1. Introduction

Traditionally, it has been held that negative sentences with until involve actualization at the time the until clause specifies. The main clause should be a durative, not punctual, expression. Hence, in the case of negative sentences, Quirk et al. (1985: 534-535) and many others assume the presence of “negative duration.” Data in (1) confirm these claims.

(1) a. John slept until nine.
   b. *John woke up until nine.
   c. John didn’t wake up until nine.

It has been observed that in (1c) not ... until implies not only that John did not wake up before nine but also that he did wake up at nine. This paper discusses the types of the implication of John’s waking up at nine, i.e. implicature of actualization (IA). It also discusses why and when such IA arises. I will put aside the problem of why (1b) is unacceptable, which Declerck (1995) tackles successfully in arguing against both Karttunen’s (1974) NPI analysis and Mittwoch’s (1977) durative analysis.

Mittwoch (1977: 414) and Ohta (1980: 417) note the difference between the following sentences.

(2) a. John will stay awake until midnight [*at the earliest/at the latest].
   b. John won’t wake up until midnight [at the earliest/*at the latest].

Phrases like at the earliest and at the latest can be added to indicate the presence or absence of IA. They also express whether or not the point specified by until X is earlier or later than expected. In (2a), the focus is on the duration of John’s staying awake and the end point is
highlighted. Nothing is said about events after midnight, i.e. after John sleeps. On the other hand, (2b) focuses on the time John will wake rather than the duration of his not waking up. At the earliest highlights the starting point after John sleeps. Both phrases help to explain “gradience of implicature”, i.e. the presence of strong/weak implicature (see 3.2 below).

2. Cancellability vs. Suspendability of Implicature

Certain confusion arises regarding the cancellability of implicature and suspendability of implicature. Declerck (1995: 54) presumes that when not \( \ldots \) until is stereotyped into one indivisible phrase, it yields the reading of IA. When it is divided, i.e., the until \( x \) is fronted with the following pause or comma, IA can be cancelled by the context, because the suggestion of IA is no more than a conversational implicature. On the other hand, Declerck assumes that IA in (1c) cannot be cancelled, because he claims it is an assertion, not implicature. Note the difference between not \( \ldots \) until and until \( \ldots \) not when the sentences are followed by the context which cancels IA (Declerck (1995: 62)).

(3) a. John didn’t wake up until nine. #In fact, I heard later that he didn’t wake up at all.
   b. Until nine, John didn’t wake up. I don’t know about later, for I left at nine. / In fact, I heard later that he did not wake up after nine either.

If his observation is accurate, he correctly predicts that the assertion of IA arises only if until is within the scope of not, in which case John didn’t wake up until nine is reanalyzed as John woke up [not until nine]. Such reanalysis yields the reading of actualization.

However, according to several of my informants, the context following not \( \ldots \) until in (3a) is not so semantically anomalous as Declerck might think. The point is whether or not IA is viewed as an assertion. I presume that the suggestion that John woke up at nine is not a matter of assertion, but implicature (see section 3), because it can be suspended as the phrases in (4a) and (4b) show. In (3b), the context in question can be added, not because IA is conversationally implicated, but because IA is not implicated at all. (3b) suggests nothing about John’s actual waking up at nine. Instead it focuses on the suggestion that John’s not-waking-up came to an end at nine. Declerck’s reanalysis does not in fact amount to the problem of assertion and
conversational implicature. Rather, it must be changed into the problem of the implicatum and non-implicatum.

(4) a. John won't wake up until midnight, if not later/or possibly later.
    b. John won't wake up until at least midnight.
    c. Until midnight, if not later, John won't wake up. (Ohta (1980: 417))

Phrases like if not later, or possibly later and at least can suspend the IA arising in (4a) and (4b), confirming that not ... until implicates the actualization. In (4c), the until clause is isolated from the head clause. Even though we add the phrase if not later suggesting the suspension of IA as in the case of (4a) and (4b), nothing is suspended and only the lateness of midnight (negative duration) is emphasized. These phrases are not accommodated by Declerck's assertion and conversational implicature distinction. Suspendability can only be applied to the implicatum.

3. Implicature of Actualization

IA of not ... until ranges from weak to strong implicature. Even in the unisolated not ... until, there is a case which yields no implicature and emphasizes only the lack of duration until the time specified in the until clause.

3.1. NIA

Examples (5a) and (5b) illustrate typical cases with no implicature of actualization (NIA).

(5) a. John was a loyal member of his party until he died.
    b. Bill didn't say another word until he died.
    (Heinämäki (1978: 113))

(6) a. Nancy remained silent until she died.
    b. #Nancy didn't get married until she died.
    (Declerck (1995: 69))

In both examples of (5), death blocks actualization of the head clause. John cannot be a disloyal member after his death, and Bill cannot say anything after his death. NIA comes from pragmatic (real world) knowledge. Declerck assumes that examples like (6b) (and also (5b)) are semantically anomalous, although he accepts an affirmative sentence like (6a). It would be impossible for Declerck to accept (6b),
because he considers that all examples of not ... until must be associated with the sense of actualization, i.e., not ... until presupposes the truth of actualization, so that Declerck forcibly matches his analysis with data. But not ... until X died does exist as in an acceptable sentence like (5b), in which case say another word means “express in words”, although (5b) is also semantically anomalous in the sense of “utter/pronounce”. Besides, some of my informants accept (6b). Those who find (6b) unacceptable must account for the difference between (5b) and (6b). One solution is that we will let NIP work on the one hand as in (5b) and will not let it work on the other as in (6b). But this solution is ad hoc. The other is that the difference lies in our pragmatic knowledge. Even though one cannot say anything after his/her death, s/he can leave something other than his/her words, i.e., negation of saying something does not always imply saying nothing. One can leave his/her message, will or anything else. Hence, a rare reading of IA: People found his will after his death. In (6b), however, one cannot get married after s/he dies, i.e., death blocks marriage. We cannot imagine the negation of marriage other than not getting married. This pragmatic reasoning would be more appropriate.

NIA comes not only out of the above blocking phenomenon but also from no scope of negation (NSN) which is also derived from the blocking phenomenon. Consider, for example, the utterance in (7).

(7) “Cool,” I told him. “What do you feel?” “Nothing. Well, uh, maybe I’m exaggerating. It was a kick, but not a big enough one for me to want to take the chance again, except for stakes. But let’s not talk about it abstractly until we’re out of here. Now, first question: the bottles. Shall we take them all with us, or leave one?” “Take them,” I said. (BROWN: L24)

(7) does not imply that we should talk abstractly after we’re out of here, but says that we should be concrete as long as we are here, in which case not does not have scope over until but only modifies abstractly. (7) is read as “But let’s talk about it concretely (= not abstractly) before we’re out of here.” What is important (or relevant) to the speaker is not our getting out of here, but our way of talking, i.e. whether or not we will talk abstractly. It remains to explain, then, how an NIA marked as NSN is in keeping with the explanation of a blocking phenomenon. (7) can also be explained like this: We are not likely to get out of here, so the until clause is a non-actualized event,
which accordingly blocks the scope of negation of not ... until. A completely stereotyped example of NSN is:

(8) John didn’t stay awake until 6. (Ohta (1980: 417))

In (8), not stay awake equals sleep, and the cognitive meaning of the sentence (8) is the same as John fell asleep before 6. Unless it is interpreted negatively, no IA arises.

3.2. Strong/Weak Implicature (SI/WI)

How much IA is implicated? How indeterminate is IA? What is the hearer’s responsibility for accepting IA? I will point out that IA is essentially “neutral”, i.e. “indeterminate” from the hearer’s point of view. The hearer must decide how strong or broad IA is. If IA is strong, s/he can infer easily that the situation is “actually” actualized. If weak, the speaker’s intention is vague, so the hearer must accept responsibility for the degree of actualization. Compare (9) and (10).

(9) a. She gave a little pout and said, “I don’t get off work until eleven o’clock. That’s when my evening commences.” (BROWN: L02) (=SI)
   cf. I don’t get off work until eleven o’clock [at the earliest/*at the latest].

   b. His own inner voice, which should tell him what not to do, has not developed. It won’t develop until he has words with which to clothe it. (BROWN: B13) (=SI)

(10) a. The fact that the queen is expecting a baby will not be official until an official announcement has been made. Even our own Queen did not mention the baby when she sent a telegram to King Baudouin. (LOB: A10) (=WI)
   cf. The fact that the queen is expecting a baby will not be official until an official announcement has been made [?at the earliest/?*at the latest].

   b. On the morning of the fifth day, I went into his room as I usually did, soon after I had woken, to see how he was, and found Elaine lying next to him in the bed. I don’t believe they had been making love—that, I imagine, did not happen until a day or so later. (LOB: N13) (=WI)
   cf. That did not happen until a day or so later [?at the earliest/?*at the latest].
Generally speaking, there are more examples with strong implicature than with weak implicature. The stronger the IA is, the more acceptable at the earliest is. The weaker the IA, the less acceptable at the earliest and the more acceptable at the latest. The acceptability, which is very subtle, all depends on the degree to which the hearer accepts and infers IA, taking responsibility for contextual effects and efforts if expressed in terms of Relevance Theory (Sperber and Wilson (1986: 46-50)). Such evidence confirms the presence of strong/weak implicature.

In (9a), the fact that the speaker asserts stopping work at eleven and her evening starts at that time is derived from the internalized strong implicature which “stereotyped” (Declerck's terminology) and conventionalized not ... until carries. Such implicature has been called “conventional.” But not all strong implicatures are conventional. (9b) describes the stage of child language development. It is commonplace for the reader of (9b) that there will definitely come a stage when a child clothes his own inner voice. Such background (or personal) knowledge confirms IA. Roughly speaking, in (10a) and (10b), as in the case of NIA, the head clause (negative duration) and IA are equally important. The decision as to which is more important is up to the hearer's judgement, but this indeterminacy does not confuse the interpretation because the hearer has only to choose the “default interpretation” and IA is only conversational.

3.3. Another NIA

Another factor in which IA does not work should be mentioned. Such NIA can be attributed to the fact that the verb in question is durative.

(11) Ensign Vesole decided that he would not tarry until he heard the whispering of the bombs, and when night began to fall, he put Seaman 2/c Donald L. Norton and Seaman 1/c William A. Rochford on the guns and told them to start shooting the moment they saw an enemy silhouette.

(BROWN: F02)

(11) is also an example of NIA. It does not mean that he would stay here when he heard the whispering of the bombs.
4. Summary

_Not … until_ has wide scope over the meaning of actualization. NIA is derived from semantic and pragmatic blocking phenomena. IA is divided into strong and weak implicature, which reveals new ways in which pragmatically based explanation can handle the complicated matters.

REFERENCES

Mittwoch, Anita (1977) "Negative Sentences with _Until_," *CLS* 13, 410-417.

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