METALINGUISTIC NEGATION AND PRAGMATIC AMBIGUITY: Some comments on a proposal by Laurence Horn¹

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1. INTRODUCTION

1.1 The goal of this paper

In this paper I will discuss the notions of 'metalinguistic negation' and 'pragmatic ambiguity' as they are used by Horn (1985) and Horn (1989, ch. 6) in his analysis of the function of negation in natural languages.

I will try to show that both notions need some clarification and, in section 5, I will suggest an alternative to Horn's classical Gricean framework.

1.2 Negation

Negation in natural language is not a unitary phenomenon. A negation operator can occur in different sentence types (*The sun isn't shining today; Don't go!; Aren't you pleased?*); it can take different parts of the sentence in its scope (the whole sentence, a constituent or a word); it can be affixal (*unhappy*) or not (*not happy*). Horn's voluminous 1989 book is an extensive treatment of all these complexities. The discussion in his chapter 6, which we shall focus on here, is, however, restricted to the assertoric sentence type and to non-affixal sentence or constituent negation. Thus, *Peter isn't happy* and *Not Péter is happy, but Paul* fall within the range of the present discussion, whereas *Peter is unhappy* and *Isn't Peter happy?* do not.

Although I will confine my comments to the types of negation discussed in chapter 6, it is my opinion that theoretical claims developed for the sentences under discussion should be at least compatible with other claims that pertain to negation in general, or, more particularly, with claims applying to negation as it occurs in other sentence types or in (morphological) word-negation.

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1.3 A natural history of metalinguistic negation

Central in Horn's theory is the idea that the negation particle does not always fulfill the same function in language use. He acknowledges that the same idea, in one or another form, has been put forward by Ducrot (1972) and by Grice (1967), cf. Horn (1989:377):

"As Grice (1967) has pointed out, either truth or assertability can be affected by negation; it is up to the addressee to factor in the relevant contextual clues so as to determine just what the speaker intended to object to or deny in the use of the negative form at a given point in the conversation".

The specific form that this idea took in Horn's work originated in 1979, as Horn notes on the first page of his 1985 article (p.121): "The seeds for the major thesis germinated at the July 1979 Colloquium on the Possibilities and Limitations of Pragmatics at Urbino, Italy". As the Barcelona conference is a follow-up to Urbino (with Viareggio 1985 and Antwerp 1987 in between), it may be appropriate to use the Barcelona platform to examine what has grown out of the seeds sown in Urbino.

The seedlings of Horn's new idea on negation first appeared in his 1985 article. Subsequent literature referring to that article showed the notion of metalinguistic negation as rather easily accepted (for example Brugman 1986, Sweetser 1990), while the notion of pragmatic ambiguity elicited critical reactions (Seuren 1988, Burton-Roberts 1989, among others, see my section 4). In 1989 the seedlings were transplanted wholesale into what was in effect a forest on negation, Horn's magnum opus, 'A natural history of negation'. Chapter 6 of that book, entitled 'metalinguistic negation', is just a "revised and expanded version of Horn 1985" (1989:362), and in it his earlier fundamental idea is "essentially reproduced" (1989:433) without change. Although at the moment of writing the present paper (summer 1990) no reactions to the 1989 version have yet appeared, the same type of reactions that I referred to above (Brugman etc.) should apply to the 1989 version.

2. DESCRIPTIVE AND METALINGUISTIC NEGATION: TWO NATURAL CLASSES?

2.1 Descriptive and metalinguistic negation

According to Horn, negation, as it is used in sentence or constituent negation in assertoric sentences, can fulfill one of two different functions: either the negation is descriptive or it is metalinguistic. But in exactly which cases do we have a descriptive use and in which cases a metalinguistic one? We should pay some attention to this question, as Horn is not optimally clear on this point.

In descriptive use, negation is primarily 'world-oriented', or 'referentially oriented'; that is, the speaker intends to

describe a negative state of affairs. This is typically the case in initial, non-reactive, utterances as in (1):

- (1) The sun isn't shining today.

In metalinguistic use, on the other hand, we have "a formally negative utterance which is used to object to a previous utterance on any grounds whatever, including ... the way it was pronounced" (Horn 1989:374). A typical example of this use is the negation in (2 B):

- (2) A. He called the pólice.
B. He didn't call the [pólis]; he called the [polís].

The first, negative, conjunct of the example utterance (2 B) rejects the (wrong) pronunciation of the word 'police' as it occurs in A's utterance. Negation is here primarily 'discourse-oriented': the negative utterance pertains to the ongoing discourse and could be paraphrased as: 'you should not pronounce that word in that way'. Indeed, the negation in the metalinguistic utterance has nothing to do with any real world state of affairs, or, depending on one's theory, with anything in the cognitive domain.

In a way, descriptive negation also has a contextual or discourse aspect, insofar as the use of a negative sentence always presupposes more or less strongly the contextual relevance of the positive counterpart. Saying the sun isn't shining today suggests that I or the addressee had the expectation or wish, or did not exclude the possibility, that the sun would shine today. Although Horn (1989) treats this aspect of descriptive negation in chapter 3, under the heading 'markedness', it is not returned to in chapter 6. Let us thus assume, in line with Horn, that utterances with a descriptive negation are primarily world-oriented and that the discourse-orientation of such utterances is a secondary aspect.

2.2 Initiative and reactive negative utterances

In section 2.1 I introduced the distinction between descriptive and metalinguistic use of negation by giving some typical examples (1 and 2). But examples will not suffice by themselves. What we in fact need is a clear criterion that makes it possible to decide for each example whether it falls into the descriptive or metalinguistic class. Horn unfortunately does not offer such a clear-cut operational criterion.

Examples (1) and (2) invite the hypothesis that such a criterion could be found in an identification of the descriptive-metalinguistic distinction with a distinction between initiative and reactive utterances. More precisely, the hypothesis would be that descriptive negation is always associated with initiative utterances - those not prompted by preceding discourse - and metalinguistic negation with reactive negative utterances. Although Horn does not explicitly discuss such a possible parallelism, we can in fact infer from a passage where he does

discuss Karttunen and Peters (1979) that he would not subscribe to it. In their article, Karttunen and Peters define what they call 'contradiction negation', as a special function, contradicting what the addressee had just said, implied, or implicitly accepted. Horn (1989:423) reacts to this by stating that "most ordinary (descriptive) negations can be characterized as serving the same 'special function'" (namely the function of contradicting something the addressee just has said). This is to say, descriptive negation is sometimes reactive. I assume that Horn has denials in mind here, in which an assertion by speaker A is followed by a reactive counter-assertion by B, as in (3):

- (3) A. Peter lives in Amsterdam.
 B. Peter doesn't live in Amsterdam.

B's utterance can be taken as "a formally negative utterance which is used to object to a previous utterance" (cf. the definition of metalinguistic negation quoted above, between example 1 and 2), and thus as an example covered under the (intensional) definition of metalinguistic negation. I assume, however, on the basis of Horn's comments on Karttunen and Peters, that he would consider the negation in (3) as a case of descriptive negation, despite its reactive character. B's utterance is primarily 'world-oriented': B makes a claim about the real state of affairs in the world, as A has done before. B's statement appears exactly opposite to A's claim, which certainly gives a contrastive and rejecting discourse-effect, but that effect is a 'side-effect'. B could also have reacted with a positive counter-assertion as in (3'):

- (3') A. Peter lives in Amsterdam.
 B. (To my knowledge) Peter lives in Rtterdam!

The negative reaction in (3) has the same descriptive status as the positive reaction in (3') has. I assume that an analysis of example (3) along this line is in accord with the descriptive-metalinguistic distinction as Horn would like to have it understood.

That descriptive negation can be reactive invites the question whether metalinguistic negation can be initiative. And here the answer must be 'no'. In his discussion of Karttunen and Peters, Horn remarks that the special function of contradicting something the addressee has just said "is a necessary condition for a negative to be functioning metalinguistically" (p. 423). A negative metalinguistic utterance presupposes that the positive counterpart of that sentence has been uttered, usually by a different speaker immediately before the present negative utterance.

In this 'explication' of Horn's distinction we can conclude, then, that initial negative utterances are always descriptive and that metalinguistic negative utterances are always reactive. But reactive negative utterances can be either metalinguistic or descriptive. So the question remains: When exactly is a reactive negative utterance descriptive and when metalinguistic? Horn's

intensional definition of metalinguistic negation does not really solve the problem. For as we have seen, the definition is too vague, in that it too easily allows cases of descriptive counter-assertions to fall inappropriately under the definition.

2.3 Metalinguistic negation and echoing

Van der Sandt (to appear) posits that there is an 'echo-operator' present in every reactive utterance with reversed polarity. This would hold both for negative reactions as in (3) as for positive ones as in (4):

- (4) A. It doesn't matter.
B. It does matter.

The function of the echo-operator is to 'import' the (positive) content of the previous utterance into the present utterance. In case the echoing utterance has a negative polarity, the imported informative content is brought under the scope of the negation. In Van der Sandt's view, the imported content is a 'full informative content', which means that it is not only the propositional content of the previous utterance that is imported, but also the presuppositions, conversational implicatures, and other non-truth-functional inferences associated with the propositional content.

The question is, whether the idea of echoing can be useful in explicating Horn's distinction between descriptive and metalinguistic negation. Could we say that descriptive negation occurs in non-echoing utterances and metalinguistic negation in echoing ones? As was the case with Karttunen and Peters' distinction between initiative and reactive utterances, Van der Sandt's distinction can not be used without change as a proper reconstruction of what Horn is aiming at. Example (3) makes the difference again. Van der Sandt would call (3) a case of echoing, whereas Horn would interpret it as a case of descriptive and not of metalinguistic negation.

To reach an optimal cooperative reconstruction of Horn's theory, I make a liberal use of Van der Sandt's notion of the echo-operator. First, I do not assume that it plays a role in every polarity-reversing reactive utterance. Thus, in ordinary counter-assertions as in (3), I assume no echoing to be present in B's utterance. There is only (partial) similarity between B's assertion and the previous assertion of A. Secondly, I would like to stress that in the operation of echoing as I take it here, what is primarily echoed is (part of) the *form* of the previous utterance. This form has of course a meaning and this meaning has a contextual interpretation (and thus, for example, conversational implicatures) and finally a truth-value. These meanings and interpretation aspects are, together with the echoed form, imported into the current utterance and thus, in the case of negative utterances, brought within the scope of negation. But form-copying is, in my interpretation of the echoing operation, primary.

What I propose now, is to say that we have a metalinguistic

negation in those cases where negation has such an echoed form (with its meaning and interpretation) within its scope. This interpretation does justice to the term 'metalinguistic', because the scope of the negative operator is now a linguistic object, namely a copy of the utterance that was produced by the previous speaker.

Although I have the feeling that using the concept of echoing is helpful in clarifying what Horn's distinction is aiming at, it still does not really give us an operational criterion. We simply claim, as a result of a certain interpretation of Horn's distinction, that there is no echoing present in counter-assertions as in (3).

Let us consider now a broader range of examples that Horn classifies as cases of metalinguistic negation to see whether they fit the picture we have built up so far.

2.4 The extension of metalinguistic negation

2.4.1 Focusing and correction

If the negative operator focuses on part of an utterance, in other words, if we have constituent negation, Horn considers the use of negation as metalinguistic, as in (5):

- (5) A. Peter lives in Amsterdam.
- B. Peter doesn't live in 'Amsterdam.

Such a reactive utterance is more often than not followed by an utterance with a corrective function, cf. (5'):

- (5') A. Peter lives in Amsterdam.
- B. Peter doesn't live in 'Amsterdam; he lives in Rtterdam.

All the examples that Horn discusses are in fact followed by such a corrective utterance. I assume, however, that examples as (5) in which a corrective continuation is not present but possible, would be considered, analogous to (5') as metalinguistic.

Horn points out that in case the corrective continuation is introduced by an adversative conjunction like the English *but*, the corrective utterance must be reduced down to a conjunct that consists of the simple focus. Thus, (5'') would be acceptable, but (5''') wouldn't:

- (5'') Peter doesn't live in 'Amsterdam, but in Rtterdam.
- (5''') Peter doesn't live in 'Amsterdam, but he lives in Rtterdam.

The presence of such a reduced adversative clause in the second conjunct, as in (5''), is considered by Horn as a diagnostic for the presence of negation of the metalinguistic type in the first conjunct. The fact that *but* in this kind of metalinguistic context has to be translated by a special form in some languages (German *sondern*, Spanish *sino*) is considered by Horn as an additional argument for its diagnostic value. The obligatory

syntactic reduction of the second conjunct in English and the special form that the adversative conjunction in this context takes in some languages are seen as a reflection of the special, metalinguistic, function of the utterance.

Two further points can be added here. The first is illustrated by example (6).

(6) They had run, not walked, to the station.

In this utterance, the rejection does not precede but rather follows the correction. Yet Horn classifies this example as metalinguistic. He observes that in such a context no *but* can be inserted before *not walked*. This example shows that it is not the order of rejection and correction per se that makes the negative a metalinguistic one. It is rather the function of each of the conjuncts, rejecting and correcting, that is determinative.

The second additional point is illustrated by example (7).

(7) A. Peter lives in Amsterdam.

B. Peter doesn't live in Amsterdam. He lives in Rtterdam.

In (7), B utters two sentences that could be interpreted as showing the same rejection-correction pattern, typical for metalinguistic negation, that we already encountered earlier in (5'). But this would be a mis-interpretation, at least if we are on the right track in reconstructing Horn's distinction. B's first utterance in (7) is, in my view, another example of counter-assertion, comparable to example (3). B's second utterance in (7) should then be interpreted as a more precise counter-assertion or as an explanation for the fact that a counter-assertion was made in the first sentence (*Peter doesn't live in Amsterdam, because I know that he lives in Rotterdam*).

One could ask what is the communicative difference between (7 B) and (5' B). Intuitively, the informative effect is the same in both cases. If we consider, however, descriptive and metalinguistic negation as two different modes of language use, we are forced to assume that the more or less identical informative effect of (7 B) and (5' B) is reached in different ways. In (7), speaker B chooses the descriptive route to reach his communicative goal, in (5') speaker B chooses the metalinguistic route. It would be interesting to investigate in real language use whether factors can be identified which influence the choice of route.

2.4.2 Positive polarity items

Characteristic of positive polarity items (PPI's), like the adverbials *pretty* or *rather*, is that they cannot occur within the scope of negation, cf. (8):

* (8) The job isn't pretty/rather hard.

Sometimes, however, PPI's do occur within the scope of a negation, namely when the negative utterance is a polarity-reversed reaction to a positive utterance containing a PPI:

- (9) A. The job is pretty hard.
 B. The job isn't pretty hard.

In some of the literature on PPI's, for example Seuren (1976), B's utterance in (9) would be considered a case of 'echoing'. This observation can be accounted for if we assume that in this case we have again not normal descriptive negation, but rather a metalinguistic negation. *Pretty* is allowed under negation because A's utterance is echoed and brought wholesale in the scope of the metalinguistic negation.

Note that if a PPI is involved, B cannot choose between a descriptive and a metalinguistic route. The presence of a PPI in the A sentence preempts the choice of descriptive, polarity-reversed, counter-assertion. Moreover, the PPI seems to make a correcting second conjunct sound strange:

- (10) A. The job is pretty hard.
 ?? B. The job isn't pretty hárd, but easy.

According to my intuition, an explaining second conjunct is better:

- (11) A. The job is pretty hard.
 B. The job isn't pretty hard; it's easy.

Apparently, it is not only counter-assertion that can be followed by explanatory continuations (cf. example 7); metalinguistic negations as in (11) also have this possibility.

Like the presence of the special *but* in the rejection-correction cases the presence of a PPI under negation is considered by Horn as a diagnostic for metalinguistic negation (cf. his section 6.4.2). Note that these diagnostics are unidirectional, i.e. their presence is a sufficient but not necessary condition for metalinguistic negation. What is necessary and essential is that the negation pertains to something that is echoed. There are many more examples to give in which such echoing is present, for example such famous ones as *The king of France is nôt bald - there is no king of France*. Before we bring such 'logical' examples into the discussion, we first have to go into the question of how, in Horn's view, descriptive and metalinguistic negation are related to truth-functional negation as it is defined in logical semantics.

3. NEGATION AND TRUTH-FUNCTIONALITY

3.1 Metalinguistic negation and truth-functionality

The main impetus for Grice's theory of logic and conversation was to show that logic is an appropriate means for the analysis of natural language. Indeed, Grice demonstrated how logic could be rescued, despite the seemingly many non-logical aspects that the natural language counterparts of the logical particles ($\wedge, \vee, \rightarrow, \sim$) seemed to have.

Although Horn takes great pleasure in the details and curiosities of natural language, he shares at the same time Grice's interest in safeguarding the role of logic for the analysis of natural language. In that sense, Horn's work can be characterized as classically Gricean.

In Horn's view, natural language negation has the same function as logical negation when negation is used descriptively. Descriptive negation is truth-functional, i.e. it has the function of reversing the truth-value of the positive counterpart. *The sun isn't shining* is interpreted as the claim that *The sun is shining* is not true. This logical function of descriptive negation is not a *part* of the meaning of descriptive negation, it is the whole and only meaning. Logical and descriptive negation are, in this view, fully identical.

Metalinguistic negation, on the other hand, would represent the non-logical use of negation in natural language. In this use, truth-functionality plays no role at all. The discourse-function of rejection is all there is, and it is the whole and only function of metalinguistic negation. Whether negation is truth-functional or not thus runs strictly parallel to the descriptive-metalinguistic distinction.

I would like to raise the question here of whether this strict parallelism is really defensible. More specifically, I doubt that we have to deny truth-functionality any role in the area of metalinguistic negation.

In my view, which is in fact not different from the ordinary classical view, a truth-functional interpretation of an utterance must be allowed in those cases where it makes sense to ask whether the utterance is true or not and where that truth-value can be calculated mechanically on the basis of the truth-value-bearing parts of the utterance as a whole. Thus negation is truth-functional when it makes sense to ask whether the negative utterance is true or false and where the answer to that question can be found by determining the truth-value of the positive counterpart, which is at the same time part of the negative sentence. The truth-value of the sentence as a whole is then reckoned by reversal, because that is the 'meaning' of the negative operator.

In Horn's view, it makes no sense to ask whether an utterance that contains a metalinguistic negation is true or false. Nevertheless, I find it intuitively acceptable to ask whether *The job isn't pretty hard* is true or false. Although the utterance may have as its primary function the rejection of the positive counterpart as stated by the previous speaker, the ground for rejection is the presumed falsity of that positive counterpart. Together with the echoing of the form of the previous utterance there is a propositional content that is 'copied' and brought within the scope of the metalinguistic negation. I have no problem holding that the echoing and rejecting aspect is part of the functioning of metalinguistic negation, at the same time holding that there is an aspect of truth-functionality involved. The difference between descriptive and metalinguistic negation would be, then, that descriptive negation has a direct 'world-orientation', the question of truth

and falsity being directly relevant, whereas in the case of metalinguistic negation echoing is primary. The echoing imports a propositional content and only secondly the question of truth and falsity becomes relevant. The metalinguistic utterance inherits the truth value of the previous positive utterance and reverses it, which leads to the final truth-value of the metalinguistic utterance as a whole.

The foregoing argumentation might be interpreted as an effort to go further than Horn, i.e. to safeguard logic for the analysis of natural language to a much greater extent than he considered possible or theoretically profitable. Indeed, the strict parallelism between the descriptive-metalinguistic distinction and the truth-functional - non-truth-functional distinction has, because of its simplicity, a theoretical attractiveness. Nevertheless, I am prepared to give it up. In section 5, I will argue that the theoretical loss is not as large as it might seem, for in its stead I will offer a different view on the relation between logic and language.

In the next section, we will look at some further examples of metalinguistic negation that Horn considers as support for the claimed parallelism between metalinguistic negation and non-truth-functionality.

3.2 Conversational implicature and truth-functionality

Consider the following examples that Horn discusses extensively:

- (12) A. Some men are chauvinists.
B. Some men aren't chauvinists - all are chauvinists.
(Horn 1989:370)
- (13) A. They had a baby and got married.
B. They didn't have a baby and get married, they got married and had a baby. (Horn 1989:373)

According to Horn, the negation in these examples cannot be a descriptive and thus truth-functional negation, because then they would be paradoxical in content, which they intuitively are not. In a descriptive reading of negation, the first sentence in (12) would logically imply that not all men are chauvinists, whereas the second sentence explicitly states that all men are chauvinists. In (13) the propositional content of the sentence before the comma is identical to the propositional content of the sentence after the comma, at least in the classical Gricean view. This content cannot at the same time be negated and confirmed without paradox.

The way out for Horn is a metalinguistic reading of the negative element. Then truth-functionality no longer plays a role in the first conjunct of B's reply in (12) and (13), so that no truth-functional conflict with the second conjunct occurs.

In both examples the first conjunct metalinguistically rejects the previous utterance, not on the ground of falsity of the propositional content, as was the case in our earlier PPI and rejection-correction examples, but on the ground of a conversa-

tional implicature the previous utterance gave rise to and which is considered wrong by speaker B. More precisely, in (12) it is a scalar quantity implicature (*not all*) that B considers as wrong and in (13) it is a manner implicature (*and then*), triggered by the order of conjuncts in A's utterance, that is rejected.

The fact that it is a conversational implicature that is the target of rejection in (12) and (13) is for Horn an extra argument for denying that metalinguistic negation has a truth-functional role in these cases. Conversational implicature is something pragmatic, whereas truth-functional operators can only take semantic material, namely propositional contents, as their argument.

Recent theoretical views, however, particularly those within the framework of Relevance theory, have cast doubt on the assumption that the truth-conditional evaluation of a sentence should be strictly linked to its semantic content. Sperber and Wilson (1986:176-193) have differentiated between sentence content and truth-conditional content. The latter is the result of a pragmatic interpretation of the former. The pragmatic component takes a rather abstract sentence content as input, adds 'explicatures', and gives a propositional form, 'what is said', as output.

Carston (1988) and Récanati (1989) have developed Sperber and Wilson's line of thinking further, arguing that manner and quantity implicatures should be considered as 'explicatures', forming part of what is said and thus falling within the scope of truth-functional operators.

If we adopt this line of thinking, as I am inclined to do, there is no principled reason for denying truth-functional interpretation for these cases of metalinguistic negation. Echoing copies, together with the form of the previous utterance, its truth-conditional content. In example (12) the truth-conditional content would, in this view, read as 'some but not all men are chauvinists'. A negative operator can apply to this 'explicated' content, focusing on the 'not all'-part, without contradicting the immediately following statement that all men are chauvinists. If the rejected previous utterance was indeed false, then the metalinguistic utterance can mechanically be given the value 'true'. It is then true that some men aren't chauvinists and, analogously, it is true for (13) that they didn't have a baby and get married. Again, metalinguistic use and truth-functional interpretation are not mutually exclusive.

3.3 Prototypical metalinguistic negation

One might be tempted, on the basis of the foregoing sections, to make the argument even stronger, claiming that every occurrence of metalinguistic negation has at the same time a truth-functional interpretation. This would be to say that descriptive and metalinguistic negation are not different in respect to truth-functionality. Although I would agree that truth-functionality is not the essential point, of difference between the two types of negation, I would not go as far as, for example, Carston(1985) or Van der Sandt (to appear), who indeed

claim that the truth-functional aspect is always present when negation is used in natural language. The problematic cases for me are the following:

- (14) The king of France is *nót* bald - there is no king of France.
(Horn 1989:362)
- (15) a. I am *nót* a 'colored lady' - I am a black woman!
(Horn 1989:373)
- b. He didn't call the [pólis], he called the [polis].
(Horn 1989:371)

In a metalinguistic reading of (14) and (15 a and b), the first conjunct in each case rejects a previous utterance, but the grounds for the rejection are different from the ground of falsity that we encountered in the previous sections. In (14) the ground for rejection is the non-fulfillment of a presupposition. In (15 a) the ground is the word choice and in (15 b) it is the pronunciation of the word police. Truth or falsity do not become relevant in these cases because it is the act of saying X (in 14) or the way X is said (in 15) that the current speaker is opposing. Whereas it does make sense to paraphrase the implicature cases by a 'it is not true' phrase, the examples that we are discussing here can be better paraphrased in ways like the following: 'It makes no sense to state that the king of France is bald'; 'It is not appropriate to call me a colored lady'; 'The word police should not be pronounced that way'. One could call this use of metalinguistic negation prototypical in the sense that the grounds for rejection are in these cases *linguistic* ones, namely the saying of X or the way X is said.

As mentioned before, Carston (1985) defends a position in which all uses of negation are treated as truth-functional. Horn (1989:434) criticizes this position in the following way: "Carston is forced by her neomonogism to propositionalize every target of metalinguistic negation, from grammatical usage to phonology ...". Horn suggests that treating presuppositional and stylistic aspects of an utterance as propositional is a kind of "category mistake" (Horn 1989:434). I think his critique on 'propositionalizing' every aspect of an utterance is justified.

3.4 Conclusion

In the foregoing sections, I have accepted Horn's distinction between descriptive and metalinguistic use as a useful one. I have proposed that the distinction can be clarified by asking whether the negation pertains to an argument echoed from the previous speaker's utterance. Horn's claim that descriptive negation goes together with truth-functional interpretation and metalinguistic negation doesn't, was questioned, however. I argued that a truth-functional interpretation of some but not all metalinguistic utterances is possible.

4. PRAGMATIC AMBIGUITY

4.1 Ambiguists and monoguists

Horn is not the first one to note that negation is an operator that seems to perform different operations in different contexts. One of the values of his study is the broad overview of the different theoretical positions that observations on the variability of negation have led to. Horn makes clear that most analyses of this variability have been semantic without taking pragmatics properly into consideration. More specifically, he shows that most authors have defined the problem of variability as a dilemma between two possible positions: Can we, despite the apparent functional diversity of the negative operator in language use, isolate a meaning (*the meaning*) that is constant across these uses? Or do we have to accept that negation is not a unitary phenomenon, so that two or more conventionalized meanings or functions have to be assumed? Horn calls these positions the 'monogulist' and the 'ambiguist' position. Carston (1985) and Kempson (1986) are representatives of the first position, whereas Seuren (1985, 1988) could be mentioned as a defender of an ambiguity analysis. Seuren contrasts the presupposition-rejecting function of negation (which he calls 'radical negation') with all other uses of negation ('minimal negation' in his terms) and argues that both meanings or functions must be seen as conventionalized operators in the language system.

One weapon that Horn uses repeatedly against many of the earlier analyses of negation is of an empirical nature. He shows that they brought only part of the range of uses of negation into play. In particular, the cases where negation pertains to formal aspects of the previous utterance (pronunciation, morphological realization or style) have been left out of the discussion in most analyses. Indeed, Horn must be complimented for his broad empirical basis, which surpasses every previous study of negation. One might hope for future studies that they not fall below Horn's empirical standard.

Besides the empirical value of Horn's work and his extensive discussion of the literature (although non-English literature is relatively neglected), he develops a new theoretical view which is meant as a synthesis of the monogulist and the ambiguity position. Essential in his new proposal is bringing into play the pragmatic level of description, not as a 'waste-basket', but as a fully serious level, which in interplay with the semantic level, should help to account for the facts.

Horn's proposal can be summarized as follows. All uses of negation fall into two 'natural classes', the descriptive class and the metalinguistic class. The two classes are claimed to cover completely and discretely the entire range of possible examples. The difference between the two classes is, however, not to be found on the semantic but on the pragmatic level. The difference is analyzed as a case of 'pragmatic ambiguity', not of semantic ambiguity as the ambiguityists would have it. On the semantic level, Horn assumes that negation is unitary. On the semantic level he thus follows the monoguists, in particular

those monoguids who claim that the unified negative operator is to be identified with negation as it is defined in logic, i.e. with the truth-functional operator. This unification on the semantic level does not imply for Horn that negation is truth-functional in all its uses, as the other logically oriented monoguids assumed. Only in the descriptive use of negation is truth-functionality preserved. In the metalinguistic uses it is 'replaced' by the function of rejection.

Central to this picture is the theoretical notion of pragmatic ambiguity. The term 'pagmatic ambiguity' is rather new, it does not have an established position in pragmatic theory. Horn does not explicitly define what pragmatic ambiguity is. He uses the concept and legitimatizes his use of it by pointing out an analogy between his analysis and similar analyses of other meaning phenomena that are available in the literature. He mentions Donnellan's (1966) distinction between the attributive and referential understanding of *Smith's murderer is insane*, some analyses of modal verbs, and the one-sided or two-sided understanding of scalar predications as analyzed in the Gricean tradition.

These illustrations with examples could not prevent several authors who reacted to Horn's 1985 article from criticizing the notion of pragmatic ambiguity or at least Horn's use of it. Besides the references to critics that Horn gives in his 1989 book (p. 377), the following could be added. The quotations are meant to give an impression of the type of reactions that Horn's text apparently elicited.

"Horn unfortunately does not point out what he means by pragmatic ambiguity, but introduces this notion by examples" (Van der Sandt, to appear, p. 37).

"The notion of 'pragmatic ambiguity' is relatively new in linguistic theory. Horn (1985:135) attributes it to Donnellan (1966). Although there is some unclarity as to what it stands for, it implies anyway the possible use of the expression in question in a non-truthconditional way" (Seuren 1988:194).

Burton-Roberts (1989:227-228) reacts to a passage in Horn (1985:132) where Horn states that the distinction between the two types of negation represents a case of "pragmatic ambiguity, a built-in duality of use" (cf. also Horn 1989:370). To this passage, Burton-Roberts reacts as follows:

"What is 'pragmatic ambiguity'? ... what is a 'built-in duality of use'? ... He [Horn] never provides any explanatory derivation of it [metalinguistic negation] and repeatedly contradicts himself in the matter of how this PRAGMATIC understanding of negation relates to the logical SEMANTICS of negation. For example, at one point Horn speaks of this marked negation as 'an extended metalinguistic use of a basically truth-functional operator' (p. 122). ... Horn elsewhere contradicts this by alluding to 'this special or

marked use of negation, irreducible to the ordinary internal truth-functional operator' (p. 132)".

Finally, Jacobs (to appear, p.45) commented in the following way:

"Es müsste irgendwelche pragmatischen Mechanismen geben, die die alternativen Interpretationen miteinander oder mit einer gemeinsamen 'zugrundeliegenden' Interpretation in Beziehung setzen. ... Mechanismen, die diese beide Operatoren in einen Zusammenhang bringen könnten, werden von Horn nicht diskutiert". [Some pragmatic mechanisms should be given that relate the alternative interpretations to each other or to a common 'underlying' interpretation. ... Mechanisms that could relate the two operators are not discussed by Horn].

It is my feeling that the discussion can be brought further if a reflection of a more fundamental kind is made. Only by reflecting in a more systematic way on the notion of pragmatic ambiguity can we develop a context for interpreting or criticizing Horn's proposal.

4.2 Two types of pragmatic ambiguity

In my view, it is possible and useful to distinguish between two types of pragmatic ambiguity. The two types will be discussed in the following sections.

4.2.1 Type 1: semantic vagueness

In this type of ambiguity, a form is underspecified on the semantic level. Different contexts, for example different types of arguments to which an operator applies, make the meaning more concrete.

Among Horn's examples of pragmatic ambiguity, his reference to the analysis of the modal verbs by Wertheimer (1972) and Kratzer (1977) could be picked out as an illustration of this type of pragmatic ambiguity, cf. Horn (1989: 375):

"Wertheimer (1972) argues pervasively that sentences containing modals ... are not semantically ambiguous, but have either of two uses ... depending on the system of rules which is implicitly invoked for the evaluation of the sentence".

Smith's (1989: 92) short example analysis of the modals could also be mentioned here:

"The triple of alethic, epistemic and deontic readings can, mercifully, be left unspecified, as the differences are arrived at on the basis of pragmatic interpretation in context".

If I understand Atlas' (1989) analysis of negation well, his analysis belongs to this type too. Atlas' favorite concept is

'generality of sense', cf. Atlas (1989: 134):

"The speaker of English knows, in the usual implicit sense, that in a sentence 'The F is not G' the word 'not' is sense-general. This knowledge is not captured by a truth-conditional theory of sense. ... What the speaker knows is what recognizable circumstances count as justifying the assertion 'The F is not G'. There are different possible *grounds* for the *correct employment* of the sentence 'The F is not G'".

According to Horn (1989: 423), who comments on a series of publications by Atlas, he [Atlas] is "placing all our negative eggs into a radically underspecified basket".

Note that Atlas' unified description of negation does not identify the natural language meaning of negation with its logical counterpart as most monogists tend to do. Secondly, Atlas does not use the notion of pragmatic ambiguity explicitly, but his 'different grounds for the correct employment' could be read as an alternative formulation of the same idea.

4.2.2 Type 2: Pragmatic re-interpretation

A semantically fully specified meaning is 'overruled' in certain pragmatic contexts by a secondary meaning. The prototypical example here is the theory of indirect speech acts. *Can you pass me the salt?* is a question on the semantic level. On the pragmatic level there is ambiguity. Either the 'question' meaning is preserved or a re-interpretation takes place, on the basis of context and Gricean principles, leading to a request interpretation.

Maybe the two-sided understanding of scalar predications (cf. Horn 1989: 376) also fits here. The semantically given lower bound one-sided understanding (*at least*) is, in most contexts, turned into a two-sided understanding, in which an upper bound (*not more than*) is added, whereas in other contexts the pragmatic understanding will be identical with the semantically given meaning (the *at least* interpretation).

In type 1 pragmatic ambiguity there is an abstract meaning that becomes more concrete by applying it in different domains or to different types of arguments. In type 2 pragmatic ambiguity the semantic meaning can function perfectly well without 'enrichment' of that meaning, although in some contexts the meaning is changed into a secondary understanding by interpretation processes along Gricean principles.

4.3 Pragmatic ambiguity and metalinguistic negation

If it makes sense to distinguish between two types of pragmatic ambiguity, then the question arises under which type Horn's descriptive-metalinguistic ambiguity can be categorized. From certain passages in his text we may infer that he has a type 2 pragmatic ambiguity in mind:

"... the descriptive uses of negation is primary; the nonlogical metalinguistic understanding is typically available only on a 'second pass', when the descriptive reading self-destructs" (Horn 1989:444).

And in a footnote he points explicitly to a difference between his understanding of the pragmatic ambiguity of negation and the type of ambiguity that is assumed in the examples he refers to (Donnellan 1966, Wertheimer 1972):

"Note, however, that the dual functions of negation are not entirely on a par with the instances of pragmatic ambiguity just cited, where the distinction between the two understandings in each case is neutralized at the level of logical form" (Horn 1989:563).

These quotations strongly suggest that Horn interprets his descriptive-metalinguistic distinction as a type 2 pragmatic ambiguity, i.e. the indirect speech act type. This type demands, however, the explication of a Gricean derivative mechanism. It has to be shown which contextual factors initiate the mechanism and how the mechanism derives the non-logical function from the logical meaning. As Burton-Roberts (1989) and Jacobs (to appear) have pointed out, Horn fails to give such a derivation (see above, section 4.1).

Jacobs suggests in his comment that the two uses of negation be derived from a common underlying meaning (see above), i.e. to choose a type 1 description. Whatever Horn is aiming at, it is not a proposal of that type, cf. his critique of Atlas' 'radically underspecified basket'. I nevertheless want to propose in the following, pre-final, section of this paper a type of solution that interprets Horn's descriptive-metalinguistic distinction as a type 1 pragmatic ambiguity.

5. IS NOT LOGICAL?

'Is not logical?' is the title of one of Atlas' articles on negation (Atlas 1981). Horn's answer to this question is as follows: "I conclude that the only full and complete answer must be 'sometimes'" (Horn 1989: 443). I doubt that this answer is really an answer that adequately reflects Horn's view. Atlas means the question to pertain to the semantic level, and on that level negation, in Horn's theory, is not 'sometimes' logical, but always. Horn is fully in line with Grice in whose view the semantics of natural language is logical in nature.

In recent years this classical Gricean view has been more and more cast into doubt. Relevance theory, for example, argues in favor of a division between logic and language. Logical reasoning takes contents as input that are the result of pragmatic interpretation of abstract semantic constructs, cf. Carston (1988: 176):

"It seems then that we must distinguish two kinds of semantics, linguistic and truth conditional, the former naturally figuring only in a theory of utterance meaning, the latter taking as its domain propositional forms, whether of utterances or unspoken thoughts".

The same type of argument can be found in the cognitive linguistic literature. Sweetser (1990: 92-93)), for example, in discussing the analysis of natural language *and*, takes a skeptical stand against logicism:

"Given that *and* has some uses which do not parallel those of the logical operator $\wedge$, as well as some which do, does that mean we should analyze $\wedge$ in terms of *and*, or *and* in terms of $\wedge$? My feeling is that it is a mistake to analyze natural-language words like *and* as being identical to entities of the man-made logical terminology which so clearly derives from natural language (rather than the other way around) and so clearly has needs and purposes distinct from those of natural language. Whatever 'putting things side-by-side' may mean in natural language, it only *sometimes* means something equivalent to $\wedge$. Perhaps the closest we can get to stating the relation between *and* and $\wedge$ is to say that $\wedge$ is a mathematical crystallization of one of the most salient uses of *and*".

Continuing in this line of thinking, I take a type 1 ambiguity as a point of departure and propose for negation an abstract Atlas-type of meaning, something like 'signifying inadequacy' which is neutral between such more concrete specifications as descriptive inadequacy or metalinguistic inadequacy. The descriptive use would, in this view, be one of the more concrete pragmatic interpretations of the semantic abstract operator. Horn's metalinguistic 'rejection' function of the operator would also be one of the concrete interpretations, that occurs if the argument of the operator is of a linguistic character, namely the echoed form (and content) of the previous utterance. Depending on the exact target of the metalinguistic negation we can distinguish different subtypes of metalinguistic negation (propositional content, conversational implicature, presupposition, formal aspects).

Truth-conditional interpretation of utterances takes place after pragmatic interpretation. It takes only those utterances as input for which it makes sense to ask whether they are true or false. In my view, this condition is not fulfilled for some subtypes of the metalinguistic negative utterances that Horn discusses, namely those subtypes in which the ground for rejecting the previous utterance is of a special linguistic nature (presupposition failure, form-inadequacy).

6. CONCLUSION

I realize that what I proposed in section 5 is not more than a suggestion of a possible framework for further research. Analogous to Sweetser's relativizing phrase "whatever 'putting things side-by-side' may mean in natural language" I have to use a phrase like 'whatever signifying inadequacy may mean in natural language'.

My main goal was to show that Horn's proposal cannot be the last word in the natural history of negation. I hope to have made clear at the same time, that his work is a landmark in this history by which everyone who wants to explore further ground must pass.

By way of conclusion, I mention four points that I have tried to defend or support here:

1. The three distinctions that can be made regarding the use of negation, namely initiative vs. reactive, descriptive vs. metalinguistic and truth-conditional vs. non-truth-conditional, do not run parallel.
2. We can distinguish 2 types of pragmatic ambiguity. The descriptive-metalinguistic distinction is a type 1 ambiguity.
3. Negation can be unified on the semantic level, without necessarily identifying this unified meaning with the logical truth-functional negation operator.
4. Truth-conditional semantics specifies the relationship between 'what is said' (a pragmatic representation) and an extralinguistic domain of interpretation. Negative utterances that reject previous utterances on specific linguistic grounds (X cannot be said because a presupposition is not fulfilled or X should not be said in this way) are excluded from truth-functional interpretation.

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