Presuppositions Can Be Disruptors Too:
A Case against Strawson-Entailment

Vincent Homer
University of California, Los Angeles

1. Introduction

This paper has one main goal, which is a negative one. It aims at showing that the theory of NPI licensing defended in von Fintel (1999) is empirically inadequate. In essence, the theory we're discussing relies on so-called Strawson-entailment, a device which ensures that weak NPIs are licensed despite the presence of presuppositions. We level two main criticisms against von Fintel's theory. First, the empirical claim underlying the theory has exceptions left unnoticed until now. Among the facts that we bring to light, there is an important discovery, namely the disruption caused by the presupposition trigger *too:*

(1) *Context:* Mary read some interesting book.[1]

    a. *I do<u>n't</u> think [John]$_F$ read **anything** interesting *too.*

    b. I don't think [John]$_F$ read something interesting too.

    c. *Presupposition of (1b):* Somebody other than John read something interesting.

Second, the theory cannot be amended to account for the exceptions: to do so, it would have to jettison its fundamental tenets.

2. Strawson-Entailment

Let's assume for the time being that NPIs are subject to the following licensing condition:

(2) **The Fauconnier-Ladusaw Licensing Condition:**
An NPI is licensed only if it is in the scope of an α which is Downward Entailing (DE). A function F is DE iff for all A, B in the domain of F such that A $\Rightarrow$ B, F(B) $\Rightarrow$ F(A), where '$\Rightarrow$' stands for cross-categorial entailment.

Looking at English weak NPIs (*any, ever, care to, bother with*), it is tempting to think that presuppositions are *never* a source of disruption for NPI licensing. In fact, triggers like *only* and the emotive factive predicates *sorry* and *surprise* are so far from being disruptors that they even seem to license NPIs:

(3) *Context:* Mary just bought a car.

    a. John is <u>*sorry*</u> that Mary bought **any** car.

    b. *Presupposition of (3a):* John believes that Mary bought a car.

(4) *Context:* John is complaining that there is not enough light in his hotel room.

    a. Meredith is <u>*surprised*</u> that John has **any** complaints about the hotel.

    b. *Presupposition of (4a):* Meredith believes that John has complaints about the hotel.

[1]In this example and in the rest of the paper, we supply contexts in order to avoid unacceptability due to a presupposition failure. We also spell out presuppositions; for ungrammatical sentences, we provide a grammatical paraphrase and its presupposition.

(5)   *Context:* John visited Chicago last year.

    a.   <u>*Only*</u> John has **ever** been to Chicago.

    b.   *Presupposition of (5a):* John has been to Chicago.

These facts are surprising. Consider for example (3a): DE functions allow inferences from sets to subsets, but it doesn't seem that the inference from (6a) to (6b) goes through (the set of Hondas is a subset of the set of cars), since one can easily imagine scenarios in which John is sorry that Mary bought a car, and the only car she bought is a Mazda (in which case 6b is undefined):

(6)   a.   John is sorry that Mary bought **a car.**
        Presupposition: John believes that Mary bought **a car.**

    b.   John is sorry that Mary bought **a Honda.**
        Presupposition: John believes that Mary bought **a Honda.**

$$(6a) \Rightarrow^? (6b)$$

Since NPIs, which require a DE function, are licensed by *sorry,* the inference must somehow be valid despite some appearances to the contrary. It would suffice that the presupposition of the consequence (6b) be granted, i.e. that it is part of contextual knowledge that Mary bought a Honda, for the inference to be truth-preserving: under this assumption, whenever (6a) is true, (6b) is also true, since its definedness is taken care of. This is exactly the move von Fintel (1999) makes to account for the above facts: granting the presuppositions of the consequence will secure downward entailingness.

(7)   **Strawson Downward Entailingness:**
    A function f of type $<\sigma, t>$ is Strawson Downward Entailing (SDE) iff for all x, y of type σ such that $x \Rightarrow y$ <u>and $f(x)$ is defined</u>: $f(y) \Rightarrow f(x)$

According to von Fintel, the licensing condition given in (2) is simply too strong to be empirically adequate. He thus advocates the following formulation:

(8)   **von Fintel's (1999) Licensing Condition** (to be revised):
    An NPI is only grammatical if it is in the scope of an α that is SDE.

The reader can verify that (6a) Strawson-entails (6b), leading to the grammaticality of the NPI *any* in (3a), as desired. von Fintel (1999) is thus a *theory of possible licensers* and as such the condition it states is only a necessary one. Furthermore, it is only concerned with a specific category of NPIs, namely weak ones, in a specific language, namely English. Its two main tenets are:

1. NPIs are licensed by <u>operators</u> (as opposed to environments). This is what one might call the *syntactic* component of the theory;

2. A necessary condition for being a suitable licenser is <u>Strawson Downward Entailingness</u>. This is the *semantic* component of the theory.

But as it stands, the theory is in fact too weak. In particular, it makes wrong predictions with regard to the singular definite article and *both,* two triggers which do not license weak NPIs in their restrictor.

(9)   *Context:* There is exactly one student who read some books on NPIs.

    a.   *<u>The</u> student who read **any** books on NPIs is selling them.

    b.   The student who read books on NPIs is selling them.

    c.   *Presupposition of (9b):* There is exactly one student who read books on NPIs.

(10)   a.   The student who read **a book** is selling it.
        Presupposition: There is exactly one student who read **a book.**

    b.   The student who read **a novel** is selling it.
        Presupposition: There is exactly one student who read **a novel.**

$$(10a) \Rightarrow^{Strawson} (10b) \qquad (SDE)$$

(11)   *Context:* Exactly two students read some linguistics books.

    a. *<u>Both</u> students who read **any** linguistics books have applied to the department.

    b. Both students who read linguistics books have applied to the department.

    c. *Presupposition of (11b):* There are exactly two students who read linguistics books.

(12)   a. Both students who read **books** have applied to the department.
       Presupposition: There are exactly two students who read **books.**

    b. Both students who read **novels** have applied to the department.
       Presupposition: There are exactly two students who read **novels.**

$$(12a) \Rightarrow^{Strawson} (12b) \qquad (SDE)$$

In (9b) and (11b), the definite descriptions carry a uniqueness presupposition. As a result, for each inference (10 and 12), the individual (or pair of individuals) denoted by the definite description is the same in both sentences: for example, in any given model the student who read a book and the student who read a novel, granted they exist and are both unique, have to be the same individual; but then whatever is predicated of one can also be predicated of the other, thus ensuring entailment in both directions, i.e. from sets to subsets and from subsets to sets. Since singular *the* and *both* are not licensers, this property of supporting downward as well as upward entailments has been the designated culprit of non licensing (this is the idea first put forward in Lahiri 1998). Alongside Strawson Downward Entailingness, the notion of Strawson Upward Entailingness is called for:

(13)   **Strawson Upward Entailingness:**
    A function f of type $<\sigma, t>$ is Strawson Upward Entailing (SUE) iff for all x, y of type σ such that $x \Rightarrow y$ <u>and $f(y)$ is defined</u>: $f(x) \Rightarrow f(y)$

The reader can verify that *the* and *both* are SDE, SUE in their restrictor. So possible licensers cannot include SUE operators:[2]

(14)   **von Fintel/Lahiri's (vFL) Licensing Condition:**
    An NPI is only grammatical if it is in the scope of an α that is SDE, <u>non SUE.</u>

3. Discussion
3.1. In Defense of Environment-Based Licensing

Although many researchers adopt the Fauconnier-Ladusaw view that the licensing condition should be phrased in terms of downward entailingness, there is no real consensus as to what it is that must be downward entailing, or in other words, what it is that licenses NPIs. Once DEness is accepted, licensing can be viewed in two different ways: either as a relationship between a DE operator and an NPI in its scope (we propose to dub this view, which is essentially syntactic, the operator-based approach), or as the match between the demands of the NPI and the properties of the constituent it finds itself in (henceforth the environment-based approach).

For the operator-based approach, the number of DE items outscoping a given NPI is never important: if the NPI is licensed by the closest DE item, it will remain licensed even in the presence of a higher DE operator. This is not necessarily the case for the environment-based approach: in effect, the constituent upon which licensing is checked might contain more than one DE item; an important consequence of this fact is that the environment will fail to be downward monotone w.r.t. the position of the NPI in case an even number of DE items outscope the NPI in the constituent at issue.

(15)   a. There was<u>n't</u> anyone at the scene of the accident who did **a thing** to help.

    b. *There was<u>n't</u> anyone at the scene of the accident who did<u>n't</u> do **a thing** to help.[3]

---

[2]SDE, non SUE operators are a superset of DE operators.
[3]These data are from Bhatt & Schwarz (2003).

The phenomenon of non-licensing exemplified in (15b) is known as flip-flop. It is admittedly rare and ill-understood, but noteworthy nonetheless. Flip-flop is probably not due to some general constraint against an even number of DE operators above the NPI, as shown by the well-formed (16b):

(16)   a.   This student doesn<u>'t</u> know **any** linguistics.   *(One DE operator)*

     b.   <u>Every</u> student who does<u>n't</u> know **any** linguistics is encouraged to take this class.   *(Two DE operators)*

The above sentences falsify a radical environment-based hypothesis but they lend decisive support to a moderate one: the radical hypothesis would hold that the constituent upon which licensing is checked is *always* the matrix, while the moderate one, which appears to be right, is that licensing is checked upon a constituent which can but need not be the entire sentence (it is so in 15b but not in 16b; again, the rules governing the determination of this constituent are still mysterious). If the constituent relevant for licensing happens to be non decreasing with respect to the position of the NPI (as a result of having an even number of DE operators in the constituent), ungrammaticality will ensue, as in (15b). Lastly, the facts are incompatible with operator-based approaches, which predict that licensing should be impervious to the number of DE operators.

We already have reasons to think that one of the two main tenets of vFL, namely operator-based licensing, is not correct. We are now going to show that the vFL account cannot countenance environments without contradicting itself.

3.2. Disruption

Turning to the problem at hand, i.e. the apparent innocuousness of presuppositions, we provide two arguments that show the falsity of each of the two main tenets of the vFL account. Our first argument is based on the disruptive effect of the trigger *too*.

(17)   *Context:* Mary read some interesting book.

     a.   *I do<u>n't</u> think [John]$_F$ read **anything** interesting *too.*

     b.   I don't think [John]$_F$ read something interesting too.

     c.   *Presupposition of (17b):* Somebody other than John read something interesting.

Crucially, the ungrammaticality of (17a) is not due to some incompatibility between *too* and the negation, as shown by the well-formedness of (17b). Now compare the ungrammatical (17a) with the grammatical (18a) below:

(18)   *Context:* Mary didn't read anything interesting.

     a.   I do<u>n't</u> think [John]$_F$ read **anything** interesting *either.*

     b.   *Presupposition:* Somebody other than John didn't read anything interesting.

Either is a disruptor while *too* isn't. This discrepancy is all the more significant since the only pertinent difference between the two triggers concerns their presuppositions. Compare the presupposition of (17b), which is the closest grammatical paraphrase of (17a), and the one of (18a): the former contains no constituent which is DE in the relevant position, while the latter does. We are thus entitled to think that the polarity of the presupposition is a crucial matter. Here is our proposal: we treat the assertive content and the presupposition of a given sentence Φ as separate entities; (17a) and (18a) have the same assertive content, but a different presupposition as far as polarity is concerned. This difference can only matter to the occurrence of *anything* in (17a) and (18a) if the process of checking the licensing of the NPI involves considering an enriched meaning which includes, for each sentence, the presuppositions it carries.

We thus assume that, alongside the plain meaning of a given sentence Φ, grammar provides an enriched meaning of Φ (henceforth labeled the μ meaning of Φ and noted $\mu(\llbracket\ \Phi\ \rrbracket)$), which is the conjunction of the assertive content of Φ and of (the conjunction of) its presuppositions;[4] it is the μ

---

[4]Given the definition of the μ operator, we are led to stipulate that the licensing condition should require that the constituent upon which licensing is checked be of type $< t >$.

meaning that counts for NPI licensing. The effect of the μ operator is to turn a trivalent meaning into a bivalent one:[5]

(19)   Let E be a trivalent meaning. $\mu(E) = 0$ iff E = # or 0 and $\mu(E) = 1$ iff E = 1

Let us illustrate how the procedure goes: in order to show that the ungrammatical (17a) (repeated as 20a below) doesn't provide a downward entailing environment for the NPI *anything,* we check in (20b)-(20c) whether some constituent of type $< t >$ of the sentence supports an inference from sets to subsets in the relevant position. The constituent we examine is the whole sentence, for the embedded clause lacks any expression denoting a DE function (and as such cannot be a DE constituent).

(20)   a. *I do<u>n't</u> think [John]$_F$ read **anything** interesting *too.*

   b. I don't think [John]$_F$ read **a book** too.
       Presupposition: Somebody other than John read **a book.**

   c. I don't think [John]$_F$ read **a novel** too.
       Presupposition: Somebody other than John read **a novel.**

(21) $\mu(\llbracket (20b) \rrbracket) = \neg[\llbracket$ a book $\rrbracket[\lambda y.\ \text{read}(j,y)]] \land \exists x[x{\neq}j \land \llbracket$ a book $\rrbracket[\lambda y.\ \text{read}(x,y)]]$

(22) $\mu(\llbracket (20c) \rrbracket) = \neg[\llbracket$ a novel $\rrbracket[\lambda y.\ \text{read}(j,y)]] \land \exists x[x{\neq}j \land \llbracket$ a novel $\rrbracket[\lambda y.\ \text{read}(x,y)]]$

$$\mu(\llbracket (20b) \rrbracket) \nRightarrow \mu(\llbracket (20c) \rrbracket)$$
$$(20b) \Rightarrow {}^{Strawson} (20c) \qquad (SDE)$$
$$(20c) \nRightarrow {}^{Strawson} (20b) \qquad (non\ SUE)$$

The μ meaning of (20b) fails to entail the μ meaning of (20c), leading to ungrammaticality. We now apply the same procedure to the grammatical (18a), repeated as (23a) below:

(23)   a. I do<u>n't</u> think [John]$_F$ read **anything** interesting *either.*

   b. I don't think [John]$_F$ read **a book** either.
       Presupposition: Somebody other than John didn't read **a book.**

   c. I don't think [John]$_F$ read **a novel** either.
       Presupposition: Somebody other than John didn't read **a novel.**

(24) $\mu(\llbracket (23b) \rrbracket) = \neg[\llbracket$ a book $\rrbracket[\lambda y.\ \text{read}(j,y)]] \land \exists x[x{\neq}j \land \neg\llbracket$ a book $\rrbracket[\lambda y.\ \text{read}(x,y)]]$

(25) $\mu(\llbracket (23c) \rrbracket) = \neg[\llbracket$ a novel $\rrbracket[\lambda y.\ \text{read}(j,y)]] \land \exists x[x{\neq}j \land \neg\llbracket$ a novel $\rrbracket[\lambda y.\ \text{read}(x,y)]]$

$$\mu(\llbracket (23b) \rrbracket) \Rightarrow \mu(\llbracket (23c) \rrbracket)$$
$$(23b) \Rightarrow {}^{Strawson} (23c) \qquad (SDE)$$
$$(23c) \nRightarrow {}^{Strawson} (23b) \qquad (non\ SUE)$$

The disruption in (20a) is not caused by the mere presence of a presupposition trigger in the way between the negation (an SDE, non SUE operator) and the NPI *anything:* what is the culprit is the very makeup of the presupposition. So this case challenges the vFL account both in its syntactic component (the condition that the NPI should be in the scope of some SDE, non SUE operator is met) and in its semantic component (even if the vFL account countenanced environments, it would make the wrong prediction since the environment of the NPI is SDE, non SUE). Our theory departs from the vFL account w.r.t. its two tenets: it is an environment-based theory which invokes strict downward entailingness. Here is our licensing condition:

---

[5]As an alternative to building conjunctions, we could adopt the rule that in a trivalent framework, *F* entails *G* iff whenever $\llbracket F \rrbracket = 1$, $\llbracket G \rrbracket = 1$. Thanks to B. Spector for suggesting this solution; we will use conjunctions (μ meanings) as a pedagogical device.

(26) **Licensing Condition** (after Gajewski 2005):
An NPI α is licensed in a sentence S only if there is a constituent β of type $<t>$ of S containing α such that β is DE w.r.t. the position of α.[6]

Since the meaning which is relevant to NPI licensing is the μ meaning, we give the following definition:

(27) A constituent β is DE with respect to the position of α ($[\![\alpha]\!] \in D_\sigma$) iff the function
$\lambda x.\mu([\![\,\beta[\alpha/v_\sigma]\,]\!]^{g[v_\sigma \to x]})$ is DE.

Importantly, an NPI is licensed in a sentence Φ only if both the assertive content and the presupposition(s) of the sentence are DE w.r.t. to its position. DEness holds in a conjunction provided that the substitution of subsets for sets is exactly parallel in every conjunct:

(28) Let F and G be DE functions. For all A, B such that B $\Rightarrow$ A, $F(A) \wedge G(A) \Rightarrow F(B) \wedge G(B)$

We thus rightly predict that an NPI is licensed in the scope of *too,* if it is the focus of *too* (this corresponds to a DE position in the presupposition triggered by the additive particle):

(29) *Context:* Many students in Mary's class read a very interesting book.
   a. I do<u>n't</u> think [**anybody** in John's class]$_F$ read something interesting *too.*
   b. *Presupposition:* Somebody other than anybody in John's class read something interesting.

(30) a. I don't think [**a student**]$_F$ read something interesting too.
       Presupposition: Somebody other than **a student** read something interesting.
   b. I don't think [**a French student**]$_F$ read something interesting too.
       Presupposition: Somebody other than **a French student** read something interesting.

(31) $\mu([\![\,(30a)\,]\!])=\neg\exists x[x\in[\![\text{ student }]\!]\wedge[\![\text{ something interesting }]\!][\lambda y.\text{ read}(x,y)]] \wedge \exists x[x\notin[\![\text{ student }]\!]\wedge[\![\text{ something interesting }]\!][\lambda y.\text{ read}(x,y)]]$

(32) $\mu([\![\,(30b)\,]\!])=\neg\exists x[x\in[\![\text{ French student }]\!]\wedge[\![\text{ something interesting }]\!][\lambda y.\text{ read}(x,y)]] \wedge \exists x[x\notin[\![\text{ French student }]\!]\wedge[\![\text{ something interesting }]\!][\lambda y.\text{ read}(x,y)]]$

$$\mu([\![\,(30a)\,]\!]) \Rightarrow \mu([\![\,(30b)\,]\!])$$
$$(30a) \Rightarrow {}^{Strawson} (30b) \qquad \textit{(SDE)}$$
$$(30b) \not\Rightarrow {}^{Strawson} (30a) \qquad \textit{(non SUE)}$$

The contrast between (20a) and (29a) shows that we rightly invoke the presupposition triggered by *too* as the cause of the ill-formedness of the former.

3.3. SDE, SUE operators

Our second argument against the vFL account is based on singular *the/both* and *it*-clefts. The strengthening of the licensing condition (placing a ban on SDE, SUE operators), made necessary in view of the facts about singular *the* and *both,* leads to a catch-22. First, we know that the restrictor of singular *the* and *both* do not allow NPIs in them. But what if we added an SDE, non SUE operator above the quantifier, e.g. forming the NOT $>$ THE$_{SG}$/BOTH $>$ NPI configuration (by THE$_{SG}$, we mean the singular definite article)? The vFL account predicts that the NPI should be licensed, because its licensing condition, which states that the NPI should be in the scope of some SDE, non SUE operator, is obviously met. But in fact, this prediction turns out to be wrong:

(33) (*Context:* Two men are flirting with Mary; one of the two keeps giving her presents, while the other never offered her anything.)
   *I do<u>n't</u> think *the* man who gave Mary **anything** is very smart.

---

[6]This condition should be modified further to incorporate the lesson drawn from the operator *vs.* environment discussion in subsection 3.1: we know that there are (still ill-understood) constraints bearing on the constituents that qualify for the checking of NPI licensing.

vFL couldn't respond by adding a negative rule to the effect that the NPI should *not* be in the scope of an SDE, SUE operator. This rule would be immediately falsified by the following grammatical sentence, which illustrates the THE_{SG}/BOTH > NOT > NPI configuration:

(34)   *Context:* There is some student who knew nothing about linguistics.

    a. *The* student who did<u>n't</u> know **any** linguistics passed all his syntax exams.

    b. *Presupposition:* There is some student who knew nothing about linguistics.

So we reach the same conclusion as before regarding the syntactic component of the account: it cannot be correct. But the vFL account could still be right, provided it acknowledged that licensing is checked on *environments,* for the NPI *anything* in (33) occurs in an SDE, SUE environment (*'I don't think the man who gave Mary a Honda is very smart'* Strawson-entails *'I don't think the man who gave Mary a car is very smart'*, because the definite descriptions in the two sentences refer to the same individual).

However, accepting environment-based licensing is incompatible with the semantic component. In effect, there exists at least one expression, namely the *it*-cleft, which, according to proponents of the vFL account (Cable 2002, Guerzoni & Sharvit 2007) creates an SDE, SUE environment, but which doesn't in fact disrupt NPI licensing:

(35)   (*Context:* All the Chinese statuettes have been stolen; investigators say they found fingerprints, and they think there was only one burglar.)
    I do<u>n't</u> think *it was* John *who* stole **anything.**

(36)   a. I do<u>n't</u> think *it was* John *who* stole **a vase.**
    Presupposition: There is exactly one individual who stole **a vase.**

    b. I do<u>n't</u> think *it was* John *who* stole **a blue vase.**
    Presupposition: There is exactly one individual who stole **a blue vase.**

$$\mu([\![\,(36a)\,]\!]) \not\Rightarrow \mu([\![\,(36b)\,]\!])$$

$$(36a) \Rightarrow {}^{Strawson} (36b) \qquad (SDE)$$
$$(36b) \Rightarrow {}^{Strawson} (36a) \qquad (SUE)$$

To sum up, von Fintel's original theory was too weak, hence the ban on SUE operators. But it cannot in fact be strengthened to account for the restrictors of singular *the* and *both,* because this move requires switching to an environment-based licensing condition, and this leads the theory to undergenerate w.r.t. to *it*-clefts. And we have seen it overgenerate as well (e.g. w.r.t. to *too*).[7]

In all fairness, we're not convinced that *it*-clefts trigger a uniqueness presupposition, that is, the following sentences don't seem to us to imply that there is exactly one individual who ate a pizza:

(37)   a. If it is John who ate the pizza, we should not feed him.

    b. Is it John who ate the pizza? (*Possible answer:* No, it is Sue and Tom.)

    c. It is not John who ate the pizza.

If *it*-clefts don't trigger a uniqueness presupposition, that is, if they only trigger an existence presupposition as is often assumed, then *it*-clefts create an SDE, non SUE environment:

(38)   a. I do<u>n't</u> think *it was* John *who* stole **a vase.**
    Presupposition: Someone stole **a vase.**

    b. I do<u>n't</u> think *it was* John *who* stole **a blue vase.**
    Presupposition: Someone stole **a blue vase.**

$$\mu([\![\,(38a)\,]\!]) \not\Rightarrow \mu([\![\,(38b)\,]\!])$$

$$(38a) \Rightarrow {}^{Strawson} (38b) \qquad (SDE)$$
$$(38b) \not\Rightarrow {}^{Strawson} (38a) \qquad (non\ SUE)$$

---

[7]The μ theory is globally too strong. But at least, contrary to the vFL account, it doesn't both undergenerate and overgenerate. See Homer (2008), for a comparison of the merits of the two theories and reasons to favor the μ theory, drawn in particular from strong NPIs and cross-linguistic data.

Alas, the uniqueness presupposition postulated by Cable (2002) is necessary to save the vFL account from wrongly predicting that an NPI is licensed in an *it*-cleft in the absence of a negation, as in (39):

(39)   *It was John who stole anything.

Assuming standard truth conditions and presuppositions for *it*-clefts, vFL overgenerates:

(40)   a.   It was John who stole **a vase.**
           Assertion: John and no other contextually salient individual stole **a vase.**
           Presupposition: Someone stole **a vase.**

       b.   It was John who stole **a blue vase.**
           Assertion: John and no other contextually salient individual stole **a blue vase.**
           Presupposition: Someone stole **a blue vase.**

$$\mu([\![\,(40a)\,]\!]) \not\Rightarrow \mu([\![\,(40b)\,]\!])$$
$$(40a) \Rightarrow {}^{Strawson} (40b) \qquad (SDE)$$
$$(40b) \not\Rightarrow {}^{Strawson} (40a) \qquad (non\ SUE)$$

Therefore proponents of vFL are trapped: whatever move they make is doomed to failure.

3.4. SDE, non SUE operators

Another weakness of the theory we would like to point out is the case of genuine SDE, non SUE operators which, contrary to the predictions of the vFL account, are disruptors (this is another instance of overgeneration). The first of these is *each:*

(41)   *Context:* There is at least one student who knows some linguistics.

       a.   *_Each_ student who knows **any** linguistics has applied to the department.

       b.   *Presupposition:* The set of students who know some linguistics is non-empty.

(42)   a.   Every student who knows **any** linguistics has applied to the department.

       b.   *Presupposition:* None.

The vFL account doesn't predict the contrast, as *each* and *every* are both SDE, non SUE in their restrictor. But the μ theory has a ready analysis: unlike *every, each* triggers a (positive) existence presupposition. This claim, we think, is corroborated by the following test (suggested by Philippe Schlenker, p.c.): we place the putative presupposition trigger in the scope of a universal quantifier over times to determine whether a presupposition is triggered or not. The idea is that if it is, its accommodation should be either local, i.e. in the scope of the quantifier over times, or global, i.e. above it. If the sentence can be understood without either of the two resulting meanings, then the presupposition is not triggered.

(43)   Each year since 1980, each visiting student from France in the department passed the exam.

According to our consultants, the sentence is ambiguous: it means either that there is at least one visiting student from France in the department and they repeatedly passed the exam every year from 1980 on (*global accommodation*), or that each year since 1980, there has been at least one visiting student from France in the department, possibly a different one every year, and he passed the exam (*local accommodation*). Although this judgment is subtle, a difference is perceived between (43) and (44):

(44)   Each year since 1980, every visiting student from France in the department passed the exam.

This sentence doesn't appear to make any claim about the existence of some visiting student from France in the department, either the same individual(s) since at least 1980, or a possibly different one each year since then.

The second example is plural *the,* which, contrary to singular *the,* is SDE, non SUE in its restrictor. Unlike singular *the,* it allows NPIs in its restrictor.

(45) a. The students who have any books on NPIs are selling them.

    b. *The student who has any books on NPIs is selling them.

The contrast between (45a) and (45b) has been taken to support the use of Strawson-entailment (e.g. Guerzoni & Sharvit 2007). The μ theory will account for these cases of licensed NPIs by saying that, in those instances, plural *the* doesn't trigger a presupposition. Let's use our test to show that plural *the* doesn't (always) trigger a presupposition:

(46) a. Each year since 1980, the visiting student from France in the department passed the exam.

    b. Each year since 1980, the visiting students from France in the department passed the exam.

(46a) means either that there is a single visiting student from France who repeatedly passed the exam since 1980, or that every year since 1980, there has been a possibly different single visiting student from France, who passed the exam. No such claims of existence are made in (46b): the sentence can be true even if there were years between 1980 and now in which the department had no visitors from France, or even if there has never been a visiting student from France.

    Now, what vFL fail to predict is that NPIs are not always licensed in the restrictor of plural *the:*

(47) a. The students who have ever been to Florida are happy about their trip.

    b. *(*Context:* It's the end of the party; all the guests are gone, except for John and Mary, two students who recently came back from Florida...) The students who have ever been to Florida are now in the lobby, saying goodbye to the host.

(48) a. The drugs that have any hazardous side effects are prohibited under a certain age.

    b. *(*Context:* My backpack fell into the fountain; I have two kinds of drugs in it: the vitamins are intact but...) The drugs that have any hazardous side effects are soaked.

Explaining the two contrasts above is not an easy task, as it requires a theory of presupposition triggering. It seems to us that a presupposition of existence is clearly triggered in (47b) and (48b), while this is not the case in (47a) and (48a). And the triggering is achieved by making the context as specific/episodic as possible.[8] Applying the same intuitive recipe, we form the clearly deviant sentence below:

(49) *(*Context:* Pointing at John and Mary, who recently came back from Florida, Paul introduces the senator to them...) Senator, I'd like to introduce you to the students who have ever been to Florida.

4. Conclusion

    This paper shows that von Fintel (1999) is empirically inadequate, but cannot be amended without making an even greater number of wrong predictions. We establish that presuppositions, at least the ones triggered by *too,* the definite articles and universal quantifiers, can affect NPI licensing. It is thus an important merit of this paper that it offers the first tool to probe the presuppositional nature of quantifiers.

References

Bhatt, Rajesh & Bernard Schwarz (2003). Notes on Szabolcsi's 'Positive Polarity-Negative Polarity'. Ms.

Cable, Seth (2002). Some Remarks on Two Theories of Negative Polarity. Ms, MIT.

von Fintel, Kai (1999). NPI-Licensing, Strawson-Entailment, and Context-Dependency. *Journal of Semantics* 16, pp. 97–148.

Gajewski, Jon (2005). *Neg-Raising: Polarity and Presupposition*. Ph.D. thesis, MIT, Cambridge, Mass.

Guerzoni, Elena & Yael Sharvit (2007). A Question of Strength: on NPIs in Interrogative Clauses. *Linguistics and Philosophy* 30.

Homer, Vincent (2008). Disruption of NPI Licensing: the Case of Presuppositions. *Proceedings of SALT XVIII*, CLC Publications, Cornell, Ithaca.

Lahiri, Utpal (1998). Focus and Negative Polarity in Hindi. *Natural Language Semantics* 6, pp. 57–123.

---

[8]We suggest that the presuppositions are triggered in those contexts because it is assumed that the speaker wouldn't refer to non-existing entities, when the context makes it clear that she has good knowledge of the situation.

Proceedings of the 27th West Coast Conference on Formal Linguistics

edited by Natasha Abner and Jason Bishop

Cascadilla Proceedings Project   Somerville, MA   2008

Ordering information

Orders for the library binding edition are handled by Cascadilla Press.
To place an order, go to www.lingref.com or contact:

Cascadilla Press, P.O. Box 440355, Somerville, MA 02144, USA
phone: 1-617-776-2370, fax: 1-617-776-2271, e-mail: sales@cascadilla.com

Web access and citation information

This entire proceedings can also be viewed on the web at www.lingref.com. Each paper has a unique document # which can be added to citations to facilitate access. The document # should not replace the full citation.

This paper can be cited as:

Homer, Vincent. 2008. Presuppositions Can Be Disruptors Too: A Case against Strawson-Entailment.
In *Proceedings of the 27th West Coast Conference on Formal Linguistics*, ed. Natasha Abner and Jason Bishop,
220-228. Somerville, MA: Cascadilla Proceedings Project.

or:

Homer, Vincent. 2008. Presuppositions Can Be Disruptors Too: A Case against Strawson-Entailment.
In *Proceedings of the 27th West Coast Conference on Formal Linguistics*, ed. Natasha Abner and Jason Bishop,
220-228. Somerville, MA: Cascadilla Proceedings Project. www.lingref.com, document #1835.