Singleton Indefinites (re. Schwarzschild 2000)

1. *If a (particular) friend of mine from Texas had died in the fire, I would have inherited a fortune.

   (Fodor & Sag 1982)

2. Fodor & Sag: ambiguity of indefinites – referential (type e) vs. existential quantifier

3. Intermediate scope readings:

   *Every member of the club was convinced that if a (particular) friend of his from Texas had died in the fire, he would have inherited a fortune.*

4. The modern account: indefinites can be interpreted via choice-functions (Reinhart, Winter, Kratzer, Matthewson, Chierchia).

   \[ \text{if } f \left( \text{friend of mine from Texas} \right) \text{ had died in the fire, I would have inherited a fortune} \]

   \[ \forall y: \text{y member of the club} \]

   \[ \exists f: \text{y convinced that: if } f \left( \text{friend of y's from Texas} \right) \text{ had died in the fire} \]

   \[ \text{y would have inherited a fortune} \]

   or:

   \[ \exists f \exists y: \text{y member of the club} \]

   \[ \text{y convinced that: if } f \left( \text{y, friend of y's from Texas} \right) \text{ had died in the fire} \]

   \[ \text{y would have inherited a fortune} \]

5. Suspicion: indefinites are not that special, perhaps there is a more widely applicable mechanism that as a limiting case produces pseudo-scope indefinites.

6. Idea: the mechanism that produces pseudo-scope indefinites is the same one that effects domain restriction on quantifiers of all sorts.

7. One implementation:

   Matthewson: in St’át’imcets, the indefinite determiner (which she analyzes as introducing a choice-function) also occurs under real quantifiers.
8. Perhaps, indefinites, even pseudo-scope ones, are always existential quantifiers.
   -> Pseudo-scope indefinites can occur in *there*-insertion contexts
   *Some linguists dislike every paper in which there is a particular example of Chomsky’s.*

9. If the restriction of an existential quantifier is true of exactly one individual, the quantifier behaves logically like a (type-lifted) referential noun phrase. Schwarzschild calls indefinites with such an interpretation “singleton indefinites”. [An idea along these lines was first proposed by Uli Sauerland in a squib for my 1995 seminar on context-dependency.]

10. Schwarzschild’s claim: indefinites with unexpected wide scope interpretations are simply singleton indefinites. That is, to get such wide scope, the context must provide a restriction that characterizes a singleton set.

11. This will of course rarely be the case unless contextual domain restriction supplements the overtly expressed restriction.

12. *If a friend of mine from Texas had died in the fire, I would have inherited a fortune.*
   \[\text{if } \exists x \left( C(x) \& x \text{ friend of mine from Texas} \& x \text{ had died in the fire} \right), \]
   I would have inherited a fortune

If the context is such that the free variable C is assigned a value that contains exactly one relative of mine from Texas, then the sentence will be truth-conditionally equivalent to one in which the indefinite would have had wide scope over the conditional.

13. *Every member of the club was convinced that if a friend of his from Texas had died in the fire, he would have inherited a fortune.*
Schwarzschild argues that this as well can be analyzed as involving a singleton indefinite as long as the contextual domain restriction varies with the higher
quantifier.

\[ \forall y: \text{y member of the club} \]
\[ \text{y convinced that: if } \exists x (C_y(x) \& x \text{ friend of y's from Texas } \& x \text{ had died in the fire}) \]
\[ \text{y would have inherited a fortune} \]

Assuming that for each member of the club \( C_y \) characterizes exactly one relative of y’s from Texas, this should be equivalent to a logical form where the indefinite has scope outside the conditional but still under the universal quantifier.

14. One apparently quite tough problem with this kind of account is that it appears a speaker could utter our sentence without expecting the hearer to be able to determine to any extent at all what the value of C should be. Schwarschild argues that this property is one that C shares with other contextual parameters. [There is also relevant discussion in Fodor & Sag 1982.]

15. We can go further: the extent of C does not have to be known to the speaker either. Again, Schwarzschild would say that this is not a defect of the account but just a feature of some contextual parameters.

16. Arguments for existential force (see Ludlow & Neale, recast by J. Stanley in his commentary on my 1999 conference paper):

The general suspicion problem

“Suppose that Jane suspects that there is a relative of hers who is such that if that relative dies then Jane will inherit a house. However, Jane has no idea who this relative would be. On this basis, Jane utters:

\[ \text{If a relative of mine dies, then I will inherit a house. But I don’t know who it is.} \]

The lucky guess problem

“Suppose Jane, in a bout of irrationality, asserts:

\[ \text{If a relative of mine dies, then I will inherit a house.} \]

She has absolutely no one in particular in mind. Furthermore, she would deny, of many of her relatives, that if they die, then she would inherit a house.”
17. Schwarzschild’s argument against existential wide-scope:

Nobody believes that I have seen a certain Buñuel movie. [Cresti 1995:130 (96)]

18. Chierchia (2000) has shown that approaches to pseudo-scope indefinites that do not employ existential closure fail when such indefinites occur in downward entailing environments. Consider:

Contrary to what was thought, not every member of the club would have inherited a fortune if a (particular) friend of his from Texas had died in the fire.

This can quite easily be read in a way paraphraseable by “not every member of the club is such that there is a friend of his from Texas such that if that friend had died in the fire, the member would have inherited a fortune”.

19. We might want to introduce existential closure over contextual domain restrictions to solve Chierchia’s problem within Schwarzschild’s approach.

20. Note immediately that this cannot be allowed for domain restrictions on ordinary quantifiers:

Everyone is having a good time.

≠ There is a domain C such that everyone in C is having a good time.

= Everyone in the contextually salient domain C is having a good time.

21. Perhaps then, existential closure is for some reason only available with existential quantifiers (see Matthewson for some ideas about why this may be so).

22. But Schwarzschild’s story depended on it just so happening that C picked out a singleton. If we now bind off C existentially but still want to maintain parts of the singleton story, we need to build in singleton-ness into the logical form.

\[ \Box C: \text{singleton}(C) \land \Box \left( C(x) \land x \text{ friend of mine from Texas} \land x \text{ had died in the fire} \right) \]

I would have inherited a fortune

23. Attempt #1: C itself is a singleton.
24. Attempt #2: Call C a singleton restriction iff for every predicate P, C&P is true of exactly one individual.

25. Attempt #3: Call C a singleton restriction for another predicate P iff C&P is true of exactly one individual.


27. Call C a singleton subset selection function iff for any predicate P (that C is defined for if C is a partial function) C(P) is true of exactly one individual.

28. “Not every member of the club is such that there is a singleton subset selection function C such that if there is something in C(friend of that member from Texas) and that the thing had died in the fire, the member would have inherited a fortune.”

29. Subset selection function can be used in general for domain restriction, so we replicate one advantage of Schwarzschild’s account: a unification of domain restriction and pseudo-scope for indefinites.

30. We also replicate the fact that pseudo-scope indefinites still can be existential quantifiers in some sense (there-insertion).

31. But we add the possibility of explicit existential claims about singleton subset selection functions.