

Universal laziness of pronouns*

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Abstract The goal of the paper is to try to account for an interesting binding phenomenon, namely the fact that pronouns sometimes appear to be bound by universal quantifiers out of islands. Specifically, my claim is that the appearance of binding is an illusion which results from the fact that pronouns can stand for universal quantifiers, i.e. there is a new type of pronouns of laziness. However, the distribution of such pronouns of laziness is highly restricted. These restrictions can be derived by means of Maximize Presupposition principle and situation semantics. The structure of the paper is as follows. In section 1, I illustrate the phenomenon. In section 2, I show that this phenomenon is not a case of real binding but a binding illusion which is made possible by the fact that pronouns can stand for universal quantifiers like *everyone*. In sections 3 and 4, I show that there are certain restrictions on the environments in which such a binding illusion is possible. First, it is ruled out in cases where it is in conflict with Maximize Presupposition principle (section 3). Second, it is only possible when the clause containing a quantifier and the clause containing a pronoun in a sense describe the same situation (section 4). In section 5, two readings of illusive binding sentences are discussed and an analysis of how they are derived is proposed. Section 6 concludes the paper.

Keywords: pronominal binding, conditionals, pronouns of laziness, universal quantifiers, situation semantics, illusive scope, Maximize Presupposition

1 The problem: exceptional binding

Sometimes a universal quantifier seems to be able to bind a pronoun out of an embedded clause as is illustrated by the following example from Russian in (1)¹:

* Many thanks to Danny Fox, Irene Heim, Kai von Stechow and the audience of SALT 20 in Vancouver. All errors are mine.

¹ Examples of “exceptional binding” in this work come from Russian, although it is more than likely that similar phenomena are attested in other languages as well.

- (1) Esli každy_i budet zanimat'sja svoim delom, on_i prineset bol'she
if everyone will do his.own business he will.bring more
pol'zy.
use
'(?)*If everyone_i minds his own business, he_i will be more useful.*'

The fact that binding is possible in this configuration is quite puzzling. It has often been argued in the literature that the necessary condition on binding is a c-command requirement (cf. Reinhart 1983) which was hotly debated for decades but recently defended against apparent counterexamples by Büring's (2004) situation semantic approach. In (1), the quantifier, obviously, doesn't c-command the pronoun. But even if we assume that the surface c-command requirement is not the one that determines the possibility of binding, it is still not clear how the quantifier can bind the pronoun, as the pronoun is not in the scope of the quantifier (if we believe that QR is clause-bound). So sentences like (1) seem to be a problem for any existing semantic theory of variable binding.

Moreover, the situation seems to be even more complicated than that, as binding out of an embedded clause is not an option that is always available, as (2) shows:

- (2) *Esli každy_i poluchil podarok, on_i byl rad.
if everyone got present he was glad
Intended: '(*)*If everyone_i got a present, he_i was glad.*'

The question arises as to what the source of exceptional binding in cases like (1) is and what are the environments in which such binding is possible.

The main claim I argue for in this paper is that in cases like (1), a pronoun is not truly a bound variable, rather it stands for a universally quantified NP, thus creating the illusion of binding.

2 What is the source of binding?

The goal of this section is to find out what the source of binding in cases like (1) is. In subsection 2.1, I will test whether QR can be responsible for these exceptional binding cases. In subsection 2.2, the situation binding approach *à la* Fox & Sauerland (1997) will be examined. In subsection 2.3, I will sketch an alternative analysis.

2.1 Quantifier raising?

The first obvious possible answer to the question of what the source of binding in cases like (1) is could be Quantifier Raising (I am not concerned whether it is literally QR or some other mechanism which is responsible for a quantifier getting

wide scope). Let's test this hypothesis.

First of all, it should be noted that QR is commonly assumed to be clause-bound, which should prevent the quantifier *every* from taking scope over the matrix sentence. But let's assume for a second that the quantifier can undergo QR out of the if-clause, which results in the following LF:

- (3) $\forall x$. if x minds x 's own business, x will be more useful

If it was indeed a legitimate movement, we wouldn't have any problems at all, since, as it seems, the LF in (3) correctly captures the truth conditions of (1). However, this line of analysis cannot be maintained even if we were willing to relax our assumptions about the locality of QR because of the puzzle described below.

Let's consider the following situation:

- (4) There are two brothers, *Sam and Jeremy*, and two sisters, *Mary and Claire*. Sam and Jeremy are marrying Mary and Claire.

In this scenario, the sentence (5) is grammatical and is interpreted as entailing that Sam and Jeremy are becoming each others' brothers-in-law.

- (5) Esli by každyj_i iz nix ženilsja na odnoj iz sester, ego_i brat
if would every of them marry on one of sisters his brother
stal by ego_i svojakom.
become would his brother-in-law
'If [each of them]_i married one of the sisters, his_i brother would become his_i brother-in-law.'

Let's suppose that (5) has the LF in (6):

- (6) $\forall x$. if x marries one of the sisters, x 's brother will become x 's brother-in-law.

Now consider the situation in which Sam marries Mary, but Jeremy doesn't marry Claire. Then, if (6) was indeed an allowed representation of (5), the sentence would be predicted to entail that Sam's brother (Jeremy) becomes his brother-in-law. The prediction, however, is not borne out. In fact, we do not interpret (5) as entailing that Jeremy becomes Sam's brother-in-law in this scenario, as for two brothers to become brothers-in-law they both must marry two sisters (it is not enough for one of them to marry one of the sisters).

Thus, analyzing this case leads us to the conclusion that the binding interpretation cannot be the result of a quantifier taking wide scope outside of an *if*-clause.

2.2 Trivialization of a universal quantifier by a generic operator?

The other option would be to say that binding in (1) is merely an illusion, the crucial mechanism for getting the interpretation being situation binding as proposed in Fox & Sauerland 1997 for universal quantifiers in generic contexts in English.

Fox and Sauerland note that in generic contexts QR of universal quantifiers may seem to violate clause-boundedness or obviate WCO effect, cf. example in (7).

(7) Her_i thesis year is the hardest for [every student]_i.

The grammaticality of (7) shows that the effect of WCO is somehow obviated².

Fox and Sauerland argue that this unexpectedly large scope of the universal quantifier is due to the presence of the generic operator and not to QR. The pronoun in this case is interpreted as an *e*-type pronoun, namely a definite description dependent on the situation that the generic operator quantifies over. The interpretation they propose for (7) is as in (8):

(8) For every relevant situation *s*, [the student in *s*]'s thesis year is the hardest for every student in *s*

The meaning of the QNP every student in (8) can be trivialized – its domain could be restricted to just one individual in each of the situations the generic operator quantifies over. That is what makes the illusion of binding.

Let's assume that in cases like (5) binding is "illusory" in the sense of Fox & Sauerland 1997. The semantics for (5) will then be as in (9):

(9) For every relevant situation *s* in which [every brother in *s*] marries one of the sisters, [the brother in *s*]'s brother becomes [the brother in *s*]'s brother-in-law.

However, we are facing the same problem again: the predicted truth conditions are too strong. In the situation where Sam marries Mary and Jeremy doesn't marry Claire, it would be predicted that Jeremy and Sam become brothers-in-law, but this prediction is not borne out, as was already discussed in the previous subsection.

2.3 A sketch of the proposal: pronouns as hidden universals

In the two preceding subsections, I presented some evidence for the fact that the binding interpretation in sentences like (1) is due neither to QR nor to the generic operator. The proposal I will argue for is that it is due to the fact that a pronoun stands for a universal quantifier.

² Fox and Sauerland, however, do not say anything about the ungrammaticality of sentences like *His_i mother loves every child_i that could also be treated as generic statements.

Note that if we assume that a pronoun stands for a universal quantifier, we can capture the truth conditions of (5) correctly. Consider the possible LF of (5):

- (10) If [each of the two brothers] marries one of the sisters, [each of the two brothers] λx . x 's brother becomes x 's brother-in-law.

If so, the binding interpretation in cases like (5) is not the result of real binding, but it is just a binding illusion.

The question I will be concerned with in the next section is what are conditions under which this binding illusion is possible. In particular, in case of conditionals, the question is what the semantics of a conditional must be.

The claim I will argue for is that only a particular type of conditionals, namely one-case conditionals in the sense of Kadmon 1987, allow for such a binding illusion. I will attempt to derive this restriction from the principle of Maximize Presupposition.

3 What is the semantics of an “exceptional binding” conditional?

It is generally assumed that *if*-clauses serve as restrictors of different operators, cf. Kratzer 1987 and others. They can restrict a covert adverb of quantification as in (11) or a covert modal as in (12). Kadmon (1987) terms the readings exemplified in (11) and (12) multi-case and one-case interpretation, respectively:

- (11) (ALWAYS) If John stays late at work, he has no dinner.
 (12) (MUST) If John's light is on now, he is at home.

The sentences in (11) and (12) can be given the following paraphrases, respectively:

- (13) ‘Whenever John stays late at work, he has no dinner.’
 (14) ‘If it's true that John's light is on now, then he is at home.’

The rough semantics we adopt for multi-case and one-case conditionals is given in (15) and (16):

- (15) Every situation in which John stays late at work is a situation in which he has no dinner.
 (16) In all the worlds compatible with our knowledge in which John's light is on, he is at home.

The difference between the two types of conditionals is that there is quantification over situations within the same world in the case of (11), whereas there is quantification over possible worlds associated with the modal but no quantification over situations within one world in the case of (12).

In what follows, I will give some evidence in favor of the hypothesis that the "exceptional binding" conditional must have "one-case" semantics and try to give an explanation for that fact.

3.1 Aspect and one-case vs. multi-case interpretation

It has often been claimed that perfective sentences express an episodic event, whereas imperfective sentences can report a generalization (see [Bonomi 1997](#) and [Menendez-Benito 1983](#), i.a, for Italian and Spanish). This seems to be true for Russian as well. As shown below, unlike imperfective sentences, perfective sentences are incompatible with *always*-type adverbs which can serve as evidence for the fact that perfective sentences cannot have a multi-case interpretation.

- (17) Kogda Džon prišedil domoj, on vseгда pil čaj.
 when John came.IPF home he always drank.IPF tea
 'When John came home, he always drank tea.'
- (18) *Kogda Džon prišel domoj, on vseгда pil čaj.
 when John came.PF home he always drank.IPF tea

The same holds for conditionals:

- (19) Esli Džon budet prišedit' domoj rano, on budet každyj raz gotovit' užin.
 if John will come.IPF home early he will every time cook dinner
 'If John comes home early, he will cook dinner every time (he does so).'
- (20) *Esli Džon pridet domoj rano, on budet každyj raz gotovit' užin.
 if John come.PF home early he will every time cook dinner

The imperfective conditional (19) can be paraphrased as follows: whenever John comes home early, he will cook dinner. The perfective conditional (20), on the other hand, is incompatible with the quantificational adverbial 'every time', as the ungrammaticality of (20) shows.

Taking into consideration the facts discussed above, we can conclude that perfective aspect blocks generic (multi-case) interpretation.

An obvious way of deriving this generalization is to assume that perfective *if*-clauses cannot serve as restrictors to adverbs of quantification³.

To implement this idea technically, we can adopt the analysis of the perfective/imperfective aspect along the lines of [Hacquard 2006](#). The perfective aspect

³ I assume that the semantics of *always* is equivalent to the semantics of the generic operator: both introduce universal quantification over situations.

is associated with existential quantification over events and its semantics looks as follows:

$$(21) \quad \llbracket \text{PERFECTIVE} \rrbracket = \lambda P_{\langle s,t \rangle} . \lambda t . \exists e [\tau(e) \subseteq t \wedge P(e)]^4$$

The imperfective morpheme, in its turn, doesn't have any semantic import by itself. It is just a default morpheme which appears in the environments in which perfective cannot.

Thus, the difference between perfective and imperfective *if*-clauses can be described as follows. Perfective aspectual operator closes existentially the situation variable, thus making the *if*-clause not able to restrict the adverb. The imperfective morpheme, on the contrary, doesn't do anything by itself, so the imperfective *if*-clause can perfectly restrict the generic operator.

Crucially, the sentence (5) is perfective, which nicely demonstrates that sentences that allow exceptional binding do not need to be multi-case conditionals.

In the next subsection, I will try to show that sentences that allow exceptional binding not only do not need but in fact cannot be multi-case conditionals.

3.2 Multi-case conditionals and binding

It seems that binding illusion is ruled out in all the cases of multi-case conditionals. Consider a multi-case conditional (22):

- (22) *Esli každyj_i čelovek sažacet derevo, on_i prinosit pol'zu planete.
 if every person plants.IPF tree he brings.IPF use to.planet
 Intended: *'If everyone plants a tree, he helps the planet.'*

Compare this with grammatical (23). (23) contains perfective aspect, which serves as evidence that this is a one-case conditional:

- (23) Esli každyj_i čelovek posadit derevo, on_i prineset pol'zu planete.
 If every person plants.PF tree he brings.PF use to.planet
'If every person plants a tree, he will help the planet.'

The question arises as to what exactly blocks binding in case of multi-case conditionals.

⁴ According to this definition, the perfective operator takes a predicate of events and a time argument and returns truth iff the time of the event is contained within the reference time. (For the purposes of the present work, it doesn't matter whether there is a conceptual difference between *events* and *situations*, I treat them the same.)

3.3 Exceptional binding and Maximize Presupposition

As was shown in the previous subsection, binding is impossible in multi-case conditionals. In this subsection, I will try to give a possible solution to the question of why this is so.

Note that if the universally quantified NP is replaced with an indefinite NP in (22), the sentence becomes good (we get a typical donkey sentence).

- (24) Esli čelovek_i sažæet derevja, on_i prinosit pol'zu planete.
 If person plants.IPF trees he brings.IPF use to.planet
 'If a person plants a tree, he helps the planet.'

What explains the contrast between (22) and (24)? We can assume that in generic (multi-case) sentences, there is a competition between a universally quantified NP and an indefinite NP for expressing binding interpretation. It was argued that in donkey sentences, quantification is over minimal situations. Thus, we can assume that an indefinite NP is preferred over *every*-NP due to the Maximize Presupposition principle, which requires that the expression with the strongest presupposition be used, cf. Heim 1997. The article *a* in English and corresponding bare NP in Russian have the uniqueness presupposition in generic sentences, cf. Percus 1997, unlike *every* which doesn't have such a presupposition, so by this principle an indefinite NP must be used.

As for non-generic sentences, there is no such competition between an indefinite NP and a universally quantified NP, since in this case there is nothing that can give a universal force to an indefinite NP (in case of generic conditionals, it was an adverb quantification (= generic operator) which was the source of the quantificational force). Based on the evidence given above, we can conclude that sentences such as (1) cannot be generic sentences quantifying over minimal situations, and exceptional binding is possible only in one-case conditionals. Taking into account this generalization, let's modify our LF for (5):

- (25) ONE-CASE CONDITIONAL LF, *first take*
 (In all the worlds compatible with what is known)⁵, if $\exists s_1$.each of the brothers marries one of the sisters in s_1 , $\exists s_2$. [each of the brothers] λx . x 's brother would become x 's brother-in-law in s_2 .

In the next section, I will show that this LF must be modified a little bit more.

⁵ From now on I will omit this part of the LF, since it is not relevant for the present discussion.

4 One more constraint on exceptional binding

In the previous section, I showed that exceptional binding is ruled out in multi-case conditionals. However, having one-case conditional semantics is not enough for binding to be possible. Consider the contrast between the (a) and (b) sentences in (26)-(29):

- (26) a. Esli každyj_i budet dumat' tol'ko o sebe, ego_i žizn' stanet ničtožnoj.
Literally: *'If everyone_i will think only about himself, his_i life will become miserable.'*
- b. *Esli každyj_i budet dumat' tol'ko o sebe, ego_i uvoljat.
Intended: *'If everyone_i will think only about himself, he_i will be fired.'*
- (27) a. Esli každyj_i napišet stat'ju o vrede kurenija, on_i pomožet spasti žizni millionov.
Literally: *'If everyone_i writes a paper on the harm of smoking, he_i will help to save the lives of millions.'*
- b. *Esli každyj_i napišet stat'ju o vrede kurenija, on_i polučit priz.
Intended: *'If everyone_i writes a paper on the harm of smoking, he_i will get a prize.'*
- (28) a. Esli každyj biznesmen_i vložit den'gi v stroitel'stvo školy, on_i sdelat dobroe delo.
Literally: *'If every businessman_i gives some money for the school construction, he_i will be doing a good thing.'*
- b. *Esli každyj biznesmen_i vložit den'gi v stroitel'stvo školy, on_i polučit nagradu ot prezidenta.
Intended: *'If every businessman_i gives some money for the school construction, he_i will be given a president award.'*
- (29) a. Esli každyj_i zajmetsja svoim delom, on_i prineset bol'she pol'zy.
'(*)*If everyone_i starts doing his own business, he_i will become more useful.'*
- b. *Esli každyj_i zajmetsja svoim delom, on_i v skorom vremeni polučit povyšenie.
Intended: *'If everyone_i does his own business, he_i will be soon promoted.'*

As can be seen from the examples above, all the (a)-sentences are good, whereas (b)-sentences are ungrammatical. It should be noted that the only difference between the (a) and (b) sentences is the consequent clause (the antecedent clause is the same).

The question that arises is what is this relation between the antecedent and the consequent that affects the possibility of binding and what it tells us about.

It turned out to be a difficult task to define what exactly the semantic difference between the (a) and (b) sentences is. An interesting observation, however, is that the sentences that allow binding also allow for modification with the adverbial *tem samym*, literally: ‘*by that itself*’ (a rough English equivalent would be a paraphrase with a *by*-gerund) of the form shown in (30):

- (30) Esli každy_i zajmetsja svoim delom, on_i *tem samym* prineset bol’she pol’zy.
‘By starting doing his own business, one will become more useful.’
(Literally: ‘If everyone_i starts doing his own business, by that itself he_i will bring more use.’)

Intuitively, what the possibility of modification with *tem samym* is telling us is that the situations expressed by the antecedent and the consequent clauses are in fact the same situation, only with different names. When the situations are different and the conditional sentence in fact expresses the relation that holds between them (for example, it could be a causal relation), such modification becomes impossible, cf. (a)-sentences (same situation) and (b)-sentences (different situations) in (31) and (32).

- (31) a. Esli čelovek_i dumaet tol’ko o sebe, on_i *tem samym*
if person thinks only about self he by.that by.itself
otravljaet sebe žizn’.
poisons to.self life
‘By thinking only about himself, one makes his life miserable.’
b. Esli čelovek_i dumaet tol’ko o sebe, ego_i *(*tem samym*)
if person thinks only about self him by.that by.itself
uol’njajut.
fire
‘(*)By thinking only about himself, one is fired.’
- (32) a. Esli biznesmen_i vkladyvaet den’gi v stroitel’stvo škol, on_i
if businessman invest money in construction of.schools he
tem samym delaet dobroe delo.
by.that by.itself does good deed
‘By giving money for school construction, a businessman will be doing a good thing.’
b. *Esli biznesmen_i vkladyvaet den’gi v stroitel’stvo škol, on_i
if businessman invests money in construction of.schools he
tem samym polučaet nagradu ot prezidenta.
by.that by.itself gets award from president
‘(*)By giving money for school construction, a businessman is awarded by the President.’

The question now is how to implement this intuition technically. To try to do it, let's return to Russian and look again at the LF in (25), repeated in (33):

- (33) if $\exists s_1$.each of the brothers marries one of the sisters in s_1 , $\exists s_2$. [each of the brothers] λx . x 's brother would become x 's brother-in-law in s_2 .

How can we guarantee that s_1 and s_2 be the same situation? It's not such a trivial task, as the situation variable of the consequent clause cannot be bound by the existential quantifier which is inside the *if*-clause.

At the moment, I am not ready to provide any good solution to this problem. The only thing I would like to point here is that it is possible to imagine how it can be done within a dynamic binding approach, as pointed out to me by I. Heim (p.c.)⁶.

Roughly speaking, within this approach, the semantics of a conditional "if p , then q " is equivalent to "if p , then p and q " and thus the variable contained in the consequent clause q can be bound by a quantifier from the antecedent clause p . Then to represent the idea that the antecedent and the consequent are part of one and the same situation, the LF given in (33) should be modified in the following way:

- (34) ONE-CASE CONDITIONAL LF, *second take*
if $\exists s_1$.each of the brothers marries one of the sisters in s_1 , $\exists s_2$.each of the brothers marries one of the sisters in s_2 and [each of the brothers] λx . x 's brother would become x 's brother-in-law in s_2

5 Further observations

5.1 Two readings of "exceptional binding" sentences

Now I would like to come back to the fact that sentences allowing binding such as (1), repeated as (35), can also have a stronger reading.

- (35) Esli každyj_{*i*} budet zanimat'sja svoim delom, on_{*i*} prineset bol'se pol'zy.
'If everyone_{*i*} does his job, he_{*i*} will be more useful.'

To show that, consider the following scenario:

- (36) There are four people: Peter, John, Michael and Sam. Peter and John are doing their job, Michael and Sam are not.

Under such scenario, the sentence (35) entails that Peter and John are being more useful. However, the analysis developed so far doesn't predict this. The LF for (35) is given in (37):

⁶ For the details of the dynamic binding approach I direct the reader to Chierchia 1995.

- (37) if $\exists s_1$.everyone is doing his job in s_1 , $\exists s_2$.everyone is doing his job in s_2 and everyone will be more useful in s_2 .

According to the LF in (37), the entailment that John and Peter are being more useful is predicted to be falsified by the scenario sketched above, but in fact, as we just said, it is not.

5.2 Accounting for both readings⁷

It is commonly assumed that quantifier domains are contextually restricted. For example, when we say “Every student is writing a composition”, it is evident that we refer not to every student in the world, but to some restricted domain, for example, we can mean every student in the class. Sometimes this domain restriction is overtly expressed as in (38):

- (38) Everyone in this room is sleeping.

In the literature, there were attempts to use Austinian topic situations (situations the assertions are about) to account for the implicit quantifier restrictions, cf. [Kratzer 2009](#) and references therein.

But it has been convincingly argued by [Soames \(1985\)](#) that quantifier domains are not necessarily provided by topic situations. To demonstrate that, Soames gave the following example:

- (39) Everyone is asleep and is being monitored by a research assistant (in a Sleep Lab).

If the domain of *everyone* were provided by a single topic situation, this utterance would have been contradictory, since then it would be understood that the research assistants are also asleep.

This paradox is resolved by stating that the implicit quantifier restriction comes not from the topic situation, but from another, contextually salient “resource situation” (in case of (39), this situation doesn’t include research assistants).

I will adopt the idea that a quantifier contains a situation variable which can get its value from the context. In such a way, the weaker reading of the sentences like (1)/(35) can be accounted for. The weaker reading of (1) will be the following:

- (40) if $\exists s_1$. [everyone in s] is doing his job in s_1 ,
 $\exists s_2$. [everyone in s] is doing his job in s_2 and [everyone in s] will be more useful in s_2
(where s is a “resource situation”)

⁷ I owe many ideas in this subsection to I. Heim (p.c.).

Crucially, we have to assume that this situation variable has the option of being locally bound giving rise to the LF shown in (41). In such a way, the stronger reading of (1) is captured:

- (41) if $\exists s_1$. [everyone in s_1] is doing his job in s_1 ,
 $\exists s_2$. [everyone in s_2] is doing his job in s_2 and [everyone in s_2] will be more useful in s_2

Let's see how exactly this LF generates the stronger reading. Consider again the scenario below (same as (36)):

- (42) There are four people: Peter, John, Michael and Sam. Peter and John are doing their job, Michael and Sam are not.

Under this scenario, the sentence entails that Peter and John are being useful. Do we predict this with the LF in (41)? In this case, the situation in which Peter and John are doing their business can be picked as a situation s_1 . Thus the LF in (41) says that everyone in that situation, namely Peter and John, are being more useful, which is correct.

I assume that sentences like (1) are ambiguous. They can have both LFs which accounts for the two readings. But sometimes the context can make the sentence false under one of the readings, thus forcing the other reading, as was the case with the sentence (5). The same holds for the following sentence.

- (43) Esli by každyj biznesmen_{*i*} vložil den'gi v stroitel'stvo školy, on_{*i*} by ne obednel, a milliony škol byli by postroeny.
 Literally: *'If every businessman_{*i*} gave some money for school construction, he_{*i*} wouldn't become poorer but millions of schools would be constructed.'*

The context dictates that only the weaker reading is available, as we know that for millions of schools to be constructed it is necessary that a lot of businessmen invest money into it.

5.3 The relevant configuration of a quantifier and a pronoun

One more question that needs to be answered is why the sentence (44) cannot have the meaning shown in (45).

- (44) Every boy likes his father.
 (45) Every boy likes every boy's father.

Descriptively, it looks like the necessary requirement for a pronoun to be able to stand for a universal quantifier is the following: in order to be interpreted as a universal quantifier, a pronoun must be outside of the quantifier scope.

I will leave the explanation of why this is so for further research.

6 Conclusion

To conclude, let me briefly repeat several main points I've made in the paper:

- i. Pronouns sometimes seem to be bound by universal quantifiers outside of islands, which is a problematic fact for existing theories of variable binding.
- ii. However, this is not a real binding, but a binding illusion which is created by the fact that pronouns can stand for universal quantifiers. Thus there exists a new type of pronouns of laziness.
- iii. There are specific constraints on the environments in which pronouns can stand for universal quantifiers. Some of these constraints can be accounted for with the help of the Maximize Presupposition principle and situation semantics. Others are not yet very well understood and require some further investigation.

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