1. Introduction

The ‘some + numeral’ construction:

Some 20 cars were involved in the accident.

- A common intuition is that some + numeral has an approximating effect, prompting analyses that treat some on par with approximators such as about and roughly:
  - some twenty [is] twenty cars
  - some 20 cars = about 20 cars

- We argue instead that the some of some + numeral is not primarily approximative, but rather should be argued to ‘ordinary’ indefinite some

2. Against an approximator analysis

DISTRIBUTIONAL RESTRICTIONS:

a) Set-based denotations

We have some 5 ounces of gold.
- Sue sang for some 45 minutes.
  - The tree is some 10 feet above the house.
  - The table is some 5 feet long/longer than the rug.

b) Lack of true degree usage

Seven times fourteen is ...

- conclusion: some operates over individuals, not pure degrees.

NON-APPROXIMATING USES

Of some 206 students who responded to the survey, 52% were female.
- The Supreme Court struck down some 236 affirmative action plans.

Solt, Stevens & Waldon (2017): In an experimental interpretation task (MTurk, n=72), some+e patterns distinctively from both about+n and bare numerals, favoring an approximation with intermediate numbers but eliciting mixed responses with non-round numbers.

3. Proposal

Number words: Following Rothstein (2012, 2017), we number words to have interpretations as both predicates and arguments, with the latter derived via nominalization of the predicate, creating a duality parallel to that in the kind domain (Chierchia 1998; see also Scontras 2017).

\[ \text{three}_\text{cars} = \{ x : |x| = 3 \} \quad \text{three}_\text{s} = \{ x : |x| = 3 \} \]

Some: Drawing on recent proposals that indefinites determine manipulates domains of quantification (Kratzer & Shimoyama 2002; Alonso-Ovalle & Menéndez-Benito 2010, 2011) we propose that some, on all its uses, encodes a variable \( f \) over functions from sets (domains) to sets.

\[ \text{some}_\text{cars} = \lambda x.\text{some}(f(x)) \]

- Non-quantificational approach: quantificational force via existential closure

Indefinite some

\[ \lambda x.\text{some}(f(x)) \]

Some + numeral

\[ \text{some twenty} = \{ x : |x| = 20 \} \]

\[ \text{some twenty} = f(\{ \text{twenty} \}) \]

\[ \text{some twenty cars} = \lambda x.\text{some}(f(x); |x| = 20) \]

\[ \text{some twenty cars were involved in the accident} = \{ x \in f(\{ |y| = 20 \}) \} \]

Explaining variable interpretations:

Basic some

\[ \text{some 5 ounces} = \text{some}(5 \text{oz}) \]

\[ \text{some 5 ounces of gold} = \text{some}(5 \text{oz}; \text{gold}()) \]

\[ \text{set of portions of matter} \]

Sue sang for some 45 minutes

\[ \text{the tree is 100 feet above the floor} = \{ x \in f(\{ |y| = 100 \}) \} \]

\[ \text{set of spatial vectors} \]

Approximating some

\[ \text{some 20 cars} = \text{some}(20) \]

\[ \text{some 20 cars were involved in the accident} = \{ x \in f(\{ |y| = 20 \}) & \text{cars}(x) \} \]

Comparison to Anderson (2014)

\[ \text{Reference measure} = \text{some} \]

\[ \text{3:00} = \text{three o’clock} \]

4. Further consequences

IGNORANCE EFFECTS

Ignorance effects arise with some+e, singular, but not with some+plural or some+numeral.
- Some student called # was John.
  - Some students called — John, Sue and Ann.
- Some three students called — John, Sue and Ann.

Following Alonso-Ovalle & Menéndez-Benito (2010, 2011) on Spanish alguno(s) ‘some’, ignorance effects can be related to anti-singleton constraint on function f lexicalized by some \( |f(x)| > 1 \),

- Implication that no proposition of form (ii) could be asserted → not some student in all epistemically accessible worlds

some 3 students: logical form in (i) has alternatives in (ii)

\[ \square \exists x (\text{student}(x) \land \text{called}(x)) \]

\[ \square \exists x \in f(\{ \text{student}(x) \}) \land \text{called}(x) \]

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\[ |f(\{ \text{student}(x)\}) > 1 \]

\[ \text{all propositions of form (ii) equivalent to one of form (i)} \]

\[ \text{e.g. (ii)} \]

\[ \text{with } f(\{ \text{student}(x) \}) = \text{some} \]

\[ \text{some students} \]

- NB: Lack of ignorance effects with plural some students requires further investigation; extension of Alonso-Ovalle & Menéndez-Benito’s account of Spanish algunos requires positing some element that introduces a proper plurality requirement.

DEGREE vs. KIND PARALLELS

(each) dogs bark. [on kind reference reading]

some dogs bark. [on generic reading]

- Characterizing generics and kind reference based on kind interpretation for bare plural (Chierchia 1998), but some can only compose with nominal on predicative (type <e,n>) interpretation.

\[ \text{seven times fourteen equals some 100} \]

- This some can be aligned to ordinary indefinite some, and helps shed light on certain semantic properties of the latter.

\[ \text{some three students] }

- Some findings provide further evidence for a parallel between the domains of degrees and kinds.

- Also evidence of a richer structure in the domain of degrees; some but not all measure expressions can be construed as individuals.

5. Conclusions

- The some+numeral construction can have an approximating interpretation — but some isn’t a true approximator.

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References

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