

# Anti-uniqueness effects with *only*: Possible implications for adverbial readings of adjectives

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## 1 Introduction

- Object-induced event measurement
  - Since at least Verkuyl (1972): Events can be measured by one or more of their participants. e.g. with incremental themes (1) (in the sense of Dowty 1991) (see also Krifka 1986)
  - Object- vs. event-related measurement in (2) (Krifka 1990)
- (1)
  - a. Berry ate sushi {#in/for} an hour.
  - b. Berry ate six pieces of sushi {in/#for} an hour.
- (2) Four thousand ships passed through the lock last year.
  - a. Four thousand ships (object-related reading)
  - b. Four thousand passing events (event-related reading)
- Similar effects with adjectival modification
  - Frequency adjectives (3) (Bolinger 1967; Stump 1981; Larson 1998; Zimmermann 2003; Schäfer 2007; Gehrke & McNally 2011)
  - External modification in idioms (4) (from Ernst 1981)
- (3)
  - a. The occasional sailor strolled by.  
~ Occasionally, a sailor strolled by.
  - b. The house underwent frequent check-ups.  
~ Frequently, the house underwent check-ups.
- (4) Carter doesn't have an economic leg to stand on.  
~ Economically, Carter doesn't have a leg to stand on

### The bigger picture behind this talk:

When and how do entity-description modifying adjectives (indirectly) modify event descriptions?

- Empirical focus on various data involving modification:
  1. Adverbial readings of frequency adjectives (Gehrke & McNally 2011, 2014, 2015)
  2. External modification in idioms (& determiner variation) (Gehrke & McNally 2019)
  3. **This talk:** DP-internal *only* (work in progress, with Louise McNally)
- General idea of Gehrke & McNally's (2019) account (which in turn builds on and generalises Gehrke & McNally 2014), without spelling it out in detail:
  - Separation of concept composition and reference
  - Concept composition at the level of the VP: Event types constructed out of V-N combinations that are interpreted on a par with semantic incorporation
  - Reference comes in at a later stage
- DP[NP]-internal As can have an effect on the VP (the event).
- Can the *only*-data be integrated into this general picture? (Not sure – open question)

## 2 Background for non-semanticists / non-linguists

- Received view: (Singular) definites presuppose uniqueness and existence, e.g. (5) (in the context of this talk) [for plural definites: maximality]

- (5) a. #**The woman in this room** has / does not have glasses. (violation of uniqueness)  
b. #**The escalator in this building** is (not) very slow. (violation of existence)

- Presupposition (not at issue) vs. Assertion (at issue; entailed)
  - Presuppositions: Inferences that survive under negation, in questions etc.
  - Entailments: Logical inferences that do not
- The presuppositions in (5) should in principle hold for both argumental and predicative definites:

- (6) a. Boban brought / did not bring **the projector**. (argumental definite)  
b. Dejan is (not) **the owner of Radgost**. (predicative definite)

(Side note: The use of definites as predicates is restricted.)

- Arguments vs. predicates:
  - Predicates express properties (sets of individuals with that property)
  - Arguments fill argument slots of predicates and (sometimes) refer to entities (e.g. proper names, definites) (putting aside quantified expressions).

Examples for argumental vs. predicative indefinites:

- (7) a. Daria presented **a paper on Russian generics**. (argumental indefinite)  
b. Natalie will be **a Juniorprofessor**. (predicative indefinite)

- Contexts that only allow for predicates:

- (8) a. I consider Mirjana **a very smart and generous person**.  
b. I consider Marko **the funniest person in the room**.  
c. #I consider Curt **Felix/the guy from Konstanz**.

## 3 Coppock & Beaver (2015): Anti-uniqueness effects with DP-internal *only*

- The gist of Coppock & Beaver's (2015) proposal:
  - Definites presuppose weak uniqueness but not existence.  
Presupposition: at most 1 (so either 1 or none)
  - Main argument from predicative definites with *only*: 'anti-uniqueness effect'

Argumental definites: presuppose (sometimes entail) existence, but due to type shift

- Regularly get a 'determinate' reading through type shifting (iota shift is preferred because it gives rise to a simpler type)
- In some cases, they also give rise to the 'anti-uniqueness effect' with *only* → existential type shift takes place

Argumental indefinites:  $\exists$  shift due to Maximize Presupposition

- This paper:
  - We do not want to question the general claim of their paper, but ...
  - We want to focus on the anti-uniqueness effect of *only* to get a better understanding of what might be going on.

### 3.1 ‘Anti-uniqueness’ with *only*: Predicative definites

- Coppock & Beaver (2015) (C&B):

- Predicative definites with *only* and negation give rise to an anti-uniqueness reading (9-a).
- (Equative reading (9-b): the definite is not a predicate, so not of concern here)

- (9) Scott is not the only author of *Waverly*.
- a. Anti-uniqueness effect: >1 author
  - b. Equative reading: for C&B not predicative (equation of two *e*-type nominals)

Adverbial paraphrases of both readings (not in C&B):

- a. It is not the case that only Scott is an author of *Waverly*.  
→ **‘Only’ seems to have its semantic effect somewhere outside the DP**
  - b. There is only one author of *Waverly* and Scott is not it.
- This is really a property of predicative definites: With *consider* (which only combines with predicates) we only get the anti-uniqueness reading (10). (C&B’s claim)

- (10) I don’t consider Scott the only author of *Waverly*.

Side note: For German I seem to get both readings again (11-a), especially with stress on *only*, but German *consider* might be different (e.g. accepts referential DPs, (11-b))

- (11) a. Ich halte Scott nicht für den einzigen Autoren von *Waverly*.  
I consider Scott not for the only author of *Waverly*
- b. Ich halte Clark Kent für Superman.  
I consider Clark Kent for Superman

→ **C&B’s conclusion: Definites do not presuppose existence.** (Under (11-a), there is no existence presupposition of an *x* with the property ‘only author of *Waverly*’.)

- Let’s unpack the contribution of *only* in (9), without negation: Two components (12)

- (12) Scott is the only author of *Waverly*.
- a. Scott is an author of *Waverly*. C&B: presupposition of *only*
  - b. The exclusive part of *only*: There is no other author of *Waverly*. C&B: at issue

This is the contribution of DP-internal (adjectival) *only* that C&B assume based on what we know about adverbial *only*, as in (13) (our example).

- (13) Only Scott is an/the author of *Waverly*.

#### Q But why should the same hold for adjectival *only*? What if:

- Both meaning components are present.
- Stress (or sth.) decides what is at issue (focused) and what is presupposed (backgrounded).
- Negation can target either meaning component:

- (14) Anti-uniqueness reading
- a. Scott is an author of *Waverly*. ((12-a) is presupposed)
  - b. It is not the case that there is no other author of *Waverly*. (negation of (12-b))  
(~ there are other authors)

- (15) 'Equative' reading
- a. There is no other author of *Waverly*. ((12-b) is presupposed)
  - b. Scott is not an author of *Waverly*. (negation of (12-a))

Why would (15) necessarily be equative (Scott = the author of *Waverly*) and not predicative (Scott is an author of *Waverly*)? → **Q for future research: What is the role of focus?**

### 3.2 'Anti-uniqueness' with *only*: Argumental definites

- *Only* with argumental definites (C&B):

- Regularly gives rise to a determinate reading  
[~ referential definite of type *e* with uniqueness and existence presupposition]
- Sometimes gives rise to an 'anti-uniqueness' reading, especially with focus on *only*

(16) Anna didn't give the only invited talk.

- a. Determinate reading: There was exactly one invited talk (and Anna didn't give it).
- b. Anti-uniqueness reading: There was more than one invited talk (one of which Anna gave).

(17) Anna didn't see the only invited talk.

⊢ There was exactly one invited talk. (only determinate reading)

- C&B report similar contrasts for the following pairs:

- *score* vs. *cheer for the only goal*
- *bring* vs. *taste the only chocolate cake*
- *have* vs. *admire the only beautiful dress*

- C&B's empirical generalisation:

- Only arises for objects of verbs that allow existence to plausibly be at issue: verbs of creation, *bring*, *run*, *have*, *wear*, *find*, *own*

→ Entity-introducing verbs: 'to V an N' tends to increase the number of salient Ns (18)

(18) There are at least seven cakes. ...

- a. If Maria brings a cake, that will make eight.
- b. #If Maria takes a cake, that will make eight.

- Entity-introducing verbs under negation: no existence implication for an indefinite object argument (19-a) (vs. other verbs (19-b))

(19) a. Nobody baked any brownies. #Some of them are made with nuts.  
b. Nobody tasted any brownies. Some of them are made with nuts.

- This is not necessarily a lexical property: *see the only talk* vs. (20)

(20) Context: If John sees a sparrow, that will make eight.

He indeed saw that sparrow. But he didn't see the only sparrow – Sue had seen another one earlier!

## Q Is this the right empirical generalisation?

- Might be broader: also verbs where existence is removed (*remove, take, eat, destroy, steal, rob, smash* etc.)
- C&B' list contains *have, wear, find, own*: HAVE-predicates?  
(cross-linguistic tendency for pseudo- / semantic incorporation)

- Some more examples (where # indicates unavailability of the anti-uniqueness reading):

(21) a. Izabela didn't compose the only sonata.  
b. #Pedja didn't order the only pizza. (despite entity-introduction)

(22) a. The invaders didn't destroy the only building.  
b. #The tornado didn't destroy the only building.

→ Agent (mentally involved, volitional) vs. cause?

(23) a. #Vladimir didn't see the only invited talk.  
b. Vladimir didn't see the only boring talk.

→ Different modifiers:

\* *give invited talk*: the same person gives the talk and is invited?

\* *see boring talk*: the same person sees the talk and is bored?

## Q A general question

Why do we not get the anti-uniqueness reading also with other V-N combinations, if negation (by our assumption) can, in principle, target both meaning components (there is an N & exclusivity)?

(24) Katie did not go to the only party.  
~ There was just one party and Katie didn't go (attend it).  
≠ Katie went to a party and there were other parties (that she or others went to).

C&B on the role of nuclear stress on *only*: marker of narrow focus

- With 'entity-introducing verbs': only the anti-uniqueness reading is available
- With other verbs: anti-uniqueness reading becomes available
- Focus alternatives: 'only' and 'multiple'
- Anti-uniqueness has to comply with the QUD: Existence of a unique N must not be part of the common ground

Still, this suggests that the anti-uniqueness effect with argumental definites might be broader than portrayed here and that **the interaction with focus and negation should be investigated more closely, also for predicative definites.**

## 4 Comparison with a few other languages

### 4.1 German

- Recall absence of anti-uniqueness reading with some V-N combinations in English:

(25) Katie did not go to the only party.  
~ There was just one party and Katie didn't go (attend it).  
≠ Katie went to a party and there were other parties (that she or others went to).

I seem to get a contrast in German with weak vs. strong determiners:

- Strong determiner (26-a): only determinate reading
- Weak determiner (26-b): both readings possible

- (26) a. Katie ging (nicht) **zu der** einzigen Party.  
Katie went not to the only party
- b. Katie ging (nicht) **zur** einzigen Party.  
Katie went not to the only party

- Another observation about English (not in C&B):

- (27) Lidija baked the only cake.
- a. \*There is an only cake.  
RATHER: There is only one cake.
- b. Lidija baked it/a cake.

In German this is possible:

- (28) Lidija backte den einzigen Kuchen.  
Lidija baked the only cake
- a. Es gibt **einen einzigen** Kuchen.  
It gives an only cake
- b. Lidija backte ihn / einen Kuchen.  
Lidija baked it a cake

- (29) **Kein einziger** Mensch kam.  
no only person came  
'Not a single person came.'

- (30) **nur ein einziges** Tor  
only a only goal  
'just a single goal'

- **Some open questions:**

- Is German *einzig* more like *single* or *sole*?

NB With the diagnostics in Coppock & Beaver (2014) for differences among English exclusives: *einzig* is closest to *sole* (but also not in all respects)

- But C&B hold that the anti-uniqueness effect is the same for other exclusive adjectives.

→ How do we account for potential cross-linguistic variation?

→ What is the role of the determiner with *only* and why do paraphrases also allow for indefinites? (more on the latter below)

## 4.2 Russian

- Another observation not in C&B: Anti-uniqueness reading is easier with more complex DPs:

- (31) a. #Vladimir didn't see the only invited talk.  
b. Vladimir didn't see the only boring talk.

- (32) Peter didn't photograph the only giraffes on the planet.

- Side note in Fisher (2018) on Russian DP-internal *edinstvennyj* ‘only’ more generally, e.g. (33) (without discussing it further): “requires greater context”, e.g. relative clause or PP

(33) \*Anna **zabila edinstvennyj gol**.  
Anna scored only goal

- Fisher’s claim for Russian: The anti-uniqueness effect arises with all kinds of V-N combinations (as an alleged contrast with English)

BUT All of his examples involve more complex DPs.

- What if this is not the same anti-uniqueness effect (with *only* seemingly scoping outside the DP) but still only scope within the complex DP (over the (reduced) relative clause)?

- Data discussed in Fisher (2018):

- Negation in front of the subject: only determinate reading
- Negation in front of the object: only anti-uniqueness reading
- Negation in front of the verb: both readings  
(Side note in Fisher: This placement of negation is dispreferred by most native speakers)

(34) **Ne** Anna posetila **edinstvennuju** lekciju, kotoruju pročital Xomskij, kogda byl v  
not Anna attended only lecture which gave Chomsky when was at  
našem universitete.  
our university  
‘It wasn’t Anna that went to the only lecture that Chomsky gave at our university.’  
[C&B’s determinate reading]

(35) Anna posetila **ne edinstvennuju** lekciju, kotoruju pročital Xomskij, kogda byl v  
Anna attended not only lecture which gave Chomsky when was at  
našem universitete.  
our university  
‘Anna went to one of the lectures that Chomsky gave at our university.’ [C&B’s  
anti-uniqueness reading]

(36) Anna **ne** posetila **edinstvennuju** lekciju, kotoruju pročital Xomskij, kogda byl v  
Anna not attended only lecture which gave Chomsky when was at  
našem universitete.  
our university  
‘Anna didn’t go to the only lecture that Chomsky gave at our university.’ [either  
reading possible]

- Fisher’s (2018) Russian data to show that the anti-uniqueness reading is possible with all kinds of V-N combinations:

(37) Lena **uvidela ne edinstvennogo krokodila, kotoryj byl v zooparke**. #On byl  
Lena saw not only crocodile which was at zoo it was  
dlinoj tri metra.  
lengthwise three metres

(38) Ol’ga **probovala ne edinstvennyj tort, kotoryj byl na večerinke**. #On byl  
Olga tasted not only cake which was at party it was  
šokoladnyj.  
chocolate

- **Why could looking at Russian be helpful in the future?**

- The position of negation in Russian directly reflects the scope of negation (in most cases).
- Russian does not have articles.

(These are not reasons mentioned by Fisher though)

#### 4.3 Summary and open questions for *only*

- There are many issues to be explored:
  - What does stress (or no stress) on *only* do and how does it interact with negation? What is the role of focus?
  - Why is *only* (but not other exclusives) restricted to the definite article (and possessives) (if indeed correct)?
  - What is the effect of additional modification?
  - How do we account for cross-linguistic differences?

### 5 The broader picture: Adverbial readings of adjectives

#### 5.1 Adverbial readings of frequency adjectives (FAs)

- Two types of frequency adjectives (FAs) (Gehrke & McNally 2015)
  - Non-temporal FAs, e.g. *occasional, odd, rare*:  
Allow adverbial readings with non-event nouns as well as distribution in a domain other than the temporal one

- (39) a. The {occasional/odd/rare} sailor strolled by.  
~ {Occasionally/on odd/rare occasions}, a sailor strolled by.  
b. The {occasional/odd/rare} sailor is six feet tall.  
~ {Occasionally/on odd/rare occasions}, a sailor is six feet tall.

- Temporal FAs, e.g. *monthly, frequent, periodic, sporadic*:  
Do not allow adverbial readings with non-event nouns or non-temporal distribution

- (40) a. #A/#The {monthly/frequent/sporadic} sailor strolled by.  
~ {Monthly/frequently/sporadically}, a sailor strolled by.  
b. #A/#The monthly/frequent/sporadic sailor is six feet tall.  
~ {Monthly/frequently/sporadically}, a sailor is six feet tall.

#: ok under the internal reading (someone who sails {monthly/frequently/sporadically})

- On the adverbial reading:

- Non-temporal FAs require definite sg. nouns:

- (41) a. ??The house underwent odd cleanings. (on relevant reading)  
b. The house underwent ??an/the odd cleaning.  
c. ??An/The odd sailor is 6 feet tall.

- Temporal FAs require indefinite sg. or bare pl. event nouns:

- (42) a. The house underwent monthly/frequent/periodic/sporadic cleanings.  
b. The house underwent a/??the monthly/frequent/periodic/sporadic cleaning.

- An exception to this generalisation (Gehrke & McNally 2011): Adverbial readings with temporal FAs in combination with non-event nouns
    - Possible with some verb-argument combinations (but not just incremental theme verbs; see below):
- (43) a. She wrote me frequent letters.  
       ~ Frequently, she wrote me a letter.
- b. She baked frequent batches of cookies.  
       ~ Frequently, she baked a batch of cookies.
- c. She drank frequent cups of coffee.  
       ~ Frequently, she drank a cup of coffee.
- Not possible with others:
- (44) a. ??She read frequent books to her mother.  
       b. ??She mowed frequent lawns.
- (45) a. ??She baked frequent cookies.  
       b. She baked frequent cakes.
- Conditions under which temporal FAs with non-event nouns give rise to the adverbial reading (Gehrke & McNally 2014): The atomic events described by the VP have to
    1. be uniquely individuated by the (temporal) FA-modified argument,
    2. have a uniform, continuous internal structure,
    3. describe stereotypical activities.
    4. The nominal modified by the FA must be a bare plural.

(Generalisations based on introspection and examples from corpora; see paper for sources)

- Analysis in Gehrke & McNally (2014): When all these conditions are met the FA-N-V combination is interpreted on a par with incorporation so that the effect of the FA is on the VP-N complex (the event), rather than just within the noun.
- **More general lesson from FAs** (Gehrke & McNally 2015)  
 There are different paths to adverbial paraphrases.
  1. Non-temporal FA as a second order kind modifier (46-a)
  2. Temporal FA as an intersective event modifier (46-b)
  3. Temporal FA with a non-event noun, incorporation (46-c)

- (46) a. The **occasional** sailor strolled by.  
       ~ **Occasionally**, a sailor strolled by.
- b. The storm was punctuated by a **sporadic** crash of thunder.  
       ~ **Sporadically**, the storm was punctuated by a crash of thunder.
- c. She wrote me **frequent** letters. ~ **Frequently**, she wrote me letters.

## 5.2 Comparison FAs / adverbial readings of adjectives with *only*

A Some observations about adjectival *only*:

- Determiner restrictions: *only* always needs definites (47-a)
- Anti-uniqueness reading can be paraphrased adverbially.  
 Under the adverbial paraphrase, the determiner on the NP changes to an indefinite (47-b).

– *Only* cannot be used predicatively (47-c).

- (47) a. Anna {gave / didn't give} {the /\*an} only invited talk.  
b. Anna gave the only invited talk.  
    ~ Only Anna gave an invited talk.  
c. \*The invited talk was only.

Same pattern with adverbial readings of non-temporal FAs:

- (48) a. A(n) {rare/odd} sailor strolled by.  
     $\not\sim$  Rarely/on odd occasions, a sailor strolled by.  
b. The occasional/rare sailor strolled by.  
    ~ Occasionally/Rarely, a sailor strolled by.  
c. The sailor was \*occasional/#rare/#odd.

Difference: No focus-sensitivity with FAs

B Anti-uniqueness reading with argumental definites and *only* arises only with certain V-N combinations but not with others.

- *give* vs. *see a talk*
- *score* vs. *cheer for the only goal*
- *bring* vs. *taste the only chocolate cake*
- *have* vs. *admire the only beautiful dress*

Adverbial readings of temporal FAs with non-event nouns arise only with certain V-N combinations but not with others.

However, these might not be exactly the same, there seems to be only partial overlap ...

- (49) Adverbial reading probably available
- a. Marta gave frequent talks.
  - b. Marta scored frequent goals.
- (50) Adverbial reading probably not available
- a. Marta brought frequent chocolate cakes.
  - b. Marta had frequent beautiful dresses.

We need a bigger data set and thorough empirical work.

C Coppock & Beaver (2015):

- (In)definites always denote properties (no existence entailment or presupposition).
- In argument position, (in)definites get type shifted (to *e* or GQ).

Gehrke & McNally (2019):

- (In)definites (nominals in general) first partake in concept composition via a semantics that is similar to incorporation.
- Arguments get instantiated at a later point when reference is added.

For both C&B and us (though neither builds on the other, and essentially it is not necessarily the same): All nominals, whether they have articles or not, start out as property-denoting.

Difference:

- C&B: (In)definites become arguments by type shifting, more or less where they appear.
- G&McN: (In)definites are instantiated as arguments when reference is added (for both events and individuals), but we are not very explicit as to where this happens.

## 6 Summary and conclusion

- There are many issues to be explored about DP-internal *only* and anti-uniqueness effects:
  - What does stress (or no stress) on *only* do and how does it interact with negation? What is the role of focus?
  - Why is *only* (but not other exclusives) restricted to the definite article (and possessives) (if indeed correct)?
  - What is the effect of additional modification?
  - How do we account for cross-linguistic differences?
- The main issues in the bigger context:
  - How do seemingly adverbial readings of DP-internal *only* arise? (anti-uniqueness reading)
  - Is this in any way comparable to adverbial readings with other DP-internal modifiers?
- What our previous research has shown, however:

There are different paths to adverbial paraphrases.

## References

- Bolinger, Dwight (1967): 'Adjectives in English: Attribution and predication.' In: *Lingua*, 18, 1–34.
- Coppock, Elizabeth & Beaver, David (2014): 'Principles of the exclusive muddle.' In: *Journal of Semantics*, 31, 371–432.
- Coppock, Elizabeth & Beaver, David (2015): 'Definiteness and determinacy.' In: *Linguistics and Philosophy*, 38, 377–435.
- Dowty, David (1991): 'Thematic proto-roles and argument selection.' In: *Language*, 67.3, 547–619.
- Ernst, Thomas (1981): 'Grist for the linguistic mill: Idioms and 'extra' adjectives.' In: *Journal of Linguistic Research*, 1.3, 51–68.
- Fisher, Ian (2018): 'DP-internal *only* in English and Russian.' BA Thesis, Haverford College.
- Gehrke, Berit & McNally, Louise (2011): 'Frequency adjectives and assertions about event types.' In: Ed Cormany, Satoshi Ito & David Lutz, Hgg., *Proceedings of SALT 19*, 180–197. Ithaca: CLC Publications.
- Gehrke, Berit & McNally, Louise (2014): 'Event individuation by objects: Evidence from frequency adjectives.' In: Urtzi Etxeberria, Anamaria Falaus, Aritz Irurtzun & Bryan Leferman, Hgg., *Proceedings of Sinn und Bedeutung 18*, 146–163. semanticsarchive.
- Gehrke, Berit & McNally, Louise (2015): 'Distributional modification: The case of frequency adjectives.' In: *Language*, 91.4, 837–870.
- Gehrke, Berit & McNally, Louise (2019): 'Idioms and the syntax/semantics interface of descriptive content vs. reference.' In: *Linguistics*, 57.4.
- Krifka, Manfred (1986): *Nominalreferenz und Zeitkonstitution: Zur Semantik von Massentermen, Individualtermen, Aspektklassen*. Dissertation, University of Munich.
- Krifka, Manfred (1990): 'Four thousand ships passed through the lock: Object-induced measure functions on events.' In: *Linguistics and Philosophy*, 13, 487–520.
- Larson, Richard (1998): 'Events and modification in nominals.' In: Devon Strolovitch & Aaron Lawson, Hgg., *Proceedings of SALT 8*, 145–168. Ithaca, NY: CLC Publications.
- Schäfer, Roland (2007): 'On frequency adjectives.' In: Estela Puig Waldmüller, Hg., *Proceedings of Sinn und Bedeutung 11*, 555–567. Barcelona: Universitat Pompeu Fabra.
- Stump, Gregory T. (1981): 'The interpretation of frequency adjectives.' In: *Linguistics and Philosophy*, 5, 221–256.
- Verkuyl, Henk (1972): *On the Compositional Nature of the Aspects*. Dordrecht: Foundations of Language Supplement Series 15.
- Zimmermann, Malte (2003): 'Pluractionality and complex quantifier formation.' In: *Natural Language Semantics*, 11, 249–287.