb) nehmen!"*

"Take (the basket) immediately!"

directive infinitive

Udo: "Nimm mal (den Korb)!"

"Take (the basket)!"

directive imperative

Udo: "Nimm (den Korb) oder ich gehe nach Hause."

"Take (the basket) or I'll go home."

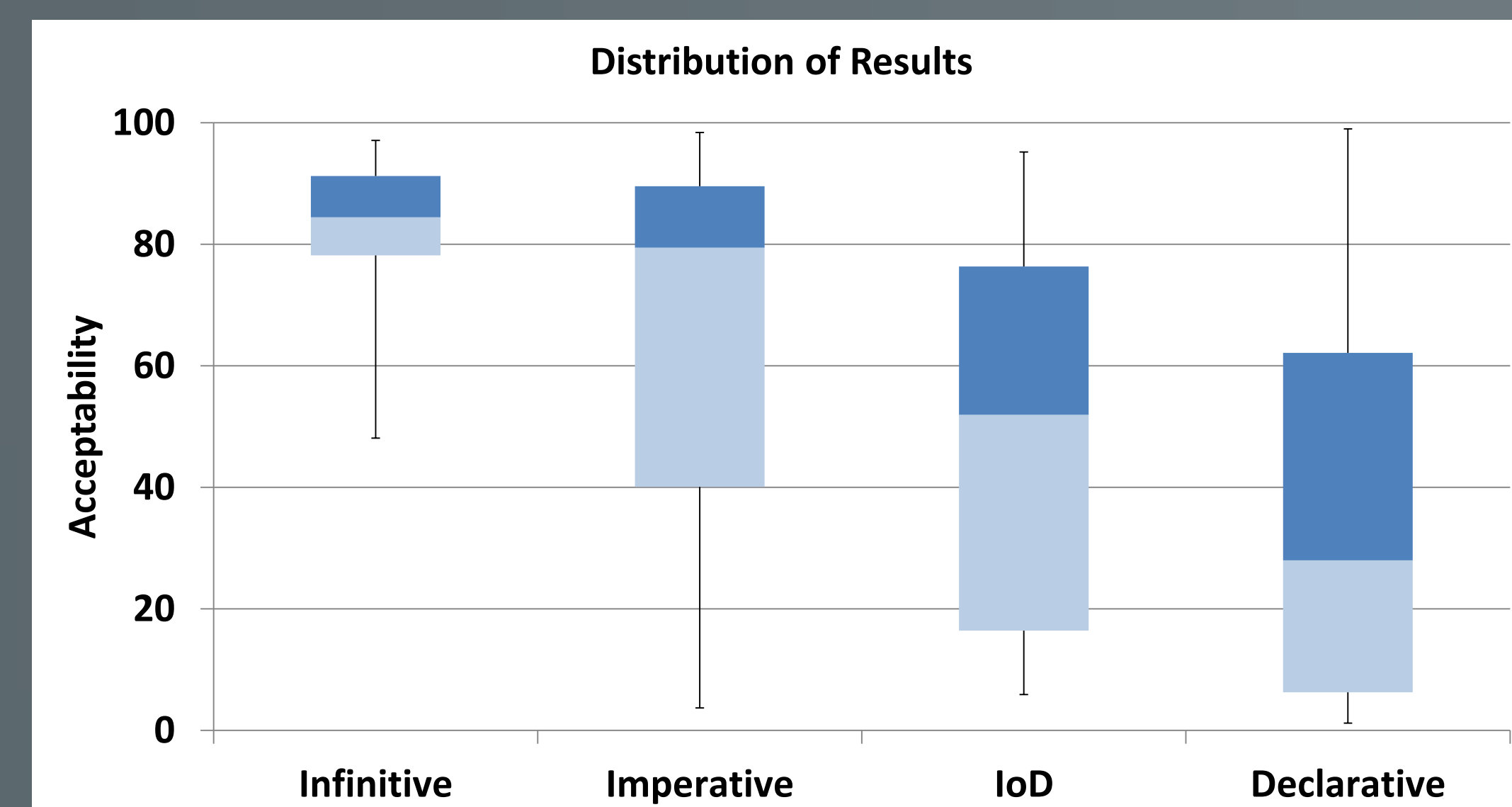
imperative + or + declarative (IoD)

*Klara nimmt *(den Korb).*

Klara takes *(the basket).

assertive declarative

	infinitive	imperative	IoD	declarative
mean	82.7%	63.7%	48.3%	36.6%
range	49	94.7	89.3	97.8
standard deviation	10.7	31	30.8	32



Example *einschalten* (to switch sth. on) [mean acceptability 64.8%]

directive infinitive [88.5%]

[Context: A couple in their car. She says:]

Schnell das Radio einschalten!

'Quickly, switch on the radio.'

directive imperative [89.7%]

[Context: A couple in their car. She says:]

Schnell, schalt das Navigationsgerät ein!

'Quickly, switch on the navigation system.'

IoD [52.9%]

[Context: A man returns to his office during a hot summer and sees that his colleague has switched off the ventilator. He says:]

Schalt den Ventilator wieder ein, oder ich bekomme einen Hitzschlag!

'Switch the ventilator back on, or I will suffer a heat stroke!'

assertive declarative [28%]

[Context: A couple after dinner. He says:]

Ich schalte den Geschirrspüler ein.

'I switch on the dishwasher.'

• A sentence type is a conventional pairing of a sentence form and an illocution [3].

• Sentence types of German differ in the position of the finite verb, the verb mode and the presence of a *wh*-element.

• Under sentence type effects, we understand the influence of a sentence type on the (non-)realization of a verb's arguments in the respective sentence type.

Primary Sentence Type Effect

We are dealing with a *primary sentence type effect* (PSTE) if a sentence type determines directly whether and which arguments can be omitted independently from the choice of the verb and independently from the possibility of AO in other sentence types.

To argue for a PSTE in the data, we had to show that

(a1) the results in the respective sentence type were not influenced by the verb and

(a2) the results for this sentence type were independent from the results for other sentence types.

Validation of (a1)

Correlation of mean acceptability values of all verbs across all four sentence types (MV) with the results of all verbs in the respective sentence type (RES).

For a PSTE, there should be no significant correlation.

Validation of (a2)

Correlation of RES of each sentence type with the RES of the other sentence types.

For a PSTE, there should be no significant correlation between the sentence type in question and any of the other sentence types.

Secondary Sentence Type Effect

We are dealing with a *secondary sentence type effect* (SSTE) if the verb has a large influence on AO in the respective sentence type and there is also a systematic relationship between the AO behaviour in the respective sentence type and the AO behaviour in at least one other sentence type.

To argue for a SSTE in the data, we had to show that

(b1) the verb has an influence on an argument's omissibility and

(b2) the results for this sentence type are related to the results of at least one other sentence type.

Validation of (b1)

Correlation of mean acceptability values of all verbs across all four sentence types (MV) with the results of all verbs in the respective sentence type (RES).

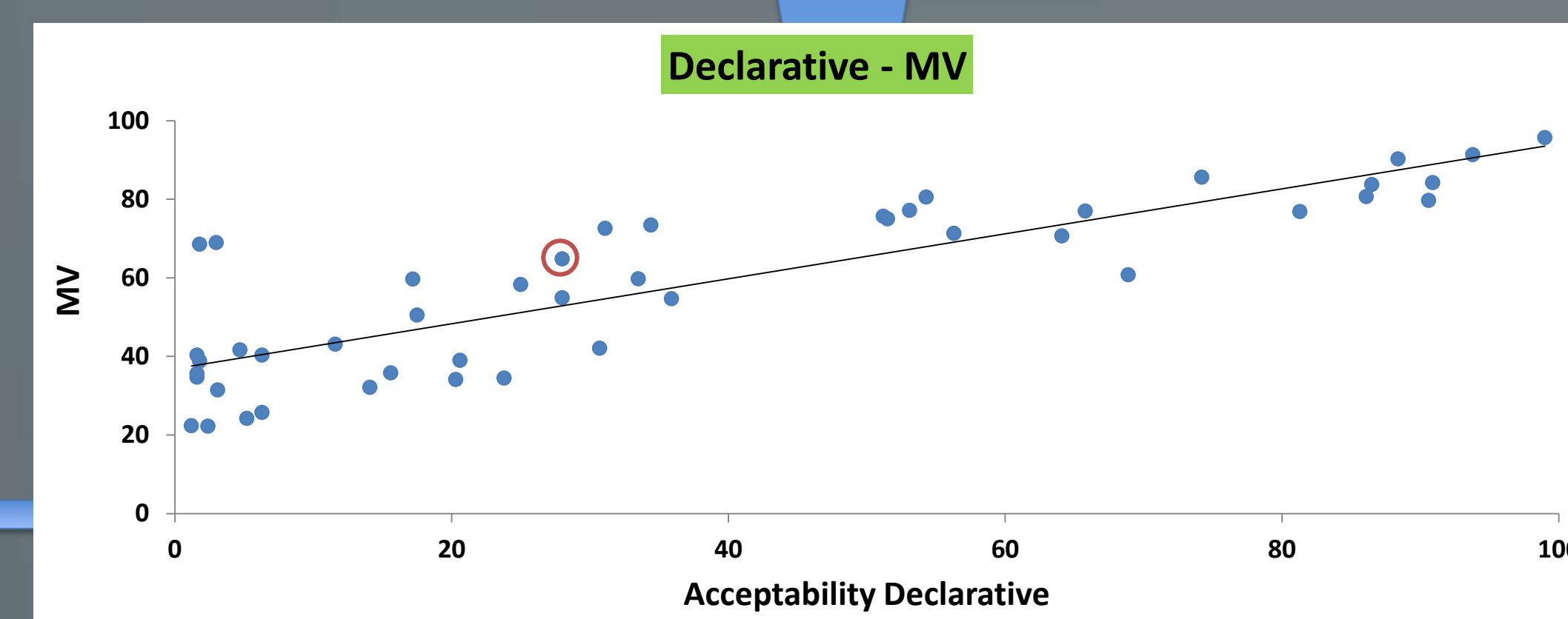
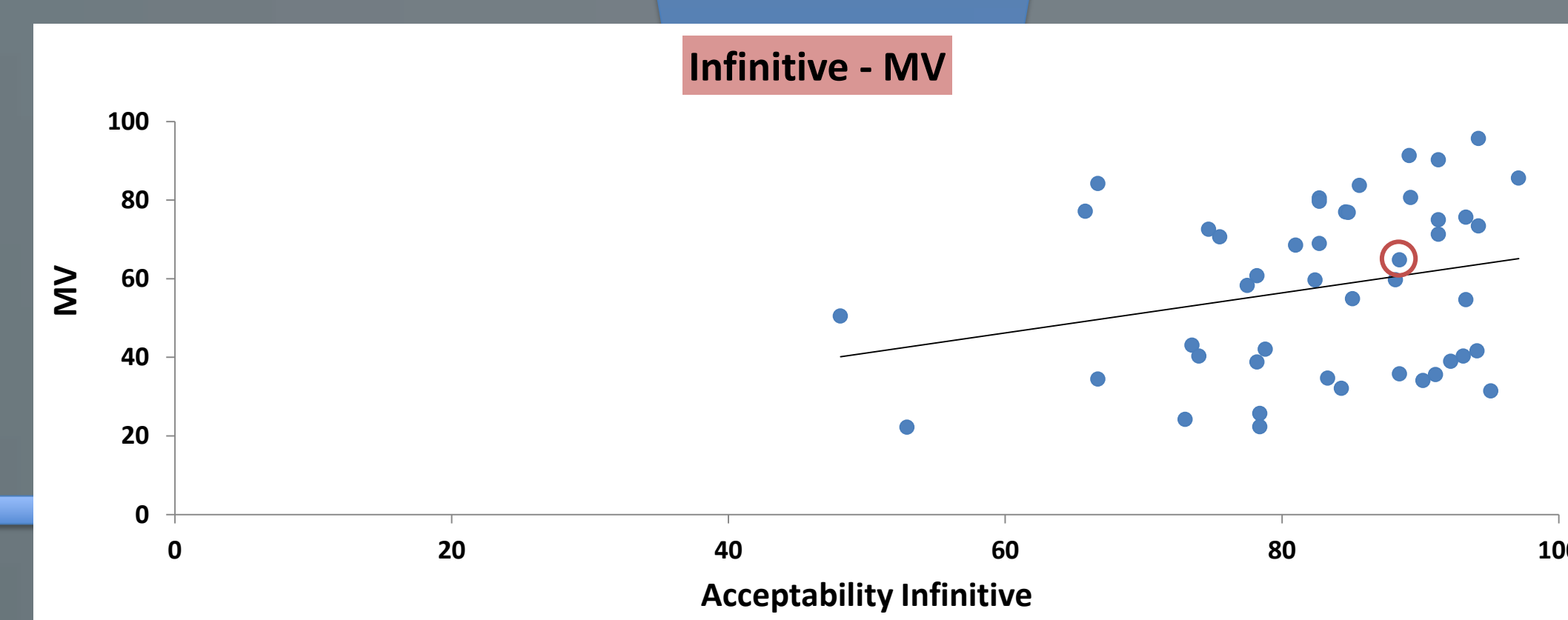
For a SSTE, there should be a significant correlation.

Validation of (b2)

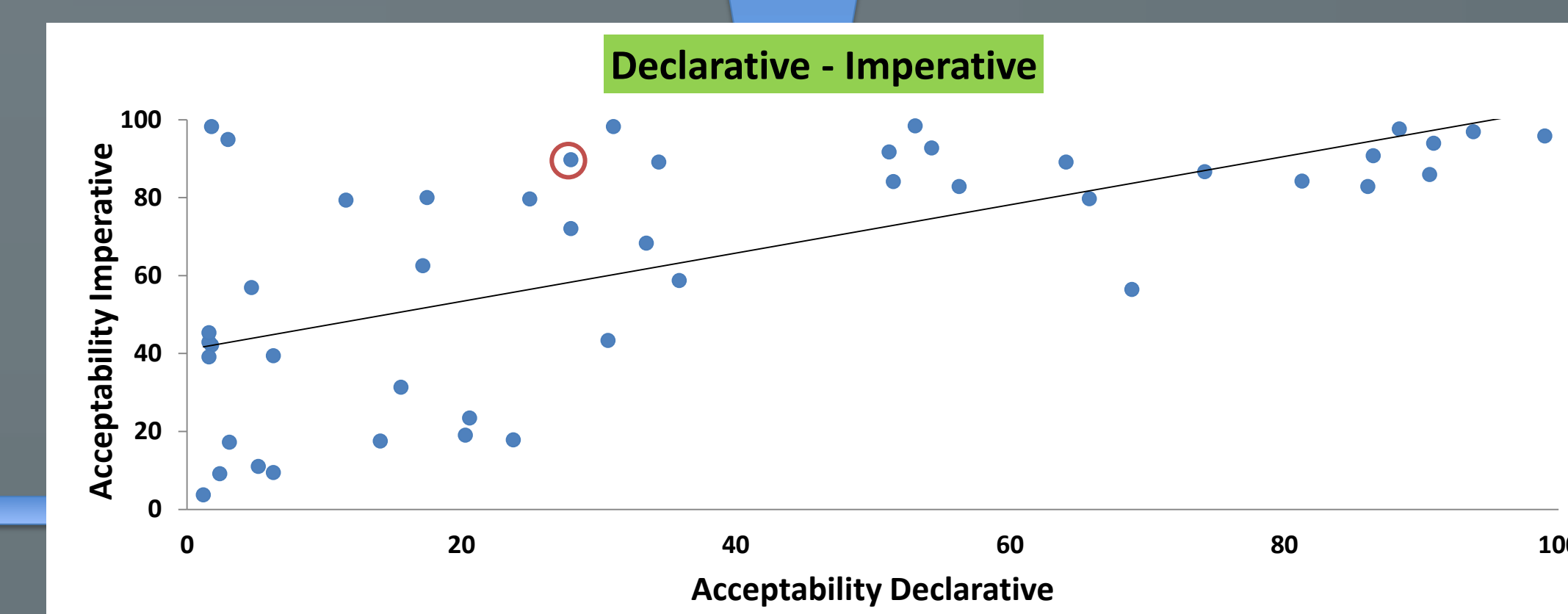
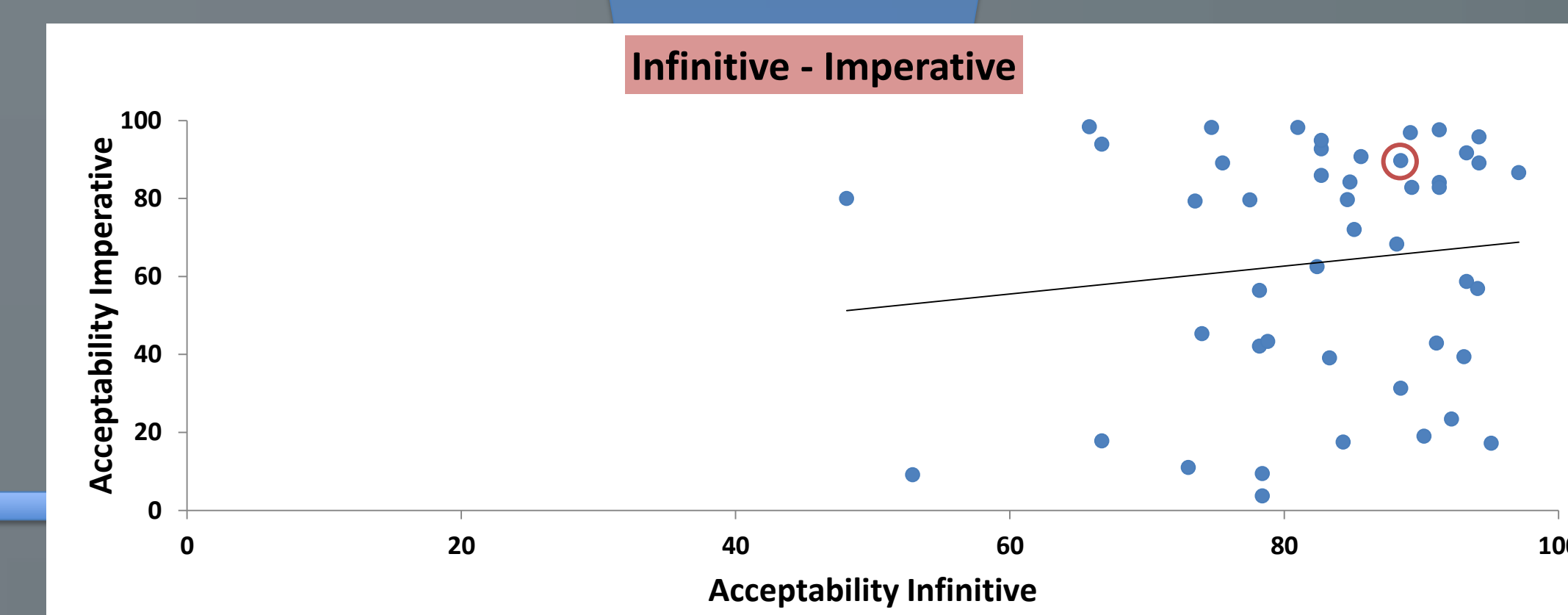
Correlation of RES of each sentence type with the RES of the other sentence types.

For a SSTE, there should be a significant correlation between the sentence type in question and at least one of the other sentence types.

	RES _{INF} – MV	RES _{IMP} – MV	RES _{IoD} – MV	RES _{DECL} – MV
r_s	0.239	0.9	0.864	0.851
df	44	44	44	44
p	0.109	0	0	0
Results influenced by lexeme?	no	yes	yes	yes



	INF – IMP	INF – IoD	INF – DECL	IMP – IoD	IMP – DECL	IoD – DECL
r_s	0.089	0.028	0.224	0.891	0.63	0.602
df	44	44	44	44	44	44
p	0.558	0.855	0.135	0	0	0
Results influenced by lexeme?	no	no	no	yes	yes	yes



Conditions of the Study

- from 6/2013 - today
- ca. 1,100 participants
- ca. 500 test items
- 12 different questionnaires
- pseudo-anonymous/pseudo-randomized
- 10 minutes written and oral instruction
- 2x10 minutes to work through the questionnaire
- in between the test phases solving math problems
- only native speakers
- binary judgements: acceptable (yes) – unacceptable (no)
- test items were given in contexts
- contexts suggest every day oral communication
- Participants were asked to judge the test sentences (underlined) in the given contexts

Grammatical Modeling

We suggest an analysis based on a division of labor between valency and constructions [4]:

- **directive infinitive is analyzed as a sentence type construction directly determining the possibility to omit arguments [2]:**
 - omitted direct arguments are still syntactically active
 - optional nominative NPs aren't subjects
 - non-finite independent main clause
- **results of assertive declarative sentences should be analyzed as verb-dependent:**
 - heterogeneity of RES_{DECL}
 - declarative is the most conservative sentence type with respect to AO
- **imperative forms are considered mini-constructions [5]:**
 - direct determination of syntactic context (V1)
 - several idiosyncrasies of imperative forms
 - imperative forms do not belong to the regular inflectional paradigm of a verb
 - vowel gradation in strong verbs
 - realization of word final schwa
- **IoDs are a complex sentence type that belong to a family of asymmetric conjunctions (imperative-declarative conjunctions cf. [6])**
 - multiple factors may play a role on AO in IoDs
 - influence of imperative forms
 - processing efforts due to the complexity of the construction
 - more marginal status of this sentence type

References

- [1] G. Zifonun et al., Grammatik der deutschen Sprache, vol. 2. Berlin/New York: de Gruyter, 1997.
- [2] J. Jacobs, „Satztypkonstruktionen und Satztypsensitivität,“ Satztypen und Konstruktionen im Deutschen, R. Finkbeiner and J. Meibauer, Eds. Berlin: de Gruyter, in press.
- [3] H. Altmann, „Satzmodus,“ Syntax. Ein internationales Handbuch zeitgenössischer Forschung, 1. Halbband, J. Jacobs, A. von Stechow, W. Sternefeld, and T. Vennemann, Eds. Berlin/New York: de Gruyter, 1993, pp. 1006-1029.
- [4] J. Jacobs, „Wozu Konstruktionen?,“ in Linguistische Berichte 213, 2008, pp. 3-44.
- [5] H. C. Boas, „Determining the structure of lexical entries and grammatical constructions in construction grammar,“ in Annual Review of Cognitive Linguistics 6, 2008, pp. 113-144.
- [6] R. Külpmann and V. Symanczyk Joppe, „Argument Omission in imperative declarative conjunctions,“ unpublished, 2015.