Referentially used descriptions can be conditionalized[*]

Eva Csipak

Konstanz University
`eva.csipak@uni-konstanz.de`

Abstract

In this paper I discuss referentially used DPs such as *Alex's spouse*. I argue that they typically contribute not-at-issue content in the sense of Potts 2005 and Simons et al. 2010, in particular when they occur with adnominal *if*-clauses, such as *Alex's spouse, if they ever got married* or *some soccer player, if that's what he is*. I propose a multi-dimensional analysis, proposing that on the truth-conditional dimension, they simply refer to an individual, while on the non-truth-conditional dimension, they have a modal meaning.

1 Introduction

Since at least Donnellan 1966 [1] it is well-known that utterances containing definite descriptions can make true claims even if the description itself fails to denote, as illustrated in (1).

(1)   A (pointing to a man in the room): Alex's spouse is having a good time.
       B: Yes, you are right, but they are not married.

B seems to be agreeing with A's claim that the individual is having a good time, while at the same time contesting that the description *Alex's spouse* contains that individual. Donnellan calls this the *referential* use of a definite description, and contrasts it with the *attributive* use. Crucially, speakers are willing to judge A's statement in (1) as true in the context even though it should technically suffer from presupposition failure. Compare this to the attributive use in (2).

(2)   A: The owner of this building is rich.
       B: #Yes, you are right, but the building is not owned by anyone.

Without knowing exactly what individual *the owner of this building* refers to, A can still have reason to believe that her utterance in (2) is true. Unlike in (1), A does not have any particular individual x in mind that she is referring to. It is not possible for B to at the same time agree that what A said is true, but disagree about the choice of predicate used to refer to *the owner of the building*.

Certain indefinites also have such dual uses, see (3) and (4).

(3)   Context: A and B are surveilling a bar. A is working as a bartender while B is watching from a secret room via hidden camera. A sporty-looking person wearing a soccer uniform has just ordered from A.
       A: Some soccer player just ordered a beer!
       B: Yes, you are right, but that guy is not a soccer player. He's our suspect.

Parallel to (1), A in (3) has an individual in mind that she is referring to with the expression *some soccer player*. Again there is the intuition that A has said something true about that individual, even if *some soccer player* is not true of the individual. There is also a non-referential, quantificational use of those indefinite determiners, as in (4).

(4)   A: I have never seen a soccer player.

In (4), A does not need to have a particular individual in mind. In fact, if she had a particular person in mind that she has never seen before, (4) would be a distinctly odd way to express this.[1]

There is a large body of literature surrounding these phenomena which is essentially debating whether these uses are systematically semantically different (referential uses versus attributive and quantificational uses), or whether we can derive the differences in interpretation from some pragmatic mechanism.

For definite descriptions, Donnellan himself is the first of many to argue that there is a semantic ambiguity between referential uses and attributive uses. Kripke 1977 [6] and much subsequent literature argues for a pragmatic account instead. For indefinites, a semantic ambiguity approach is proposed e.g. by Fodor & Sag 1982 [2], while Kratzer 1998 [5] argues that the referent is identified as the value of a choice function which is supplied by the context (i.e., a mostly pragmatic mechanism).

In this paper, I argue for a semantic ambiguity approach. I propose that referentially used definite DPs identify their referent, and the semantic content they themselves provide is only added as not-at-issue material in the sense of Simons et al. 2010 [10]. Referentially used indefinites do provide at-issue material, as do attributively used definite descriptions and quantificational DPs. Both types of referentially used descriptions are firmly in the not-at-issue dimension, however, once they are modified by an adnominal *if*-clause. Adnominal *if*-clauses are *if*-clauses as in (5) which seem to modify the nominal, rather than the matrix proposition as a whole.

(5)   Alex's spouse, if they ever got married, is having a good time.

Intuitively we take the clause *if they ever got married* to modify *Alex's spouse*, not *Alex's spouse is having a good time*. This will be discussed in more detail in section 2, where I also argue that referentially used definite DPs provide not-at-issue content. I provide an account of adnominal *if*-clauses that supports this view.[2] There is a recent proposal by Frana that I compare to my proposal in section 3. Section 4 discusses several open questions.

2   Referentially used DPs, at-issueness, and adnominal *if*-clauses

Donnellan 1966 [1] argues that definite descriptions are systematically ambiguous, and that we need to distinguish between 'speaker's reference' and 'semantic reference'. This was picked up

---

[1]Note that numerals also fall into this category of indefinite determiners that can be used referentially.

(i)   Two men have proposed to Alex in the last 24 hours (but I won't tell you who).

[2]I will stick with the term *if*-clause rather than *antecedent* as a way to help us remind ourselves that these are not standard conditionals; the matrix clause does not receive a modal interpretation in this account.

and defended by Stalnaker 1970 [11] who proposed the following semantics, in the formalization given by Heim 2011 [4].

(6) $[\![the_{ref-stal}\alpha]\!]^{c,i}= \iota x$ [the speaker in c presupposes λi'.$[\![\alpha]\!]^{c,i'}$(x)]

That is, a definite description *the* α denotes a unique individual x, and the speaker presupposes that x counts as an α. It seems reasonable to translate Heim's *the speaker in c presupposes* into an epistemic modal.

(7) $[\![the_{ref}\alpha]\!]= \iota x$ [$\forall w' \in Best(\bigcap f(w))$: $\alpha(x)$ in w']

Again a definite description *the* α denotes a unique individual x, but now the speaker presupposes that in all her (best) epistemically accessible worlds, x counts as an α.

On such a view, the main lexical content contributed by the definite description is essentially a presupposition, and the only non-presuppositional content of the definite description is 'ιx', i.e., the unique individual that is identified.

Let us now consider adnominal *if*-clauses like (5) in more detail. We had the intuition that the *if*-clause modifies the content of the definite description. That means that on this view, it modifies the presupposition. A set of literature that provides tools to enable presuppositions to participate in compositional semantics is the literature on not-at-issue content, and in particular on multi-dimensional semantics. We therefore set out to show that the content of the definite description is not-at-issue, in hopes of employing the tools of multi-dimensional semantics to account for the meaning of adnominal *if*-clauses.

Following Potts 2005, 2007 [8, 9] and Simons 2010 [10] I assume that at-issue material can be easily negated and denied, whereas not-at-issue material cannot. Referentially used definite descriptions provide not-at-issue content. Consider the following contrast.

(8)   A (pointing to a man on the dance floor): I hear Alex's spouse has texted you.
        B: No, that's not true. #Alex and that guy are not married.
        B': No, that's not true. He has called me.

B's denial can only mean that the individual A is pointing at has not texted B (which is at-issue); what it cannot mean is that that individual is not Alex's spouse. This shows that the contribution of *Alex's spouse* is not part of the at-issue meaning. Now consider the following example, where *the building manager* is used attributively.

(9)   A: I hear the building manager has texted you.
        B: No, that's not true. It was a neighbour.
        B': No, that's not true. She has called me.

Here A is using *the building manager* attributively; A does not need to have a precise idea of who this individual is, and B's denial can target the definite description, showing that its contribution is at-issue.

Interestingly we observe a contrast between referentially used definite descriptions which are not-at-issue and referentially used indefinite descriptions which are at-issue, as illustrated in (10).

(10)   A (pointing to a man at the bar): Some soccer player has just arrived.
        B: No, that's not true. That's my priest.

Clearly B can deny the content of the referentially used indefinite DP *some soccer player* here. But consider (11), where A adds an adnominal *if*-clause.

(11)   A (pointing to a man at the bar): Some soccer player, if that's what he is, has just
        arrived.
        B: No, that's not true. #That's my priest.
        B': No, that's not true. He's been there the whole time.

Suddenly B can no longer deny the material provided by the DP. This is surprising. To look
for an explanation, we turn to adnominal *if*-clauses in more detail.

2.1   The properties of adnominal *if*-clauses

We first establish that adnominal *if*-clauses do not have the same interpretation as standard
conditionals. Adnominal *if*-clauses, unlike hypothetical or biscuit conditionals, can only occur
parenthetically or postposed; they cannot occur preposed. This is illustrated in (12) with the
definite referential DP.

(12)   a.   Alex's spouse, if they ever got married, just started dancing.
        b.   Alex's spouse just started dancing, if they ever got married.
        c.   ≠ If they ever got married, Alex's spouse just started dancing.

The only interpretation that (12-c) can receive is an odd one where there is some kind of rule
in place such that if the couple gets married, Alex's spouse is forced to dance. But this is not
the same reading that is available in the other cases where only *Alex's spouse* is modified: in
(12-c) the entire sentence is interpreted as a hypothetical conditional.
    We have already seen that the adnominal *if*-clause in (11) only contributes not-at-issue
material. This is also the case when it occurs with definite DPs, as in (13).

(13)   A: Alex's spouse just started dancing, if they ever got married.
        B: No, that's not true. #Alex's spouse didn't start dancing if they ever got married.

The antecedents of hypothetical and biscuit conditionals, on the other hand, do contribute
at-issue content, as illustrated in (14) and (15), respectively. In both cases, B can target the
conditional relation between antecedent and consequent and deny it.

(14)   A: We will go to the park if the weather is good.
        B: No, that's not true. We will not go to the park if the weather is good.

(15)   A: There is pizza in the fridge if you are hungry.
        B: No, that's not true. There is no pizza in the fridge if I'm hungry.

Thus examples (13) – (15) show that adnominal *if*-clauses differ systematically from different
types of conditionals in that they provide not-at-issue content. This suggests that they are
less similar to conditionals, and perhaps more similar to other types of clauses that contribute
not-at-issue material, such as non-restrictive relative clauses like (16).

(16)   A: Alex's spouse, who is a keen dancer, has just arrived.
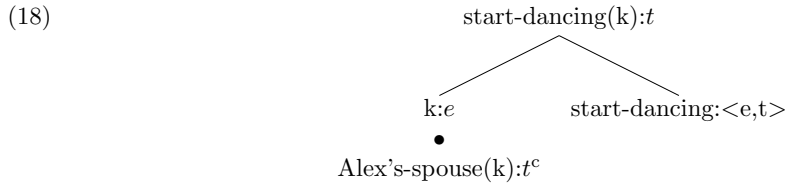   B: No, that's not true. #He does not like to dance.

The relative clause *who is a keen dancer* contributes not-at-issue information. We can model
this in a multi-dimensional semantics, and to make things easier for readers unfamiliar with
more recent works, I use the system provided by Potts 2005 [8]. Note however that in cases
where the material needs to interact with both truth-conditional and non-truth-conditional

material, we need to assume a hybrid dimension as has been proposed by McCready 2010 [7] and subsequent authors.

2.2 The proposal

[8] proposes to treat both non-restrictive relative clauses and 'supplements' in the following way (the simplified parsetree in (18) models both (17-a) and (17-b)). The bullet operator $\bullet$ separates the two dimensions, and non-truth-conditional types are indicated by a superscript ^{c}.
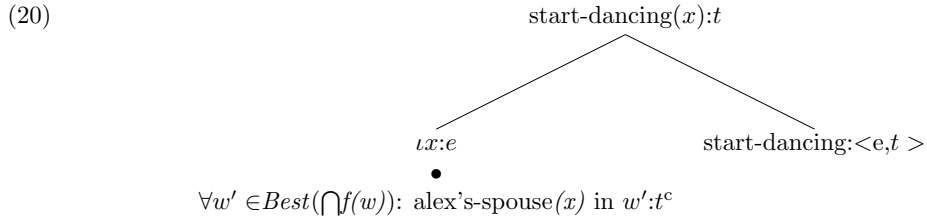
(17)   a.   Kim, Alex's spouse, just started dancing.
        b.   Kim, who is Alex's spouse, just started dancing.

(18)   start-dancing(k):t

                            k:e start-dancing:$<$e,t$>$
                             $\bullet$
                      Alex's-spouse(k):t^c

On the truth-conditional dimension, *Kim* refers to an entity which is available for functional application with the predicate *just started dancing* in the familiar way. On the non-truth-conditional dimension, the predicate *Alex's spouse* is applied to *Kim*. The overall sentence meaning is computed as the proposition that Kim started dancing, and the additional not-at-issue information that Kim is Alex's spouse. This corresponds to the intuition we wanted to model.

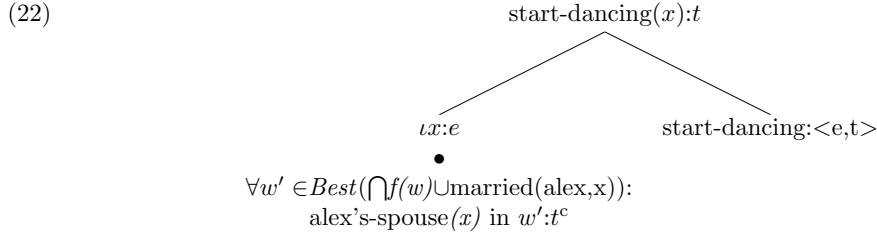Applying this mechanism to referentially used definite descriptions yields the following.

(19)   A (pointing): Alex's spouse just started dancing.

(20)   start-dancing(x):t

                        ιx:e start-dancing:$<$e,t $>$
                         $\bullet$
            $\forall w' \in Best(\bigcap f(w))$: alex's-spouse$(x)$ in w':t^c

The unique individual that the definite description refers to is the truth-conditional component of *Alex's spouse*. This predicts that even if that individual is not Alex's spouse, the at-issue proposition will not suffer from presupposition failure. It can simply be true or false, depending on whether or not the individual started dancing. On the not-at-issue level, the speaker signals that in all her best epistemically accessible worlds, x (the referent selected by *Alex's spouse* in the actual world) is Alex's spouse in that world.

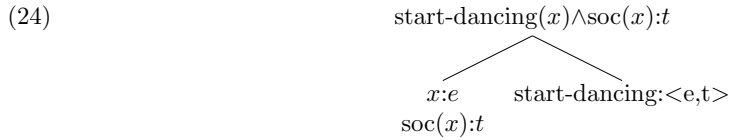We can now simply add an adnominal *if*-clause.

(21)   A (pointing): Alex's spouse, if they ever got married, just started dancing.

(22)

$$\text{start-dancing}(x){:}t$$

$$\iota x{:}e \qquad\qquad \text{start-dancing:}{<}\text{e,t}{>}$$

$$\bullet$$

$$\forall w' \in Best(\textstyle\bigcap f(w) \cup \text{married(alex,x)}):$$
$$\text{alex's-spouse}(x) \text{ in } w'{:}t^{\mathrm{c}}$$

The *if*-clause restricts the epistemic modal provided by the referentially used definite description, and the not-at-issue content is now that in all the speaker's best epistemically accessible worlds *where Alex is married to x, x* is Alex's spouse. This leaves open the possibility that there are among the best epistemically accessible worlds those where the two are not married. In those worlds, no prediction is made as to whether the individual is Alex's spouse. But importantly, independent of whether the actual world is one where they are married, the truth-conditional contribution of *Alex's spouse* is to refer to a particular individual, just like it did in (20).
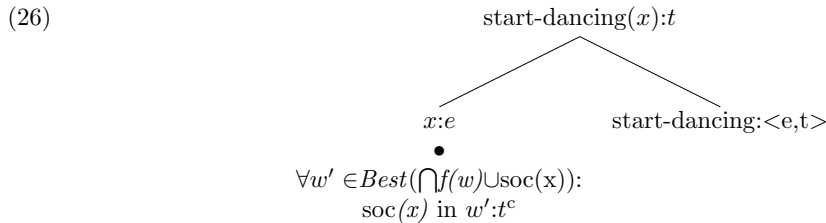
In the case of referentially used indefinites, we could follow e.g. Fodor & Sag 1982 and assume that a referentially used indefinite *some α* also identifies an individual x, and conveys $\alpha(x)$. Note that we saw that indefinites convey at-issue information, but that when they combine with an adnominal *if*-clause, their contribution is no longer at issue.

(23)   A (pointing): Some soccer player just started dancing.

(24)

$$\text{start-dancing}(x) \wedge \text{soc}(x){:}t$$

$$x{:}e \qquad \text{start-dancing:}{<}\text{e,t}{>}$$
$$\text{soc}(x){:}t$$

Here, *some soccer player* identifies an individual x and predicates two things of x: x is a soccer player, and x just started dancing. Both are at-issue (they be the target of negation and denial etc.). Once we add in the adnominal *if*-clause, the only at-issue content that *some soccer player* provides is that it refers to a salient individual.

(25)   Some soccer player, if that's what he is, just started dancing.

(26)

$$\text{start-dancing}(x){:}t$$

$$x{:}e \qquad\qquad \text{start-dancing:}{<}\text{e,t}{>}$$

$$\bullet$$

$$\forall w' \in Best(\textstyle\bigcap f(w) \cup \text{soc(x)}):$$
$$\text{soc}(x) \text{ in } w'{:}t^{\mathrm{c}}$$

That is, the fact that x is a soccer player is no longer at-issue material. Recall from (10) that we can no longer deny x being a soccer playier by saying 'that's not true!'. Instead, in the not-at-issue we now have the information that in all the speaker's best epistemically accessible worlds where x is a soccer player, x is a soccer player.

3   An alternative account

There is a recent proposal for adnominal conditionals by Frana 2017 [3]. The examples she considers are more modal in nature than the ones we have considered so far, like (27).

(27)   The head of accounting, if Campbell gets fired, is currently working for a competitor in London.

The definite description *the head of accounting* identifies an individual who at speech time is intuitively not in the denotation of the NP: the individual works for a competitor, so cannot be the head of accounting at the speaker's company. It is understood that that individual will perhaps become the head of accounting once Campbell gets fired, which may or may not happen. Thus the speaker of (27) is in a different epistemic state from the speakers we have considered so far: so far, the speakers have typically used definite descriptions in contexts where they were uncertain whether the individual they were referring to was in the extension of the NP. The speaker of (28) has no such uncertainty: she believes that the individual is certainly *not* in the extension of *the head of accounting* at speech time.

The analysis that Frana proposes is the following. There is a covert modal necessity adjective, and it is this adjective that the *if*-clause restricts, as in (28).

(28)
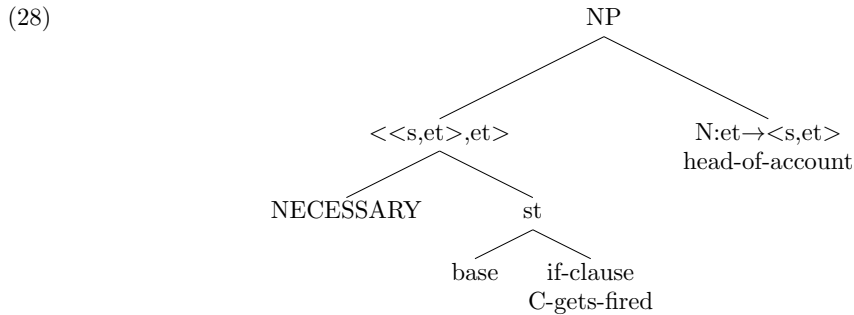
In her account, the *if*-clause attaches below the NP level, which means that she does not have to treat definite and indefinite DPs separately. However, because of this low attachment, she also predicts that adnominal *if*-clauses should be able to appear in quantifiers, even universal ones. This is not the case, see (29).

(29)   a. #Every student, if we can call him that, cheated on the exam.
        b. #Every ex-husband, if they ever got married, brought Alex a rose.

She also predicts the material provided by the *if*-clause to be at-issue. Since her examples are different from the ones we have seen, let us consider her example.

(30)   A: The head of accounting, if Campbell gets fired, is currently working for a competitor in London.
        B: No, that's not true. #She will be the CFO./#Campbell won't get fired, just demoted.
        B': No, that's not true. She is working in Paris.

It is clear from B's failed denial that the material in the *if*-clause is not-at-issue. This needs to be built into the account. One way of doing this would be to simply propose that the covert modal adjective operates on the not-at-issue dimension rather than the at-issue dimension.

However, even then at least one issue remains. Languages like German allow APs to host a lot of very diverse material, for example adverbials and discourse particles (for more data, see Viesel 2015 [12]). Consider the following examples.

(31)   der morgen   *(notwendige) Arztbesuch
        the tomorrow necessary   doctor.visit
        'the doctor's visit that is necessary tomorrow'

(32)   die ja   *(notwendige) Neubesetzung
        the PART necessary   new.placement
        'the – as we know – necessary replacement'

These examples show that adverbials like *tomorrow* and discourse particles like *ja* are not able to occur in DPs unless an adjective is present. These need not be modal adjectives, but since Frana posits a covert adjective expressing modal necessity, these examples show that *tomorrow* and *ja* are compatible with the overt version of such adjectives.

We expect that any material that can be hosted in an AP that is projected by an overt adjective should also be able to be hosted in an AP projected by a covert adjective. But here, this is not what we find: neither adverbials nor discourse particles can occur with DPs that host adnominal *if*-clauses, see (33) and (34).

(33)   #der morgen   *(notwendige) Arztbesuch, wenn man es einen Besuch nennen kann
        the tomorrow necessary   doctor.visit if   one a visit call   can
        intended: 'the doctor's visit, if one can call it that, that is necessary tomorrow'

(34)   #die ja   *(notwendige) Neubesetzung, wenn   Campbell gefeuert wird
        the PART new.placement if   Campbell fired   will
        intended: 'the –as we know – necessary replacement if Campbell gets fired'

Notice that the intended meaning is coherent, as is illustrated by the fact that when the *overt* adjective is present, the adverbial and particle are acceptable in (33) and *ja*, respectively. It is only when there is no overt adjective and Frana's covert adjective should take over that the constructions become unacceptable. This means that if one wants to maintain a covert AP account, more needs to be said.

4   Open questions

So far we have not considered whether the content of the adnominal *if*-clause has an influence on its acceptability. In fact this does seem to play a role: only certain types of *if*-clauses can appear adnominally. For example, it is not possible to express a law-like dependency between DP and *if*-clause.

(35)   #That aggressive man, if he drinks, works at a café.

The phrase *that aggressive man, if he drinks* in (35) cannot mean 'this unique x' and non-truth-conditionally express 'in all the best epistemically accessible worlds where the guy drinks, he is an aggressive man'. But this is what we predict. There has to be a further restriction: only those *if*-clauses can restrict definite descriptions that express a necessary condition for the DP to hold of x. This is illustrated with the following two contexts.

(36)   Context: During the Olympics, a runner A has qualified for the final round. The fi-
        nalists all start in a group. The fastest qualifying time was run by runner B, who

was 3 seconds faster than A. In principle, if everybody else runs as fast as during the qualifying time and A runs 4 seconds faster, A wins.
Newscaster, talking about A: #The winner, if she beats her qualifying time by 4 seconds, is getting ready.

In this context, it is not *necessary* for A to beat her time by four seconds in order to win. If everybody else runs much slower this time, A could run the same speed and still win. We observe: the sentence is odd. Contrast that with the following example.

(37)   Context: During the Olympics, a long jumper A has qualified for the final round. The finalists all take turns, and so far everyone has done exceptionally badly. In fact, A is the last person to jump and can win by jumping only 3,00 meters, which is considered very easy.
Newscaster, talking about A: The winner of the 2016 Olympics, if she makes this final jump farther than 3 meters, is getting ready.

In this context, jumping 3 meters is a necessary condition for A to be the winner: A has to jump at least 3,00 meters to win. If she jumps less far or does not jump at all, she cannot win. In this example, it also happens to be a sufficient condition that A jump 3,00 meters to be the winner, but this is not required. Recall example (27), repeated here as (38).

(38)   The head of accounting, if Campbell gets fired, is currently working for a competitor in London.

We understand that while it is a necessary condition for Campbell to be fired in order for the salient individual to become head of accounting, it is by no means a sufficient condition. This restriction that the *if*-clause needs to express a necessary condition is not currently predicted by our account, and one might wonder if there is a pragmatic principle that can predict this, or if we need to derive it in some other way.

Another interesting challenge is the treatment of proper names. It seems clear that we can modify proper names with adnominal *if*-clauses.

(39)   A: Alex, if that was his name, came to the party.
B: No, that's wrong. His name was Bob.

Notice that *Alex* remains at-issue content and can be targeted by B's denial. While this in itself does not posit a technical problem for multi-dimensional semantics (certain elements can be used on more than one dimension at once), it is surprising that definite DPs seem be fully on the not-at-issue dimension, whereas proper names appear in both dimensions. This requires further thought.

A final puzzle is that even non-referential uses of DPs seem to be able to be modified by adnominal *if*-clauses. Consider the following examples.

(40)   Context: A and B are investigating the death of Smith. It seems that another person was involved, but it is unclear if this person maliciously attempted to kill Smith, or if it was an accident. At present A and B do not know the identity of this person.
A: The perpetrator, if we can call him that, has left some DNA.

A's use of *the perpetrator* seems to be attributive, in that the speaker does not have a particular individual in mind.

We can even get quantificational readings of indefinites to occur with adnominal *if*-clauses,

as in (41).

(41)   If a student – if you can still call him a student – cheats, every professor will get fired.
         (adapted from Kratzer 1998)

Here the speaker is expressing uncertainty about whether someone who behaves in an un-studentlike way (for example, someone who cheats) can be called a student, without having a particular individual in mind. Examples like these suggest that we have to rethink our claim that what is left on the truth-conditional level is an individual of type e. On the other hand, if we adopt a quantificational analysis of *a student* in (41), more needs to be said about why other quantifiers such as *every* seem to always be unacceptable with adnominal *if*-clauses.

The proposal presented here provides some new empirical evidence to shed light onto the debate on referentially used DPs. It argues that at least when combining with adnominal *if*-clauses, referentially used DPs contribute not-at-issue content.

References

[1] Keith Donnellan. Reference and definite descriptions. *The Philosophical Review*, 75(3):281 – 304, 1966.

[2] Janet Fodor and Ivan Sag. Referential and quantificational indefinites. *Linguistics and Philosophy*, 5:355 – 398, 1982.

[3] Ilaria Frana. Modality in the nominal domain. In Ana Arregui, Maria Luisa Rivero, and Andres Salanova, editors, *Modality across syntactic categories*, pages 49 – 69. Oxford University Press, 2017.

[4] Irene Heim. Definiteness and indefiniteness. In Klaus von Heusinger, Claudia Maienborn, and Paul Portner, editors, *HSK 33.2*, pages 996 – 1025. de Gruyter, 2011.

[5] Angelika Kratzer. Scope or pseudo-scope? are there wide-scope indefinites? In S Rothstein, editor, *Events in Grammar*, pages 163 – 196, Dordrecht, 1998. Kluwer.

[6] Saul Kripke. Speaker's reference and semantic reference. *Midwest Studies in Philosophy*, 2, 1977.

[7] Eric McCready. Varieties of conventional implicature. *Semantics and Pragmatics*, 3(8):1 – 57, 2010.

[8] Christopher Potts. *The logic of conventional implicatures*. Oxford University Press, 2005.

[9] Christopher Potts. The expressive dimension. *Theoretical Linguistics*, 33(2):165 – 198, 2007.

[10] Mandy Simons, Judith Tonhauser, David Beaver, and Craige Roberts. What projects and why. In Nan Li and D Lutz, editors, *Proceedings of SALT 20*, pages 309 – 327, 2010.

[11] Robert Stalnaker. Pragmatics. *Synthese*, 22:272 – 289, 1970.

[12] Yvonne Viesel. Discourse structure and syntactic embedding. In Thomas Brochhagen, Floris Roelofsen, and Nadine Theiler, editors, *Proceedings of the 20th Amsterdam Colloquium*, pages 418 – 427, 2015.