

Experimental insights: Explicit and Implicit Exhaustivity

1 Introduction

A wealth of experimental data (Onea and Beaver 2011, among others) have shown that assumptions related to exhaustivity do not appear in experimental settings. Exhaustivity in the semantics (hence, *Explicit Exhaustivity*) appears with focus operators, while in other environments it can be canceled (*Implicit Exhaustivity*).

This paper will present data on exhaustivity in Cypriot Greek, based on Onea and Beaver's (2011) methodology, but extended to the total number of conditions [1-4] (subject/object sentences) and sentences with a default word order.

- (1) Monon o Kostis ekrusen to luvin.
Only the.NOM Kostis.NOM burned.3SG the.ACC beans.ACC
'Only Costis burned the beans'
- (2) O Yannis embu esasen to ermarin.
The.NOM Costis.NOM embu.FOC fixed.3SG the.ACC closet.ACC
'It is John who fixed the closet.'
- (3) En o Kostis pu ekrusen to luvin.
is.3SG the.NOM Costis.NOM that burned.3SG the.ACC beans.ACC
'It is Costis that burned the beans.'
- (4) O KOSTIS ekrusen to luvin.
The.NOM Costis.NOM burned.3SG the.ACC beans.ACC
'COSTIS that burned the beans.'

2 Results

Participants were asked to judge whether a given non-exhaustive response in an exhaustive context is cancelable or can be accepted, if more is added.

- (5) **Context:** John burned the beans and the lentils.
Question: What did John burn? **Target sentence:** John burned only the beans.
Possible answers:
(A) Yes, and John also burned the lentils. (B) Yes, but John also burned the lentils.
(C) No. John also burned th lentils. (D) None of the above.

If exhaustivity is an entailment, a response such as (C) is expected, while responses (A) and (B) indicate that exhaustivity is a weaker inference, an implicature.

In Figure 1, 43 speakers score high for the (C) response in *only*, but they accept all other conditions in non-exhaustive contexts. An ANOVA statistical measure showed that the environment factor has a significant effect, $F(4,168)=110.123$, $p < .001$ and a post-hoc paired t-test showed that conditions differ significantly compared to *only*.

3 Discussion

The focus operator *only* stipulates association with a focus constituent by means of its lexical properties.

- (6) $\llbracket \text{Only } S \rrbracket = \forall p \in \text{ALT} \text{ true}(p) \rightarrow (p = S')$, where S' is the ordinary meaning of the sentence S , and ALT is a salient set of alternatives which is a subset of the focal meaning of S . (Clark and Beaver 2008, p.30)

Unlike *Explicit Exhaustivity* above, in *Implicit Exhaustivity* a speaker can accept a weaker alternative, as an entailment of the stronger alternative under the Question under Discussion. These experimental data, therefore, shed light to incomplete theoretical analyses of exhaustivity.

References

- Clark, B. and Beaver, D. (2008). *Sense and Sensitivity: How Focus Determines Meaning*. Blackwell, Oxford.
- Onea, E. and Beaver, D. (2011). Hungarian focus is not exhausted. In Cormany, E., Ito, S., and Lutz, D., editors, *Proceedings of semantics and linguistic theory (SALT)*, pages 342–358.

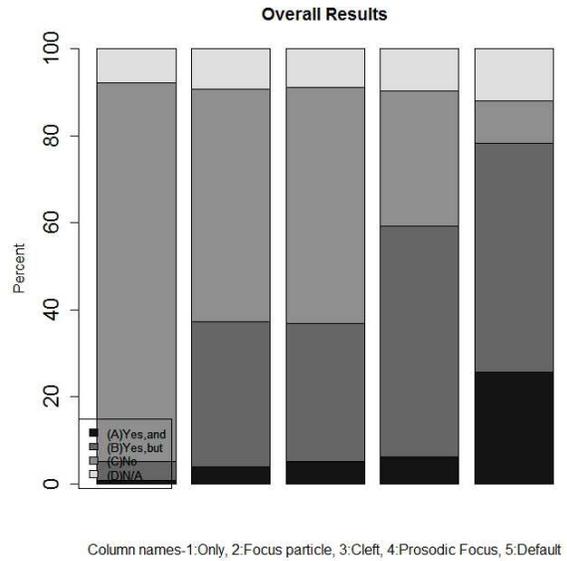


Figure 1: Overall Results