

The definiteness effect in existential sentences

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The research problem

Why are certain DPs avoided in the pivot position of existential sentences?

- (1) Es war ein Geist/*der Geist/*Elvis/*er im Schloss. Felser and Rupp (2001)

Why is the DE important?

It is at the crossroad of three main components of grammar: syntax, semantics and pragmatics. Namely it is an interface phenomenon.

Why is the DE important?

It is widespread:

- (2) You yige/*neige ren hen youqian. (Chinese:
have one/that man very rich
Hu and Pan (2007))

‘There is a/*the man very rich.’

- (3) (Turkish: (Enç, 1991, 15))

a. *Bahçe-de bazı çocuk-lar var
garden-LOC some child-PL exist
‘There are some of the children in the garden.’

b. Bahçe-de birkaç çocuk var
garden-LOC some child exist
‘There are some children in the garden.’

Why is the DE important?

Definiteness has a major impact on syntax in terms of case or position:

(4) Mandarin (Li and Thompson 1981)

- a. Rén lái le.
person come PRF
'The person has come.'
- b. Lái-le rén le.
come PRF person PRF
'A person has come.'

Why is the DE important?

Definiteness has a major impact on semantics in terms of quantification and scope:

- (5) a. A man is in every photograph. $\exists \gg \forall; \forall \gg \exists$
 b. There is a man in every photograph. $*\exists \gg \forall; \text{OK } \forall \gg \exists$

See Francez (2009) for other examples.

Why is the DE important?

Definiteness has a major impact on pragmatics in terms of reference and presupposition:

- (6) What did you see?
I saw a/the dog.
- (7) a. I saw a woman. The woman was tall.
b. I saw the woman. A woman was tall.
c. I saw a woman. A woman was tall.
d. I saw the woman. The woman was tall.

Case chains

Safir (1982); Safir and Keyser (1987):

- the position of the pivot cannot receive case, so it must be linked to an expletive in case position.
- The resultant chain has a problem: the pivot gets bound by the expletive, which violates binding principles, unless
- the pivot is indefinite, for indefinites are predicates, and exempt from binding requirements.

Problems

- What does (in)definite mean? Is it a morphological, a syntactical or a semantic property?
- What happens with definite pivots?

The nature of determiners

Milsark (1974, 1977):

- weak determiners: a, one, two, three, . . . , at most/at least/exactly/more than/nearly/only one, two, three, . . . , many, how many, a few, several, no.
 - ① $\sqrt{\text{There be [D}_{weak} \text{ N}]}$
- strong determiners: every, each, the, all, most, both, neither, which of the two, all but two
 - ① $*\text{There be [D}_{strong} \text{ N}]$

The nature of determiners

- only strong determiners are inherently quantificational
- since the existential predicate also introduces an existential quantifier, strong quantifiers produce a double quantification

Weak points

- the weak/strong distinction is defined circularly, for it is based on the same feature it tries to explain
- it leaves no room for exceptions

The nature of determiners Barwise and Cooper (1981)

Barwise and Cooper (1981) formalize the distinction weak/strong determiner de Milsark

- Strong determiners are always true (positively strong) or false (negatively strong) regardless of the situation in which they appear.
- Weak determiners are either true or false regarding the situation in which they appear.

Strong determiners

If “Det NP” is a positively strong determiner and is well-defined, then “Det NP is an NP” is true in all circumstances.

“ $[_D \text{ all}] [_{NP} \text{ girls}]$ ” is well-defined, then “ $[_D \text{ all}] [_{NP} \text{ girls}]$ are $[_{NP} \text{ girls}]$ ” is true in a situation in which there are girls, but it is also vacuously true in a situation in which there no girls, since $[_{NP} \text{ girls}] \subseteq ([_D \text{ all the}] [_{NP} \text{ girls}])$.

Strong determiners

If “Det NP” is a negatively strong determiner and is well-defined, then “Det NP is an NP” is false in all circumstances.

“ $[_D \text{ none of the two}] [_{NP} \text{ girls}]$ ” is defined for a situation in which there are two girls, hence in such situation situación “ $[_D \text{ none of the two}] [_{NP} \text{ girls}]$ are $[_{NP} \text{ girls}]$ ” is false since $[_{NP} \text{ girls}] \not\subseteq ([_D \text{ none of the two}] [_{NP} \text{ girls}])$.

Weak determiners

If “Det NP” is a weak determiner and is well-defined, then “Det NP is an NP” is true or false according to the situation.

“ $[D \text{ two}] [NP \text{ girls}]$ ” is true or false depending on the model:

- 1 if in model M_1 there are two girls, then “ $[D \text{ two}] [NP \text{ girls}]$ are $[NP \text{ girls}]$ ” is true ($[NP \text{ girls}] \subseteq ([D \text{ two}] [NP \text{ girls}])$),
- 2 if in model M_2 there is just a girl, then “ $[D \text{ two}] [NP \text{ girls}]$ are $[NP \text{ girls}]$ ” is false $[NP \text{ girls}] \not\subseteq ([D \text{ two}] [NP \text{ girls}])$.

Explanation of the DE

- existential sentence + positively strong determiner = tautology
- existential sentence + negatively strong determiner = contradiction
- existential sentence + weak determiner = contingent proposition

Proof.

*There was the president at the meeting \rightarrow tautología

“There was the president” \equiv “the president exists”, where ‘to exist’ equals to belonging to E in the model ($E \in [[\text{the president}]]$).

“The president exists” \equiv $\text{the}(\text{president})(E)=1$.

$\text{the}(\text{president})(E)=1 \equiv \text{the}(\text{president})(\text{president} \cap E)=1$ (conservativity).

Since $\text{president} \cap E = \text{president}$, $\text{the}(\text{president})(\text{president} \cap E)=1 \equiv \text{the}(\text{president})(\text{president})=1$ (“The president is the president”).



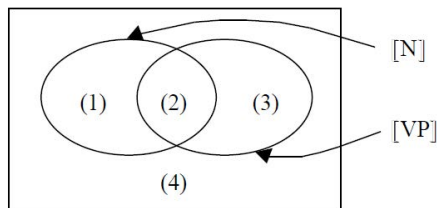
Problem

- tautology/contradiction \nRightarrow agrammaticality
 - 1 Football is football.
 - 2 To be or not to be, that is the question.

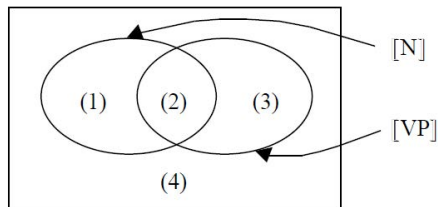
Properties of determiners

?Keenan (2003): the only determiners appearing in pivot position are the intersective ones.

Intersective determiners allow us to determine the truth of the sentence just looking at the intersection of first and the second argument of the determiner [i.e. (2)].



Intersectivity



- “Some girls smoke” is true if $[[girl]] \cap [[smoker]] \neq \emptyset$.
- “No girl smokes” is true if $[[girl]] \cap [[smoker]] = \emptyset$.

Problem

No room for exceptions, neither inter nor cross-linguistically:

- (8) There were the same people at both conferences.
- (9) Hi havia el degà, a la reunió.
LOC had the dean at the.F meeting
'The dean was at the meeting.'

Informational status of the pivot

Pragmatic analyses try to derive the DE from the particular informational conditions imposed on the pivot. In a nutshell, the pivot must be new information or focus, and definites are better suited for being topics.

Pivot as hearer-new

(Ward and Birner, 1995, 728):

“[a]ll existential *there*-sentences with definite postverbal NPs can be accounted for by a single pragmatic principle: that the postverbal NP of a *there*-sentence represents an entity that is not presumed by the speaker to constitute shared knowledge. That is, the speaker treats the postverbal NP in *there*-sentences as representing a HEARER-NEW entity (Prince 1992), where a hearer-new entity is one that the speaker does not assume to exist within the hearer’s knowledge store.”

Pivot as focus

(Francez, 2007, 124) (también Abbott (1993, 1997))

“the DE arises as a consequence of the fact that pivots are predicates and as such required to be focal. Thus, while in principle no NPs are blocked from occurring as pivots, highly topical NPs such as definites, proper names and pronouns are generally blocked by truth-conditionally equivalent copular constructions in which they function as topics. Such NPs occur as pivots only when they must, i.e. in contexts where no such construction is available.”

Hearer-new ⇔ **indefinite**

Prince (1992):

- (10)
- a. There were the same people at both conferences.
 - b. There was the usual crowd at the beach.
 - c. The child crowed. Small feet ran. There was the sound of a smart slap, and a wail, which subsided quickly. [E. Thane. 1943. Dawn's Early Light. New York:Duell. Sloan and Pearce. p. 35]
 - d. There was the wedding picture of a young black couple among his papers.

Empirical problems

- (11) a. *There is every doctor available.
b. There is no doctor available.
- (12) There were both kinds of apples in the sauce. (McNally, 1992, 35)
- (13) a. There was just me, him and a double bed on a private jet.
(Natalie Portman)
b. Then there was just me and my sister in the house.

- (14) on his gravestone there was the following epigram
- (15) En la rueda de prensa, George W. Bush indicó que en
in the wheel of press George W. Bush pointed out that in
dicho libro había el siguiente párrafo subrayado,
mentioned book had the following paragraph underlined

Milsark (1974); Rando and Napoli (1978):

A: Who is there available to fix the computer?

B: Well, there's Alice.

A. My God! How many people know about this?

B. There's me and there's you. That's all. (Rando and Napoli, 1978, ex.37)

- (16) De los hijos, había **el hermano mayor**, **la hermana menor**
 of the sons had the brother older the sister younger
y el pequeño.
 and the small
- (17) unes quantes dones, entre les quals hi
 a.F.PL some.F.PL women among the.F.PL which.F.PL LOC
 havia **ella i Victòria.** (Carme Rodríguez Virgili,
 had she and Victòria
 Benvinguda, Marta, p. 180)

- (18) a. and now there was **only him**, alone on the road,[. . .]
 (Stephen King, The long walk)
- b. He was doing that at the expense of String Theory and
 Lego fun time. And there was **even him** tolerating harp
 music in the midst of it all.
- (19) a. I **només** hi havia **ella** que el pogués aturar.
 and only LOC had she that him could stop
 (Sebastià Juan Arbó, Hores en blanc, p. 64)
- b. enemics –entre els quals hi ha **ell mateix**–. (El
 enemies among the which.PL LOC has he himself
 Periódico. 9/07/2008)
- (20) a. Icardi? Non c'è **solo** lui nell'Inter
 Icardi not LOC-is only he in-the-Inter

Conclusions I

- 1 The proper treatment of the DE is pragmatic, but probably it is a conspiracy of several semantic and pragmatic factors.
- 2 The DE is subject to much inter and cross-linguistic variation, which poses a big problem for any global analysis.
- 3 Better corpus and experimental studies will be necessary to develop a deeper understanding of the phenomenon.

Vielen dank!

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References I

- Abbott, B., jan 1993. A pragmatic account of the definiteness effect in existential sentences. *Journal of Pragmatics* 19 (1), 39–55.
 URL <http://linkinghub.elsevier.com/retrieve/pii/0378216693900692>
- Abbott, B., mar 1997. Definiteness and existentials. *Language* 73 (73), 103.
- Barwise, J., Cooper, R., 1981. Generalized quantifiers and natural language. *Linguistics and Philosophy* 4, 159–219.
- Enç, M., 1991. The semantics of specificity. *Linguistic Inquiry* 22 (1), 1–25.
 URL <http://www.jstor.org/stable/4178706>
- Felser, C., Rupp, L., mar 2001. Expletives as arguments: Germanic existential sentences revisited. *Linguistische Berichte* 13 (01), 289–324.
- Francez, I., 2007. Existential propositions. Ph.D. thesis, Stanford.
- Francez, I., feb 2009. Existentials, predication, and modification. *Linguistics and Philosophy* 32 (1), 1–50.
 URL <http://link.springer.com/10.1007/s10988-009-9055-4>

References II

- Hu, J., Pan, H., 2007. Focus and the basic function of chinese existential you-sentences. In: Comorovski, I., von Heusinger, K. (Eds.), *Existence: Semantics and Syntax*. Springer Netherlands, Dordrecht, pp. 133–145.
 URL https://doi.org/10.1007/978-1-4020-6197-4_5
- Keenan, E. L., 2003. The Definiteness Effect: Semantics or Pragmatics? *Natural Language Semantics* 11 (2), 187–216.
 URL <http://dx.doi.org/10.1023/A:1024400425028>
- McNally, L., 1992. *An Interpretation for the English Existential Construction*. Ph.D. thesis.
- Milsark, G. M., 1974. *Existential sentences in English*. Phd dissertation, MIT.
- Milsark, G. M., 1977. Toward An Explanation of Certain Peculiarities of the Existential Construction in English. *Linguistic Analysis* 3, 1–29.
- Prince, E. F., 1992. The zpg letter: Subjects, definiteness, and information-status. In: Mann, W. C., Thompson, S. A. (Eds.), *Discourse description: Diverse linguistic analyses of a fund-raising text*. Philadelphia: John Benjamins, pp. 295–325.
- Rando, E., Napoli, D. J., 1978. Definites in There-sentences. *Language* 54, 300–313.

References III

- Safir, K., 1982. Syntactic chains and the definiteness effect. Ph.D. thesis, Massachusetts Institute of Technology.
- Safir, K., Keyser, S. J., 1987. What explains the definiteness effect. In: Reuland, E., ter Meulen, A. G. B. (Eds.), *The Representation of (in)definiteness*. MIT Press, Cambridge, Mass., pp. 71–97.
- Ward, G. L., Birner, B. J., 1995. Definiteness and the English existential. *Language* 71 (4), 722–742.