

# Alternatives of exceptives

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- 1 Introduction
- 2 Two Anti-Fintelian analyses
  - QP modifier analysis
  - Clausal analysis
- 3 Proposal
- 4 Issues for further research

# exceptives: basic facts

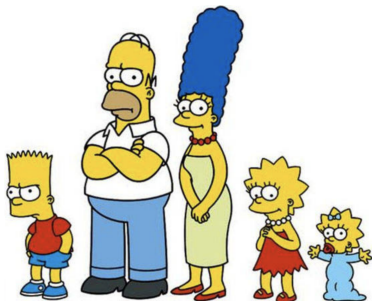
- (1) all students except John and Mary came to the meeting
- (2) Inferences
  - a. John and Mary are students *containment*
  - b. John and Mary did not come to the meeting *negation*
  - c. all other students came to the meeting *otherness*
- (3) Distribution
  - a. all students except John and Mary came to the meeting
  - b. ~~#~~some students except John and Mary came to the meeting

# agenda

- there are two schools of thought on exceptives
  - the **Fintelians** take exceptives to be NP modifiers  
von Fintel (1993); Gajewski (2008); Hirsch (2016); Crnič (2018)
  - the **Anti-Fintelians** take them to be something else  
Moltmann (1995); Vostrikova (2021)
- goal of this talk
  - present a novel observation
  - discuss the problem it poses for two Anti-Fintelians
  - propose a Fintelian analysis

what's the observation?

# Simpsons



- (4)
- a. all members of the Simpson family except Homer want to go to the concert
  - b.  $\#$ all five members of the Simpson family except Homer want to go to the concert

# Argentiniens



- (5)
- a. all eleven Argentinian players got a yellow card
  - b. #all eleven Argentinian players except Messi and Otamendi got a yellow card

# Beatles



- (6)
- a. all members of the Beatles except John Lennon were interviewed by the press
  - b. #all four members of the Beatles except John Lennon were interviewed by the press



# the generalization

cardinal determiners do not tolerate exceptives

## one more example

- (7) a. both parents of the child came to the meeting
- b. #both parents of the child except his father came to the meeting

# quick solution

- Cardinal determiners imposes a condition on the size of their restrictor

- (8) a.  $\llbracket \text{all eleven} \rrbracket = \lambda P : |P| = 11. \lambda Q. \forall x : Px \rightarrow Qx$   
 b.  $\llbracket \text{both} \rrbracket = \lambda P : |P| = 2. \lambda Q. \forall x : Px \rightarrow Qx$

- exceptives are NP modifiers and have subtractive semantics (von Stechow, 1993; Gajewski, 2008; Hirsch, 2016; Crnič, 2018)

- (9)  $\llbracket A \text{ except } B \rrbracket = \llbracket A \rrbracket \setminus \llbracket B \rrbracket$

- exceptives give rise to presupposition failure

- (10) a.  $\# \text{all eleven} [P \text{ Argentinian players except Messi and Otamendi}] [Q \text{ got a yellow card}] \quad |P| \neq 11$   
 b.  $\# \text{both} [P \text{ parents of the child except his father}] [Q \text{ came to the meeting}] \quad |P| \neq 2$

# not so quick...

- the deviance persists under appropriate change of the numeral
- (11)
- a. #all nine [<sub>P</sub> Argentinian players except Messi and Otamendi] got a yellow card  $|P| = 9$
  - b. #both [<sub>P</sub> members of the Beaux Arts trio except Menahem Pressler] came to the meeting  $|P| = 2$
  - c. #all three [<sub>P</sub> members of the Beatles except Lennon] were interviewed  $|P| = 3$

## hunch

(12)  $[D_{\#} \text{ NP except X}] \dots$

- a. requires that both **NP** and **NP except X** satisfy the presupposition of  $D_{\#}$
- b.  $|\text{NP}| \neq |\text{NP except X}|$

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## 2 Two Anti-Fintelian analyses

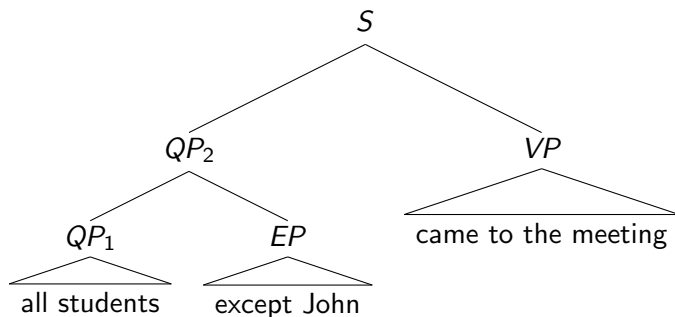
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# Moltmann (1995)

(13)

(14) Deriving the denotation of *QP<sub>2</sub>*

- a. take the set of predicates denoted by *QP<sub>1</sub>*
- b. remove John from each of those predicates



# inferences

Scenario:  $\underbrace{a, b, c}_{\text{students}}, \underbrace{d, e}_{\text{non-students}}$

(15)  $[_S [_{QP_2} [_{QP_1} \text{all students}] [\text{except } b]] [_{VP} \text{came}]]$

- $\llbracket QP_1 \rrbracket = \{\{a, b, c\}, \{a, b, c, d\}, \{a, b, c, e\}, \{a, b, c, d, e\}\}$
- $\llbracket QP_2 \rrbracket = \{\{\cancel{a}, b, c\}, \{\cancel{a}, b, c, d\}, \{\cancel{a}, b, c, e\}, \{\cancel{a}, b, c, d, e\}\}$
- $\llbracket S \rrbracket = 1$  iff  $\llbracket VP \rrbracket \in \llbracket QP_2 \rrbracket$   
 $\rightarrow$  *negation & otherness*

(16)  $\#[_S [_{QP_2} [_{QP_1} \text{all students}] [\text{except } d]] [_{VP} \text{came}]]$

- $\llbracket QP_1 \rrbracket = \{\{a, b, c\}, \{a, b, c, d\}, \{a, b, c, e\}, \{a, b, c, d, e\}\}$
- $\llbracket QP_2 \rrbracket = \#$   
**problem:**  $d$  cannot be removed from each predicate in  $\llbracket QP_1 \rrbracket$   
 $\rightarrow$  *containment*

# distribution

Scenario:  $\underbrace{a, d, c}_{\text{students}}, \underbrace{b, e}_{\text{non-students}}$

(17) # $[_S [_{QP_2} [_{QP_1} \text{some students}] [\text{except } b]] [_{VP} \text{came}]]$

a.  $\llbracket QP_1 \rrbracket = \{\{a, d, e\}, \{b, d, e\}, \{c, d, e\}, \{a, b, d, e\}, \dots\}$

b.  $\llbracket QP_2 \rrbracket = \#$

**problem:**  $b$  cannot be removed from each predicate in  $\llbracket QP_1 \rrbracket$

→ **some** does not tolerate exceptives

# problem with cardinality

Scenario:  $\underbrace{a, b, c}_{\text{students}}, \underbrace{d, e}_{\text{non-students}}$

(18)  $[_S [_{QP_2} [_{QP_1} \text{all three students}] [\text{except } b]] [_{VP} \text{came}]]$

- $\llbracket \text{all three} \rrbracket = \lambda P : |P| = 3. \lambda Q. \forall x. Px \rightarrow Qx$
- $\llbracket QP_1 \rrbracket = \{\{a, b, c\}, \{a, b, c, d\}, \{a, b, c, e\}, \{a, b, c, d, e\}\}$
- $\llbracket QP_2 \rrbracket = \{\{a, \cancel{b}, c\}, \{a, \cancel{b}, c, d\}, \{a, \cancel{b}, c, e\}, \{a, \cancel{b}, c, d, e\}\}$
- $\llbracket S \rrbracket = 1$  iff  $\llbracket VP \rrbracket \in \llbracket QP_2 \rrbracket$

→ the sentence is predicted to be fine if there are three students

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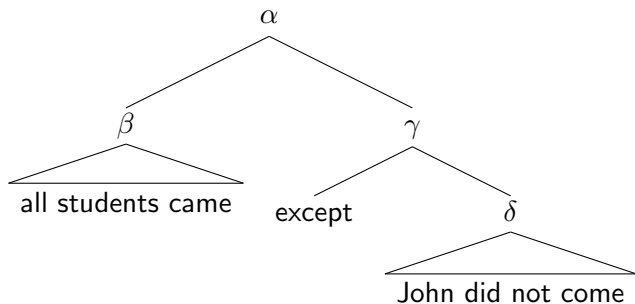
## 4 Issues for further research

# main idea

- Vostrikova (2021) takes the exceptive phrase to be an elliptical clause

(19) all students except John came

- PF = all students except John ~~did not come~~ came
- LF =



# inferences

(20)  $[\alpha [\beta \text{ all students came}] [\gamma \text{ except } [\delta \text{ John did not come}]]$

(21)  $\llbracket \alpha \rrbracket^{w_0} = 1$  iff

a.  $\llbracket \delta \rrbracket^{w_0} = 1$

‘John did not come’

→ *negation*

b.  $\forall w. \llbracket \delta \rrbracket^w = 1 \rightarrow \llbracket \text{all} \rrbracket^w(\llbracket \text{students} \rrbracket^{w_0})(\llbracket \text{came} \rrbracket^w) = 0$

‘John did not come  $\Rightarrow$  an actual student did not come’

→ *containment*

c.  $\forall w. (\llbracket \delta \rrbracket^w = 0 \wedge \llbracket \text{came} \rrbracket^w \setminus \{j\} = \llbracket \text{came} \rrbracket^{w_0} \setminus \{j\})$

$\rightarrow \llbracket \text{all} \rrbracket^w(\llbracket \text{students} \rrbracket^{w_0})(\llbracket \text{came} \rrbracket^w) = 1$

‘If John had come, all students would have come’

→ *otherness*

# distribution

(22)  $[\alpha \text{ } [\beta \text{ some student } t_\gamma \text{ came}] \text{ } [\gamma \text{ except } [\delta \text{ John did not come}]]]$

(23)  $\llbracket \alpha \rrbracket^{w_0} = 1$  iff

a.  $\llbracket \delta \rrbracket^{w_0} = 1$

‘John did not come’

b.  $\forall w. \llbracket \delta \rrbracket^w = 1 \rightarrow \llbracket \text{some} \rrbracket^w(\llbracket \text{students} \rrbracket^{w_0})(\llbracket \text{came} \rrbracket^w) = 0$

‘John did not come  $\Rightarrow$  no actual student came’

c.  $\forall w. (\llbracket \delta \rrbracket^w = 0 \wedge \llbracket \text{came} \rrbracket^{w \setminus \{j\}} = \llbracket \text{came} \rrbracket^{w_0 \setminus \{j\}})$

$\rightarrow \llbracket \text{some} \rrbracket^w(\llbracket \text{students} \rrbracket^{w_0})(\llbracket \text{came} \rrbracket^w) = 1$

‘If John had come, an actual student would have come’

(23b) and (23c) require John to be the only student, which means (22a) is a violation of Maximize Presupposition

# problem with cardinality

(24) # $[_\alpha [_\beta \text{ all seven students came}] [_\gamma \text{ except } [_\delta \text{ John did not come}]]]$

(25)  $\llbracket \alpha \rrbracket^{w_0} = 1$  iff

- a.  $\llbracket \delta \rrbracket^{w_0} = 1$   
'John did not come'
- b.  $\forall w. \llbracket \delta \rrbracket^w = 1 \rightarrow \llbracket \text{all seven} \rrbracket^w (\llbracket \text{students} \rrbracket^{w_0}) (\llbracket \text{came} \rrbracket^w) = 0$   
'John did not come  $\Rightarrow$  one of the actual seven students did not'
- c.  $\forall w. (\llbracket \delta \rrbracket^w = 0 \wedge \llbracket \text{came} \rrbracket^w \setminus \{j\} = \llbracket \text{came} \rrbracket^{w_0} \setminus \{j\})$   
 $\rightarrow \llbracket \text{all seven} \rrbracket^w (\llbracket \text{students} \rrbracket^{w_0}) (\llbracket \text{came} \rrbracket^w) = 1$   
 'If John had come, all seven students would have come'

$\rightarrow$  the sentence is predicted to be fine if there are seven students



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## subtraction & exhaustification

- exceptives are subtractive NP modifiers and associates with EXH

- (26) a.  $[\text{NP students [except John and Mary]}] = \text{students} \setminus \{j, m\}$   
 b. EXH [all students [except John and Mary]<sub>F</sub> came]

- EXH assigns 1 to the prejacent and 0 to every alternative which is defined and not entailed by the prejacent

- (27)  $\llbracket \text{EXH } S \rrbracket = 1$  iff
- $\llbracket S \rrbracket = 1$
  - $\forall S' \in \text{ALT}(S) : \llbracket S \rrbracket \not\subseteq \llbracket S' \rrbracket \wedge \llbracket S' \rrbracket \text{ is defined} \rightarrow \llbracket S' \rrbracket = 0$

- EXH comes with non-idleness requirement

- (28)  $\#[\text{EXH } S]$  if  $[\text{EXH } S] \Leftrightarrow S$

cf. von Stechow (1993); Gajewski (2008); Hirsch (2016); Crnič (2018)

# punch line

exceptives introduce **subdomain** alternatives

# subdomain alternatives

- (29) all students [except John and Mary] came
- a. all students  $\setminus \{j, m\}$  came ✓
  - b. all students  $\setminus \{j\}$  came ✓
  - c. all students  $\setminus \{m\}$
  - d. all students  $\setminus \{ \}$  came ✓
  - e. all students  $\setminus \{j, b\}$  came ✗
  - f. all students  $\setminus \{b, m\}$  came ✗
  - g. all students  $\setminus \{b\}$  ✗

# deriving the inferences of exceptives

- (30) S EXH [<sub>A</sub> all students except John and Mary came]  
 A all students  $\setminus \{j, m\}$  came  
 B all students  $\setminus \{j\}$  came  
 C all students  $\setminus \{m\}$  came  
 D all students  $\setminus \{ \}$  came

- (31) a.  $A \not\subseteq B, C, D$   
 b.  $S = 1$  iff  $A = 1$  and  $B, C, D = 0$

- (32) a. John is not a student  $\vee$  John came  $\Rightarrow A = C$   
 b. Mary is not a student  $\vee$  Mary came  $\Rightarrow A = B$

$\rightarrow$  both John and Mary are students (*containment*), neither came (*negation*), and all other students came (*otherness*)

# deriving the distribution of exceptives

- (33) S    EXH [<sub>A</sub> some student except John and Mary came]  
 A    some students  $\setminus \{j, m\}$  came  
 B    some students  $\setminus \{j\}$  came  
 C    some students  $\setminus \{m\}$  came  
 D    some students  $\setminus \{ \}$  came
- (34) a.     $A \subseteq B, C, D$   
 b.     $S = 1$  iff  $A = 1$   
        $\rightsquigarrow$  EXH is idle!

# solving the cardinality problem

- (35) S    EXH [<sub>A</sub> [all seven [students except John and Mary]] came]
- A    all seven students  $\setminus \{j, m\}$  came
- B    all seven students  $\setminus \{j\}$  came
- C    all seven students  $\setminus \{m\}$  came
- D    all seven students  $\setminus \{ \}$  came
- (36) a.    if there are nine students, then none of B, C, D is defined and EXH is idle
- b.    if there are not nine students, then A is not defined, which means S is not defined

# importance of condition on alternatives

suppose exceptives have standard Katzirian alternatives...

(37) S EXH [[all seven [students except John and Mary]] came]

A all seven students  $\setminus \{j, m\}$  came

B all seven students  $\setminus \{j, b\}$  came

C all seven students  $\setminus \{b, m\}$  came

D all seven students  $\setminus \{m, b\}$  came

E all seven students  $\setminus \{j\}$  came

F all seven students  $\setminus \{m\}$  came

G all seven students  $\setminus \{b\}$  came

H all seven students  $\setminus \{ \}$  came

(38) If there are nine students

a. A, B, C, D are defined and E, F, G, H are not

b.  $S = 1$  iff  $A = 1$  and  $B, C, D = 0$



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# precision

- Moltmann (1995) observes that the larger the number, the more tolerant a cardinal determiner is of exceptives
  - (39) a. #all four students except John came  
 b. all four hundred students except John came
- however, the relevant factor seems to be how precise, not how large
  - (40) a. all four hundred students except John came  
 b. #all four hundred and one students except John came

cf. Krifka (2002, 2007)

## relative sizes of NP and EP

- it seems the smaller NP/EP is, the less acceptable EP is
- (41)
- a. all members of congress except the most radical leftists  
voted for the bill
  - b. #all members of congress except the democrats voted for  
the bill

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