

# Presuppositional Indefinites are Positive Polarity Items

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## 1. Introduction

In this paper, I develop a proposal that addresses the puzzle regarding the scope options of indefinites shown in (1). An indefinite subject cannot take scope below negation in a matrix context in (1a) (Beghelli & Stowell 1997), but can do so in a downward-entailing context in (1b) (Spector 2004).<sup>1</sup>

- (1) a. Context: I scheduled a meeting with several students, but left because nobody was there at the appointed time. (based on Mayr & Spector (2010): 4)  
**# A student of mine didn't show up on time**, so I just went home.  
#( $\exists > \neg$ ): There is a particular student of mine who didn't show up on time.  
??( $\neg > \exists$ ): *No student of mine showed up on time.*  
b. Context: I scheduled a meeting with several students, and will leave only if nobody is there at the appointed time.  
**If a student of mine doesn't show up on time**, I'll just go home.  
#( $\exists > \neg$ ): If a particular student of mine doesn't show up on time, ...  
( $\neg > \exists$ ): *If no student of mine shows up on time*, ...

The above data raise two questions. First, why *can't* an indefinite subject take scope under negation in (1a)? And given that the indefinite subject *can't* take scope under negation in (1a), why *can* it do so in (1b)? In the spirit of Vanden Wyngaerd (1999) and Spector (2004), I will argue that *presuppositional indefinites* are positive polarity items (PPIs). Certain environments, including (1), force an indefinite to be interpreted presuppositionally, and the pattern observed in (1) follows from the status of the subject as a PPI.

### 1.1. Outline

In the remainder of this section, I discuss the methodology for obtaining scope judgments used throughout this paper. In section 2, I provide evidence that while (presuppositional) indefinites cannot take scope below negation in a matrix environment, this observation is not part of some broader pattern. I then show how the proposal that presuppositional indefinites are PPIs accounts for this generalization. In section 3, I discuss the observation made by Diesing (1992) that indefinite subjects of individual-level predicates are interpreted presuppositionally. I propose that the principle of *Maximize Presupposition* (Heim 1991) also forces certain indefinites to be interpreted presuppositionally. I demonstrate that non-presuppositional indefinites are *not* PPIs. In section 4, I present data showing that presuppositional indefinites in English indeed have the full range of PPI properties. In section 5, I discuss some earlier approaches to the data under consideration here. Section 6 concludes.

### 1.2. Methodology

Scope judgments are notoriously difficult. To make them as easy as possible, I rely on examples for which the reading (or readings) whose availability *is not* at issue are pragmatically deviant in the given context. The reading whose availability *is* at issue is the salient reading. Consequently, the scope judgment becomes a judgment of salience. The crucial reading is available whenever the sentence is judged as salient in the given context, and absent whenever the sentence is deviant in the given context.

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<sup>1</sup>For convenience, the crucial part of each example is marked in bold. The relevant reading is italicized.

## 2. The puzzle and the solution

### 2.1. The puzzle

As seen in (1a) above, a (presuppositional) *indefinite* subject cannot take scope below *negation* in a matrix context. There are two components to making sure that this is the right generalization. First, as seen in (2), quantifiers other than indefinites *can* perfectly well take scope below negation. Second, as seen in (3), indefinites *can* take scope below non-negative quantificational elements.

- (2) **Every student of mine didn't show up on time** – only Tom and Kate were there at the start of class.  
#( $\forall > \neg$ ): No students of mine showed up on time.  
 $(\neg > \forall)$ : *Not all students of mine showed up on time.*
- (3) Context: I want to have someone erase the whiteboard, but I don't care who does it.  
**A student of mine is required to erase the whiteboard** at the end of class.  
#( $\exists > \text{required}$ ): There is a particular student of mine who is required to erase the whiteboard.  
 $(\text{required} > \exists)$ : *It is required that a student (any student) erases the whiteboard.*

The restriction against indefinites taking scope below negation cannot be subsumed under a broader generalization.

### 2.2. The solution

How does the proposal that presuppositional indefinites are PPIs account for the data given in (1) (repeated in abbreviated form in (4))?

- (4) a. **A student of mine didn't show up on time.**  $\times(\neg > \exists)$   
b. **If a student of mine doesn't show up on time, ...**  $\checkmark(\neg > \exists)$

By definition, a PPI cannot take scope directly under clausemate negation in a matrix context. However, it has been observed that embedding in a downward-entailing context, such as a conditional antecedent, allows a PPI to take scope under negation (Jespersen 1909-1949; Baker 1970). The properties of the indefinite subject in (4) are thus exactly the properties of PPIs: the indefinite subject cannot take scope under negation in a matrix context in (4a), but can do so in a downward entailing context in (4b). A parallel pair of examples with the PPI *some* is given in (5).

- (5) a. Context: I scheduled a meeting with several students, but left because nobody was there at the appointed time.  
# **Some student of mine didn't show up on time**, so I just went home.  
#( $\exists > \neg$ ): There is a particular student of mine who didn't show up on time.  
??( $\neg > \exists$ ): *No student of mine showed up on time.*
- b. Context: I scheduled a meeting with several students, and will leave only if nobody is there at the appointed time.  
**If some student of mine doesn't show up on time**, I'll just go home.  
#( $\exists > \neg$ ): If a particular student of mine doesn't show up on time, ...  
 $(\neg > \exists)$ : *If no student of mine shows up on time, ...*

In the next section, I turn to the distinction between presuppositional and non-presuppositional indefinites. My proposal regarding the use of presuppositional indefinites correctly predicts that the indefinites in (4) must be interpreted presuppositionally, and are therefore PPIs.

## 3. Presuppositional and non-presuppositional indefinites

### 3.1. Not all indefinites are PPIs

The indefinite subject in examples like (1a) above (shown again in (6)) cannot take scope below negation. However, this property does not extend to all indefinites, as (7) illustrates.

- (6) **A student of mine didn't show up on time.**  $\times(\neg > \exists)$

- (7)    a. **A TV wasn't purchased**, so we have to cancel our Superbowl party.  
 $\#(\exists > \neg)$ : There is a particular TV that wasn't purchased.  
 $(\neg > \exists)$ : *No TV was purchased.*
- b. **A script hasn't been written**, so we can't shoot the movie.  
 $\#(\exists > \neg)$ : There is a particular script that hasn't been written.  
 $(\neg > \exists)$ : *No script has been written.*

$(\neg > \exists)$  scope is available for the subject in the examples given in (7), and is the only salient scope. What distinguishes the indefinite subjects in (7) from the indefinite subject in (6)? I propose that this is a difference of presuppositionality: the subject in (6) but not the subjects in (7) must be interpreted presuppositionally, and only presuppositional indefinites are PPIs. In order for this proposal to have predictive power, an independent way of identifying presuppositional indefinites (versus non-presuppositional indefinites) is required, and to this I devote the remainder of this section.

### 3.2. Identifying presuppositional indefinites

A *presuppositional* indefinite presupposes that the set denoted by the NP complement of the existential quantifier is non-empty; a non-presuppositional indefinite does not. (I will argue below that this definition must be refined.) Diesing (1992) proposes that the indefinite subject of an individual-level predicate is always interpreted presuppositionally. This is confirmed by von Fintel's (1998) test, illustrated in (8).

- (8)    a. #I'm not sure yet whether there any mistakes at all in this book manuscript, but we can definitely not publish it **if some mistakes are major**. (von Fintel 1998: 9c)  
     b. I'm not sure yet whether there any mistakes at all in this book manuscript, but we can definitely not publish it **if some major mistakes are found**. (von Fintel 1998: 9b)

The indefinite *some (major) mistakes* in (8) is embedded in the antecedent of a conditional, which is a presupposition projection environment. In (8a), the indefinite *some mistakes* is the subject of an individual-level predicate and is thus interpreted presuppositionally. (8a) is pragmatically odd because the context explicitly denies the presupposition of the indefinite. In (8b) on the other hand, the indefinite *some major mistakes* is not the subject of an individual-level predicate, and therefore need not be interpreted presuppositionally.

Subjects of individual-level predicates are not the only indefinites that are interpreted presuppositionally. Consider how the principle of *Maximize Presupposition* (Heim 1991) applies to the interpretation of indefinites.

- (9)    **Maximize Presupposition:** If two items yield the same truth conditions when their presuppositions are satisfied, use the item with the stronger presuppositions if possible.

Presuppositional indefinites and non-presuppositional yield the same truth conditions when their presuppositions are satisfied. Thus, Maximize Presupposition implies that an indefinite must be used presuppositionally whenever the existence presupposition is satisfied. As discussed in more detail below, this yields the desired result that the subject in (10) must be interpreted presuppositionally, and is therefore a PPI.

- (10)    **A student of mine didn't show up on time.**  $\times(\neg > \exists)$

However, Maximize Presupposition seems to make too strong a prediction, as (11) illustrates.

- (11)    I don't know if there is a script, but we can't shoot the movie **if a script hasn't been written**.

In (11), von Fintel's (1998) test shows that the indefinite *a script* in the conditional antecedent can be interpreted non-presuppositionally. Yet the existence of scripts in the universe is surely part of the common ground. Maximize Presupposition should therefore force a presuppositional interpretation. However, observe that the context given in (11) actually denies the (seemingly obvious) presupposition that scripts exist. *I don't know if there is a script* is not pragmatically deviant because it is taken to be

contextually restricted: the speaker doesn't know if there is a *contextually salient* script.

Intuitively, then, a *script* in the conditional antecedent in (11) is interpreted non-presuppositionally because there are no contextually salient scripts. I propose that a *presuppositional indefinite* actually presupposes that the intersection of the set denoted by the NP with the set of salient individuals is non-empty; a non-presuppositional indefinite does not. Given this, Maximize Presupposition no longer makes the wrong prediction for (11): as there are no salient scripts, a presuppositional indefinite cannot be used.

### 3.3. Only presuppositional indefinites are PPIs

My proposal has two key pieces, given in (12a) and (12b).

- (12) a. Presuppositional indefinites are PPIs, whereas non-presuppositional indefinites are not.  
b. An indefinite must be interpreted presuppositionally when:  
(i) It is the subject of an individual-level predicate.  
(ii) Maximize Presupposition forces a presuppositional interpretation.

I will now demonstrate that the proposal in (12) accounts for the data discussed above. First, recall the original puzzle presented in (1):

- (13) a. **A student of mine didn't show up on time.**  $\times(\neg > \exists)$   
b. **If a student of mine doesn't show up on time, ...**  $\checkmark(\neg > \exists)$

The set of contextually salient students in (13) is non-empty – the sentence indicates that the speaker had scheduled a meeting with his (contextually salient) students. Consequently, the indefinite subject must be interpreted presuppositionally, and thus has the PPI properties seen in (13). On the other hand, recall that in (7) above, the indefinite subjects do *not* behave like PPIs:

- (14) a. **A TV wasn't purchased.**  $\checkmark(\neg > \exists)$   
b. **A script hasn't been written.**  $\checkmark(\neg > \exists)$

There are no contextually salient TVs in (14a), and no contextually salient scripts in (14b). The indefinite subjects in (14) are thus interpreted non-presuppositionally, and are not PPI. It is correctly predicted that the subjects in (14) can take scope under negation.

## 4. PPI properties of presuppositional indefinites

I have argued that presuppositional indefinites are PPIs based on the observation that they cannot take scope under negation in a matrix environment, but can do so in a downward entailing context. Given this proposal, we expect presuppositional indefinites to display other properties of PPIs as well. Szabolcsi (2004) discusses the following environments that allow PPIs to take scope below negation:

- (15) A PPI cannot take scope under negation unless one of the following conditions holds:  
a. The negated clause is in a downward-entailing context (Jespersen 1909-1949; Baker 1970).  
b. The negation and the PPI are not clausemates (Ladusaw 1980).  
c. There is an intervening scopal element (Kroch 1979).

In the remainder of this section, I demonstrate that presuppositional indefinites can take scope under negation precisely in the environments described in (15), and thus behave just like other PPIs. Some previous accounts (Spector 2004; Mayr & Spector 2010) predict that subject indefinites should pattern differently from object indefinites, and I show that this is not the case. For subject indefinites, I use individual-level predicates throughout to ensure a presuppositional interpretation. For object indefinites, I provide contexts in which Maximize Presupposition forces a presuppositional interpretation. Note that I remain agnostic as to how the properties of PPIs come about; I simply rely on the empirical generalizations made by Szabolcsi (2004) and in earlier work.

#### 4.1. No scope under negation (unless...)

As (16) illustrates, the PPI *some* must be interpreted above clausemate negation in a matrix context.

- (16) a. #John didn't call Mary – in fact, **he didn't call someone.**  
    #( $\exists > \neg$ ): There is somebody John didn't call.  
     $\times(\neg > \exists)$ : *John didn't call anyone.*

The same holds for presuppositional indefinite subjects, as (17) shows.

- (17) a. #Some students of mine are Russian, but **a student of mine isn't Chinese.**  
    #( $\exists > \neg$ ): There is a student of mine who is not Chinese.  
     $\times(\neg > \exists)$ : *No student of mine is Chinese.*  
b. #Some students of mine are really tall, and **a student of mine isn't short.**  
    #( $\exists > \neg$ ): There is a student of mine who is not short.  
     $\times(\neg > \exists)$ : *No student of mine is short.*

The indefinites in (17) are subjects of individual-level predicates (*to be (not) Chinese* and *to be (not) short*), and must therefore be interpreted presuppositionally. Like the PPI *some* in (16), they cannot take scope directly under clausemate negation. For instance, (17a) is pragmatically odd because the only available reading, ( $\exists > \neg$ ), states that there is a student of mine who is not Chinese, which the preceding context already entails. The pragmatically sensible ( $\neg > \exists$ ) reading, which states that no student of mine is Chinese, is not available. The indefinite object in (18) is also unable to take scope under negation.

- (18) Context: My boyfriend will only go to a party if he knows at least a few people there. I'm going to a party with my high school friends.  
    # My boyfriend won't come to the party – **he doesn't know a high school friend of mine.**  
    #( $\exists > \neg$ ): There is a high school friend of mine my boyfriend doesn't know.  
     $\times(\neg > \exists)$ : *My boyfriend doesn't know any high school friends of mine.*

In the context provided in (18), there are salient individuals who are high school friends of mine, and consequently Maximize Presupposition forces the indefinite object to be interpreted presuppositionally. Thus the ( $\neg > \exists$ ) reading, which is the only one compatible with the context, is not available in (18). Note that this reading is blocked even though it is the surface scope reading.

#### 4.2. Downward-entailing contexts

Embedding in a downward-entailing context, such as a conditional antecedent, allows PPIs to take scope under negation, as illustrated for *someone* in (19):

- (19) **If John didn't call someone**, then nobody knows where he is.  
    #( $\exists > \neg$ ): If there is somebody John didn't call, ...  
     $(\neg > \exists)$ : *If John didn't call anyone, ...*

Presuppositional indefinites can also take scope directly under negation in a downward-entailing environment, as illustrated for subjects of individual-level predicates in (20).

- (20) a. **If a student of mine isn't Chinese**, I won't be able to get Chinese judgments.  
    #( $\exists > \neg$ ): If there is a student of mine who is not Chinese, ...  
     $(\neg > \exists)$ : *If no student of mine is Chinese, ...*  
b. **If a student of yours isn't short**, nobody will be able to get the pen from where it rolled.  
    #( $\exists > \neg$ ): If there is a student of yours who is not short, ...  
     $(\neg > \exists)$ : *If no student of yours is short, ...*

The only contextually salient reading in the examples in (20) is the ( $\neg > \exists$ ) reading, and the downward entailing context makes this reading available. For example, (20a) permits the sensible interpretation that I won't be able to get Chinese judgments if no student of mine is Chinese. Availability of the ( $\neg > \exists$ ) reading for presuppositional *objects* is demonstrated in (21). As in example (18) above, Maximize

Presupposition forces a presuppositional interpretation of the indefinite object in the given context.

- (21) Context: My boyfriend will only go to a party if he knows at least a few people there. I'm going to a party with my high school friends.  
**If my boyfriend doesn't know a high school friend of mine**, he won't come to the party.  
 $\#(\exists > \neg)$ : If there is a high school friend of mine my boyfriend doesn't know, ...  
 $(\neg > \exists)$ : *If my boyfriend doesn't know any high school friends of mine, ...*

#### 4.3. Non-clausemate negation

PPIs like *someone* can take scope under *non-clausemate* negation, as (22) illustrates.

- (22) a. I know that John didn't call Mary. In fact, **I don't think that John called someone**.  
 $\#(\exists > \neg)$ : There is somebody whom I don't think that John called.  
 $(\neg > \exists)$ : *I don't think that John called anyone*.  
 b. I didn't say John called Mary. In fact, **I didn't say that John called someone**.  
 $\#(\exists > \neg)$ : There is somebody who I didn't say that John called.  
 $(\neg > \exists)$ : *I didn't say that John called anyone*.

(22) shows that a PPI in an embedded clause can take scope under negation in the matrix clause. Similarly, presuppositional indefinites may take scope under non-clausemate negation. This is illustrated for subjects of individual-level predicates in (23).

- (23) a. It looks like I won't be able to get Chinese judgments – **I don't think that a student of mine is Chinese**.  
 $\#(\exists > \neg)$ : There is a student of mine who I don't think is Chinese.  
 $(\neg > \exists)$ : *I don't think that any student of mine is Chinese*.  
 b. Why do you think I have access to a Chinese speaker? **I didn't say that a student of mine is Chinese**.  
 $\#(\exists > \neg)$ : There is a student of mine who I didn't say is Chinese.  
 $(\neg > \exists)$ : *I didn't say that any student of mine is Chinese*.

The  $(\neg > \exists)$  reading and is the only salient reading in (23). In (23a), for instance, the  $(\exists > \neg)$  reading conveys that I think I have at least one non-Chinese student, which is not appropriate motivation for being unable to get Chinese judgments. The fact that (23a) is not judged as pragmatically deviant means that the  $(\neg > \exists)$  reading is available: I don't think I have any Chinese students. Presuppositional indefinite objects can also take scope below non-clausemate negation, as (24) shows. As above, Maximize Presupposition guarantees a *presuppositional* indefinite interpretation.

- (24) Context: My boyfriend will only go to a party if he knows at least a few people there. I'm going to a party with my high school friends.
- a. **I don't believe my boyfriend knows a high school friend of mine**, so I think he won't come to the party.  
 $\#(\exists > \neg)$ : There is a high school friend of mine whom I don't believe my boyfriend knows.  
 $(\neg > \exists)$ : *I don't believe my boyfriend knows any high school friend of mine*.  
 b. Why do you think my boyfriend will go to the party? **I didn't say my boyfriend knows a high school friend of mine**.  
 $\#(\exists > \neg)$ : There is a high school friend of mine who I didn't say my boyfriend knows.  
 $(\neg > \exists)$ : *I didn't say my boyfriend knows any high school friend of mine*.

#### 4.4. Intervening scopal elements

An intervening scopal element allows PPIs (e.g. *someone*) to take scope under negation:

- (25) John didn't always call Mary. In fact, **he didn't always call someone**.  
 $\#(\exists > \neg > \text{always})$ : There is somebody whom John didn't always call.

$(\neg > \text{always} > \exists)$ : *Sometimes John didn't call anyone.*

The scopal element *always* licenses  $(\neg > \exists)$  scope, and specifically  $(\neg > \text{always} > \exists)$  scope, in (25). An intervening scopal element also allows a presuppositional indefinite to take scope below negation, as (26) illustrates for the subject of an individual-level predicate.

- (26) In some semesters, I can't get Chinese judgments – **a student of mine isn't always Chinese.**  
 $\#(\exists > \neg > \text{always})$ : There is a student of mine who is sometimes not Chinese.  
 $(\neg > \text{always} > \exists)$ : *Sometimes (i.e. in some semesters) no student of mine is Chinese.*

*Always* in (26) must take scope below negation, and for pragmatic reasons the indefinite subject of an individual-level predicate must take scope below *always*. The only non-deviant reading of (26), i.e.  $(\neg > \text{always} > \exists)$  scope, is available, just as it is for other PPIs. For presuppositional indefinite objects, consider the contrast between (27a) and (27b). (27b) has an intervening scopal element between negation and the indefinite, whereas (27a) does not.

- (27) Context: John is a college student.
- #**John doesn't like a professor of his**, so he has nobody to invite to the student-faculty dinner.  
 $\#(\exists > \neg)$ : There is a professor of John's whom John doesn't like.  
~~X~~ $(\neg > \exists)$ : *John doesn't like any of his professors.*
  - John never changes his mind about people. Unfortunately, **John doesn't always like a professor of his**.  
 $\#(\exists > \neg > \text{always})$ : There is a professor whom John doesn't always like.  
 $(\neg > \text{always} > \exists)$ : *Sometimes (i.e. in some semesters), John doesn't like any of his professors.*

Since John in (27) is a college student, it is presupposed that he has professors, made salient by the context. The indefinite *a professor of his* must therefore be interpreted presuppositionally. This is confirmed in (27a), where the  $(\neg > \exists)$  reading is unavailable. The intervening quantificational element *always* allows the indefinite to take scope below negation, as evidenced by (27b) being pragmatically acceptable, unlike (27a).

#### 4.5. Summary

In this section, I have demonstrated that presuppositional indefinites behave just like other PPIs. They cannot take scope directly below clausemate negation in a matrix environment. However, they can take scope below negation in a downward-entailing environment, when the negation is in a higher clause, or when an intervening scopal element is present. This confirms that presuppositional indefinites are PPIs. Note that there is no difference in the behavior of subjects and objects with respect to the data discussed in this section.

### 5. Some Earlier Approaches

In this section, I discuss previous proposals that account for some of the data addressed in this paper. The proposal I make is along the lines of Spector (2004) and Vanden Wyngaerd (1999), but I argue that their accounts don't quite make the right generalizations. The proposal made by Mayr & Spector (2010) is different in spirit, and I highlight some empirical problems it faces.

#### 5.1. Spector (2004)

Spector (2004) proposes that *subject* indefinites, but not object indefinites, are PPIs. Empirically, I have argued above that presuppositional indefinite *objects* do display PPI properties, while *non-presuppositional* indefinite subjects do not display PPI properties. Note, also, that Spector's (2004) generalization would be theoretically troubling if it were correct. Familiar PPIs behave like PPIs regardless of syntactic position. A new theory or new stipulations would be needed to allow PPI-status

to be position-dependent.

### 5.2. Vanden Wyngaerd (1999)

Vanden Wyngaerd (1999) proposes that *all* indefinites are PPIs. I have argued above that non-presuppositional indefinites do not show PPI behavior, as (28) again illustrates.

- (28) **John doesn't have a guitar.**  
#( $\exists > \neg$ ): There is a guitar that John doesn't have.  
( $\neg > \exists$ ): *John has no guitar.*

The indefinite object in (28) is very naturally interpreted below negation. Vanden Wyngaerd (1999) is aware of examples like (28), and proposes that they all contain *metalinguistic* negation. Metalinguistic negation can take scope directly over a PPI (Horn 1989), as (29) illustrates.

- (29) First speaker: John lost something.  
Second speaker: **John didn't lose something**, he gave something away.  
~~#~~( $\exists > \neg$ ): There is something John didn't lose.  
( $\neg > \exists$ ): *John didn't lose anything.*

However, not all instances of ( $\neg > \exists$ ) scope with non-presuppositional indefinites can be due to metalinguistic negation. Metalinguistic negation is supposed to be licensed in denial contexts (as in (29)), but a denial context is not required in (28). Moreover, ( $\neg > \exists$ ) scope is allowed with a non-presuppositional indefinite in an environment where ( $\neg > \exists$ ) scope is prohibited with a PPI like *some*, as (30) shows.

- (30) First speaker: Is John going to join our band?  
a. Second speaker: John doesn't have a guitar. ( $\neg > \exists$ )  
b. Second speaker: # John doesn't have some instrument.  
#( $\exists > \neg$ ): There is some instrument John doesn't have.  
~~#~~( $\neg > \exists$ ): *John has no instrument.*

Non-presuppositional indefinites can thus take scope under (non-metalinguistic) negation when PPIs cannot. The proposal made by Vanden Wyngaerd (1999) is missing the observation that non-presuppositional indefinites (as in (30a)) are not PPIs.

### 5.3. Mayr & Spector (2010)

Mayr & Spector (2010) propose the Generalized Scope Economy Condition, given in (31).

- (31) *Generalized Scope Economy Condition (GSEC):* A covert scope-shifting operation cannot apply if the meaning of the resulting reading is equivalent to or stronger than (i.e. entails) the meaning that would have resulted without it.

As Mayr & Spector (2010) discuss, GSEC correctly predicts that (presuppositional) indefinite subjects in a matrix context cannot scope-shift below negation.

- (32) **#A student of mine didn't show up on time**, so I just went home. repeated from (1a)  
#( $\exists > \neg$ ): There is a particular student of mine who didn't show up on time.  
??( $\neg > \exists$ ): *No student of mine showed up on time.*

The missing scope-shifted ( $\neg > \exists$ ) reading in (32) entails the surface ( $\exists > \neg$ ) reading, and is thus correctly blocked by GSEC. GSEC also explains why embedding in a downward entailing context makes the ( $\neg > \exists$ ) reading available. It does *not* account for the lack of a ( $\neg > \exists$ ) reading with presuppositional indefinite *objects*, as no scope-shifting is required to obtain that reading. An independent explanation is thus required for those data. More problematically, GSEC incorrectly blocks the ( $\neg > \exists$ ) reading for *non-presuppositional* indefinite subjects. GSEC also faces empirical challenges in other domains. For

example, GSEC incorrectly predicts that the universal quantifier subjects in (33) should be unable to take scope below negation.

- (33)    a. We don't grade on a curve here. **Every student is allowed to get an A.**  
 $\#(\forall > \text{allowed})$ : No individual student is prohibited from getting an A.  
 $(\text{allowed} > \forall)$ : It is permitted for all students to get A's.
- b. **Every child is allowed to jump at the same time.**  
 $\#(\forall > \text{allowed})$ : (no binder for “at the same time”)  
 $(\text{allowed} > \forall)$ : It is permitted for all the children to jump at the same time.

The surface  $(\forall > \neg)$  reading in (33a) states that no individual student is prohibited from getting an A. It describes a fair grading system but has nothing to do with whether the grading is on a curve, and is thus odd in the context given. (33a) is not judged as odd because the salient  $(\neg > \forall)$  reading is available: it is permitted for all students to get A's. GSEC wrongly predicts that this stronger scope-shifted reading should be banned. Mayr & Spector's (2010) proposal thus runs into empirical problems both in regard to the data that is the topic of this paper and in regard to other quantifier scope patterns.

## 6. Conclusion

In this paper, I have argued that *presuppositional indefinites* are positive polarity items, while *non-presuppositional indefinites* are not. I discussed two ways of identifying presuppositional indefinites (individual-level predicates and Maximize Presupposition), and showed that presuppositional indefinites have the properties of other PPIs repeated in (34).

- (34)    A PPI cannot take scope under negation unless one of the following conditions holds:
  - a. The negated clause is in a downward-entailing context.
  - b. The negation and the PPI are not clausemates.
  - c. There is an intervening scopal element.

An interesting question arises – what exactly is the set of PPIs? What make something a PPI? I want to tentatively suggest that all existential quantifiers over individuals are either negative polarity items or positive polarity items, though sometimes this is obscured by the additional presence of a quantifier over degrees. I leave the investigation of this hypothesis for further research.

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