THE PROSODY AND INTERPRETATION OF NON-EXHAUSTIVE NARROW FOCUS IN BASQUE

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Abstract

In this paper we analyze the intonational properties of a type of focus construction that has not been discussed in the literature on focus in generative grammar. We refer to a type of answers to wh-questions in which the constituent that fills the variable does not do so exhaustively, that is, it does not provide an exhaustive answer because the speaker cannot commit to asserting that the other potential alternative candidates to fill the variable are cancelled. The type of narrow focus usually discussed in the literature is one in which a constituent fills the variable of the question exhaustively, with a concomitant cancellation of the rest of the focal alternatives. We call these types of narrow focus Non-Exhaustive Narrow Focus (NENF) and Exhaustive Narrow Focus (ENF), respectively. In our experiment, we measured peak scaling and alignment of accents in the subject and the verb in ENF and NENF utterances. The results show that NENF is distinguished from ENF in having a pitch accent on the verb with a higher F0 value, almost as if the verb were focalized. In fact, we compared the intonational patterns of NENF with Verum Focus *constructions, in which the event expressed by the verb is focalized, and there were no significant differences in the verbal peaks in NENF and VF. As for subjects, only one of the three speakers had higher peaks in NENF, but another speaker showed categorical peak delay in NENF. The paper offers a semantic analysis of the differences between ENF and NENF, by claiming that NENF is a split focus construction, in which both the subject and the polarity (or rather, the pairing between the subject and the polarity) constitute the focus of the utterance.*

1. Introduction[*]

In this paper, our objective is to analyze the nature and prosodic properties of a type of focus construction that has not been discussed so far in the literature on fo-

cus in generative grammar. In fact, usual analyses of the semantics of questions *à la* Hamblin (1973) and Karttunen (1977) propose that an answer to a wh-question like (1b) picks up one proposition of the denotation of the question (1a) (which is the set of propositions obtained by the substitution of the wh-phrase by contextually available alternatives that match it in semantic type). This gives the question an answer.

(1) a. Who loves Paula?
         {love(x, p)| x ∈ *E*} = {[[Mary loves Paula]], [[John loves Paula]], [[Peter loves Paula]], [[Sarah loves Paula]], [[George loves Paula]]...}
     b. Mary loves Paula.
         {love(m, p)} = [[Mary loves Paula]]

However, there are other cases where an answer to a wh-question may provide such a proposition but without answering the question fully. E.g., (1a) could be answered as in (1b) but implying that there might be other potential lovers of Paula, for which the speaker has no evidence; i.e., the open set denoted by the question is not cancelled by the answer. This type of answers could be paraphrased as *I know that Mary loves Paula, but I'm not saying Mary is the only one loving Paula; there could be more people besides Mary that love Paula.* We refer to this type of answers as Non-Exhaustive Narrow Focus (NENF), opposed to Exhaustive Narrow Focus (ENF).

In this paper, we will present evidence from Northern Bizkaian Basque showing that NENF is encoded intonationally. In answers to subject wh-questions, the subject does not receive main prominence in NENF, unlike in ENF. In this language, ENF on the subject is signaled through strict peak alignment on the stressed syllable followed by pitch compression, without an accent on the verb. With NENF on the subject, however, the verb does show a pitch accent, although downstepped with respect to the one in the subject. The presence of a pitch accent on lexically unaccented participial verbs such as the ones in our corpus is only expected when the verb is the narrow focus of the utterance, not when the subject is. The most common type of answer to a subject wh-question is one with ENF on the subject, in which the subject gets nuclear stress. However, in NENF answers there is an additional tonal gesture on the verb. But then, the interest of NENF constructions lies not only on the differences with ENF, but also on the similarities with another type of construction in which the subject is not narrow focus but the verb is, namely *verum* focus constructions (VF). In VF, it is the polarity, which is expressed in the inflection, which is the focus of the sentence (cf. the dialogue in (2)).

(2) A: - I'm not sure whether Mary loves Paula.
     B: - Mary *does* love Paula.

As said, here we will concentrate on the differences and similarities between ENF and NENF on the one hand and NENF and VF on the other through an experimental study of the intonational contours of these constructions in Northern Bizkaian Basque. This investigation is part of a broader project that aims at comparing NENF with other constructions with which in principle it has partial similarities. These would be constructions with an information structure in which the subject bears a pitch accent but is not the narrow focus of the utterance, such as broad focus sentences and sentences with the subject as a topic or as given information. Additionally, we aim to study whether the differences between ENF and NENF in answers to subject wh-questions also hold in multiple wh-questions, of the type *Who saw whom?*, so this type of sentences were also included in the experimental database (cf. section 3 and the appendix). Finally, since our hypothesis is that NENF is a subtype of narrow focus construction existing in all languages (thus part of grammar and human language), our ongoing project also includes Spanish and French as test languages. The relevance of our study lies in the fact that the intonational properties of NENF have not been analyzed so far in the literature on the prosodic correlates of focus.

In section 2 we present the semantic frame where we set our discussion. We give an overview of the semantics of interrogatives and present the notions of complete and partial answers (which correspond to ENF and NENF, respectively). In section 3 we present the methodology of our experimental study based on Northern Bizkaian Basque. Section 4 presents the results of the experiment and section 5 is devoted to their discussion and analysis. Finally, in section 6 we discuss some issues for further research.

2. The semantics of questions

In order to clarify the type of cases that we will be focusing on in this paper, we will start by introducing the 'Alternative Semantics' approach to the interpretation of interrogatives, as proposed in works like Higginbotham and May (1981) or Groenendijk and Stokhof (1982). These authors have argued that a question like (3) demands two pieces of information in order to be *completely* answered, (3i) and (3ii):

(3) Who read *Gramatika bideetan*?
  (i) Who read *Gramatika bideetan*?
  (ii) Who did not read *Gramatika bideetan*?

That is, in order to know the answer to question (3) it will not be enough to know what satisfies the variable in the question; rather, the answer also has to provide in some way the negative information of (3ii) in order to be a satisfactory answer.

This intuition is clearer if we look at questions in embedded contexts like the one in (4):

(4) Patxi knows who read *Gramatika bideetan*.

In order for the sentence in (4) to be truthfully uttered, Patxi has to know (within a restricted domain of discourse) who read *Gramatika bideetan* and who did

not, that is, he has to know how to split the group of the potential readers into the group of people that did read *Gramatika bideetan* and the group of people that did not read it. As an illustration, imagine the following situation:[1] there is a group G of potential readers of *Gramatika bideetan*, where G = {Jon, Xabier, Myriam, Pablo, Gorka, Aritz}, and the actual readers of *Gramatika bideetan* form a subset R of G, where R = {Jon, Xabier, Myriam, Pablo}. Even if Patxi knows that Jon, Xabier, Myriam and Pablo did read *Gramatika bideetan*, if he does not know whether the rest of the members of G (Gorka, Aritz) read *Gramatika bideetan* or not, he will not actually know who read *Gramatika bideetan*, i.e., he will not really know who constitutes the set R. In other words, in order for (4) to be true, Patxi has to know that the people he knows that read *Gramatika bideetan* is all the people that read it, but that is tantamount to knowing who read it and who did not read it.

Thus, a way of formulating this double requirement of a question in set-theoretic terms is to assume that a question creates a partition of the world into mutually exclusive states of nature, where a "partition" is defined as in (5), taken from Lahiri (2002):

(5)   *Partition*
       X is a partition on a set S iff X is a set of non-empty sets such that (i) $\cup$ X = S, and (ii) for any Y, Z $\in$ X, if Y $\neq$ Z, then Y $\cap$ Z = $\varnothing$

Under this approach, then, a question like (6a) would create a partition like the one in (6b), a set of propositions where each of them is a complete specification of possible states of nature:

(6)   a.   *Who read* Gramatika bideetan*?*
       b.   If p_1, …, p_n are the people in the world, then
            [[who read Gramatika bideetan]] = {
            that p_1, …, p_n read *Gramatika bideetan*
            that p_1 read *Gramatika bideetan*, p_2, …, p_n did not read *Gramatika bideetan*
            that p_2 read *Gramatika bideetan*, p_1, …, p_n did not read *Gramatika bideetan*
            that p_1, p_2 read *Gramatika bideetan*, p_3, …, p_n did not read *Gramatika bideetan*
            …
            that p_1, …, p_n did not read *Gramatika bideetan* }

It can be seen that each of the propositions in the set in (6b) is mutually exclusive with the others, because each of the propositions specifies for all the potential readers (p_1, p_n) whether they read it or not.

Thus, assuming that this is the correct characterization of the import of a question, we can now formulate two different types of answers: 'complete answers' and 'partial answers'. Following Lahiri (2002), we can define them as follows:

(7)   *Complete Answer*
       A proposition p is a complete answer to a question Q iff p is compatible with exactly one q $\in$ Q, *i.e.*, iff there is exactly one p $\in$ Q such that p $\cap$ q $\neq \varnothing$.

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[1] *N.B.* The names and incidents portrayed in this example are purely fictitious and any resemblance to the names, character, or history of real people is merely coincidental and unintentional.

(8)   *Partial Answer*
A proposition p is a partial answer to a question Q iff p is incompatible with at least one q ∈ Q, *i.e.*, iff there is at least one p ∈ Q such that $p \cap q = \varnothing$.[2]

So, having defined the notions of complete answer and partial answer, the next question is the following one: how do we obtain a complete answer form an answer such as (10), a response to a previous question (9)?

(9)   Who drank wine?
(10)   Nagore drank wine.

In principle, sentence (10) only seems to provide a partial answer to question (9), the positive information expressed by the proposition [[that Nagore drank wine]]. The negative side of the necessary information to complete the answer is missing, i.e., who did not drink wine. Following Irurtzun (2007), we will assume that, pragmatically, question-answer interpretations are two-sided processes of a gricean reasoning (*cf. i.a.* Grice 1975, Horn 2004). Grice (1975) proposed a set of 'maxims of conversation', which we can list in (11):

(11)   *Gricean Maxims of Conversation*

Quantity:

 (i) Make your contribution as informative as is required (for the current purposes of the exchange).
(ii) Do not make your contribution more informative than is required.

Quality:

Supermaxim: Try to make your contribution one that is true.

 (i) Do not say what you believe to be false.
(ii) Do not say that for which you lack adequate evidence.

Relation: Be relevant.

Manner:

Supermaxim: Be perspicuous.

  (i) Avoid obscurity of expression.
 (ii) Avoid ambiguity.
(iii) Be brief (avoid unnecessary prolixity).
(iv) Be orderly.

According to Irurtzun (2007), a typical answer to a wh-question like (9) implies as a first step a *partial* answer interpretation that provides the informativity of the

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[2] Other approaches like the 'Structured Meanings' approach of Krifka (1999) assume an exhaustifying operator to the same end:
Assert(M, A, c) (a sentence with meaning M and alternatives A in a context c is asserted):

—the speaker claims M (in c).
—for every alternative M' ∈ A, M' ≠ M, the speaker explicitly does not claim M' (in c).

content or, in gricean terms, 'what is said' by the proposition expressed by the sentence, i.e., that Nagore drank wine. This meaning is obtained *via* the standard compositional semantics. But this positive information is not sufficient to obtain a complete answer, that is, who did and did not drink wine. The first submaxim of the maxim of quantity ('make your contribution as informative as is required (for the current purposes of the exchange)') would be violated if just the propositional meaning of an answer like (10) were taken into account. However, the violation of the first submaxim of quantity is allowed in order to avoid violating the third submaxim of manner ('be brief'). In other words, a typical answer to (9) has the shape of (10) so as to avoid having to give an explicit and complete answer like (12), which is improper:

(12) # Nagore drank wine and the rest of the people did not.

The 'negative' part of information that is necessary as a complement of the propositional meaning of the answer in (10) in order to obtain an exhaustive or complete answer (namely, that the rest of the people in the relevant universe of participants *did not* drink wine) is left implicit for the hearer to infer. The complete answer is thus obtained by a conventional implicature, encoded by the typical ENF intonation (nuclear accent on the subject followed by postfocal pitch compression). This is, we suggest, the normal course of events in question-answer pairs.

Nevertheless, there are also other cases where we might cancel overtly and explicitly the *completeness* implicature brought by an answer, and these are the cases of NENF we will analyze. For instance, let us look at the question-answer pair in (13)-(14), repeated from (9)-(10):

(13) Who drank wine?
(14) Nagore drank wine.

The answer in (14) can be uttered in two different ways intonationally. The first possibility is that it expresses ENF on the subject, in which the subject *Nagorek* exhausts the variable introduced by the wh-phrase *who*. The interpretation of this utterance would proceed along the path of the calculation of propositional meaning and conventional implicature outlined above. But the sentence that constitutes the answer in (14) could represent another type of answer, one in which the subject *Nagorek* does not provide an exhaustive answer. In contrast to the answer with ENF on the subject, the speaker might want to express that, as far as (s)he knows, *Nagore* drank wine, but (s)he cannot commit herself to saying that only *Nagore* and nobody else drank wine. That is, the speaker wants to convey the meaning that other people may or may not have drunk wine, too. We believe that this information is conveyed through a special type of intonation contour, different from the one of ENF and which we will describe in section 4 taking Northern Bizkaian Basque as a case study. This type of intonation contour may differ from one language to another, but in Northern Bizkaian Basque (and in French and Spanish) it involves the presence of a pitch accent on the verb, which is absent in ENF, and for some speakers, a continuation rise or peak delay in the accent on the subject. This type of answer constitutes an instance of NENF on the subject and this type of construction is the one we explore in this paper.

Let us illustrate a case of NENF with another example. Let us assume that we are in a classroom situation where we assigned the students some homework. If one asks the question in (15), a given student who finished her homework but does not know whether her fellows did can answer (16) truthfully, with the intonation contour used to signal NENF (which in English would involve a higher pitch on the auxiliary than in ENF):

(15) Who finished the homework?
(16) I did.

In such a situation, it is clear that there is no commitment for the completeness of the answer, and we observed that this difference in interpretation is marked intonationally. In order to test the veracity of our observation, we designed an experiment so as to analyze the intonational differences between both types of answers (ENF and NENF). This experiment is reported in section 3.

3. Methodology

In order to assess empirically the differences and similarities in intonational contours between ENF, NENF and VF in Northern Bizkaian Basque, we designed a production experiment consisting of sets of questions and answers with different information structure. The utterances conveying ENF and NENF on the subject were answers to wh-questions of a hypothetical interlocutor, which would trigger the intended information structure. The VF utterances were statements reacting to a preceding statement by a hypothetical interlocutor. In order to achieve complete comparability, the answers expressing ENF, NENF and VF were identical at the written level, that is, they contained exactly the same words in the same word order. This would guarantee that only prosody and intonation would be responsible for expressing the difference, if any. The pairs of sentences in (3)-(5) (repeated below as (17)-(19)) constitute examples of the design of the experiment (the rest of the question-answer pairs illustrating ENF, NENF and VF are included in the appendix). The answer in (17) represents ENF on the subject, the answer in (18) expresses NENF on the subject, and the answer in (19) expresses VF. Since the question-answer pairs are identical for ENF and NENF, after NENF answers we added an expression in parenthesis that guided the speaker to utter the sentence with the intended meaning. In the case of (18), the expression says *(… nik dakitxela, baiña beste batzuk be igual edan dabe ardaua)* '(… as far as I know, but other people may also have drunk wine)'. Additionally, we prepared the subjects for NENF by telling them about the difference in meaning with ENF. In order to avoid artificially increased or decreased levels of prominence, we did not highlight the constituents bearing narrow focus in any sense.

(17) [ENF on subject, *Nagore*]
    A: *Nok   eran dau ardaua?*
       who.ERG drink AUX wine.ABS
       'Who has drunk wine?'
    B: *Nagorek   eran dau ardaua.*
       Nagore.ERG drink AUX wine.ABS
       'Nagore has drunk wine.'

(18) [NENF on subject, *Nagore*]
    A: *Nok   eran dau ardaua?*
       Who.ERG drink AUX wine.ABS
       'Who has drunk wine?'
    B: *Nagorek   eran dau ardaua (nik dakitxela, baiña beste batzuk be igual edan*
                                   dabe ardaua)
       Nagore.ERG drink AUX wine.ABS

       'Nagore has drunk wine (as far as I know, but other people may also have
       drunk wine)'

(19) [VF]
    A: *Nagorek   ardaua   erango   ebala esan eban, baiña ez   dakitx eran*
       Nagore.ERG wine.ABS drink.FUT AUX-C say AUX   but   NEG know drink
       badau.
       AUX
       'Nagore said she would drink wine, but I don't know if she has'
    B: *Nagorek   eran   dau ardaua.*
       Nagore.ERG drink AUX wine.ABS
       'Nagore *has* drunk wine'.

The data set analyzed for this paper is limited to these constructions, but this corpus is part of a more general corpus, since we wanted to compare the intonational contours of ENF, NENF and VF with sentences representing other types of information structure, such as sentences with broad focus and sentences with the subject bearing given information and the object bearing narrow focus. Hence, the production experiment also consisted of question-answer pairs that should trigger utterances with the intended meaning (cf. the appendix). Also, we wanted to see whether the differences between ENF and NENF in answers to subject wh-questions also hold in multiple wh-questions, of the type *Who saw whom?*, so this type of sentences were also included in the experimental database (cf. the appendix). In all, we had seven information structure conditions: ENF, NENF, VF, Broad Focus, Subject as given information, Multiple ENF and Multiple NENF, with three dialogues for each type. The subjects of our experiment were presented with the dialogues in paper, the interviewer (one of the authors) read the questions or statements triggering the answer, and the subjects had to read the answers in as natural a style as possible. There were two repetitions of this scheme, per subject. Three native speakers of Northern Bizkaian Basque were recorded, one male and one female from the town of Lekeitio and one female from the town of Markina, in their late thirties and early forties. In total, 126 utterances were recorded (7 sentence types × 3 answers × 2 repetitions × 3 speakers). For this paper, we only report results on ENF, NENF and VF, that is, 54 utterances, a small number but sufficient in our opinion to reveal differences in intonational contours among the three types of information structure constructions.

In order to compare the different types of information structure sentences, we measured the F0 maximum (in Hz) in the subject, the F0 maximum (in Hz) in the verb, the difference in Hz between the F0 maxima in the subject and the verb, and peak alignment with the lexically accented syllable, in the subject and the verb.

Finally, it is worth mentioning that the results and conclusions reported in this paper on the basis of the experiment on Northern Bizkaian Basque is only part of a broader project that aims at studying the prosodic and intonational aspects of NENF in natural languages. Currently, we have carried out experiments in Spanish and French with the same methodology as the one for Northern Bizkaian Basque.

4. Results

First of all, let us show representative F0 contours of ENF, NENF and VF sentences, respectively, all by speaker AE. The utterances chosen are all renditions of sentences (17)-(19) presented above. For ease of reference, the subject and the verb are segmented in syllables, and the pitch accents in the subject and the verb are marked in the figures. In the legends under each F0 contour, the accented syllables (i.e., the syllables bearing a pitch accent) are presented in boldface. If no pitch accent is produced or perceived, no pitch accent is marked.

4.1. Exhaustive Narrow Focus (ENF) on the subject

As can be observed in Figure 1, the accented syllable in the subject (i.e., *go*) displays the most prominent accent in the utterance, which in the variety of Northern Bizkaian Basque spoken by this speaker (that of the town of Lekeitio) is assigned to the penultimate or final syllable, depending on whether the word is lexically accented or not, respectively. In Northern Bizkaian Basque, words can be lexically accented or lexically unaccented, as in Tokyo Japanese (cf. Beckman 1986, Pierrehumbert and Beckman 1988, Haraguchi 1991, Kubozono 1993, among others, for Tokyo Japanese; cf. Hualde 1989, 1999, Hualde, Elordieta and Elordieta 1994, Elordieta 1997, 1998, 2003, Jun and Elordieta 1997, among others, for Northern Bizkaian Basque). The pitch accent is realized as a fall from a high tone on the accented syllable to the end of the word, and is characterized as H*+L in Autosegmental-Metrical terminology by Hualde et al. 1994, Elordieta 1997, 1998, Jun and Elordieta 1997, among others). The subject *Nagorek* 'Nagore (erg.)' is a lexically accented word and thus gets penultimate stress. Participial verbs in Northern Bizkaian Basque are not lexically accented, and only get an accent if they are focalized, or a future participle or an imperfective participle is added to then, which is not the case of the verb *eran*, in the utterance in Figure 1. That is why no pitch accent is marked on the participial verb. Auxiliaries are not lexically accented either unless they contain the morpheme for second and third person plural subjects, *-e*, which is not the case of the auxiliary *dau* in the utterance in Figure 1. Hence, no pitch accent is marked for the auxiliary, either. The postverbal object *ardaua* is a lexically unaccented word, and lexically unaccented words will not get an accent unless they appear immediately preceding the verb or are uttered in isolation (cf. the above references for Northern Bizkaian Basque). That is why no pitch accent is marked for the object *ardaua* 'wine'.

After the subject bearing the main prominence of the utterance, the pitch range is compressed substantially, as can be observed in Figure 1. The material following the
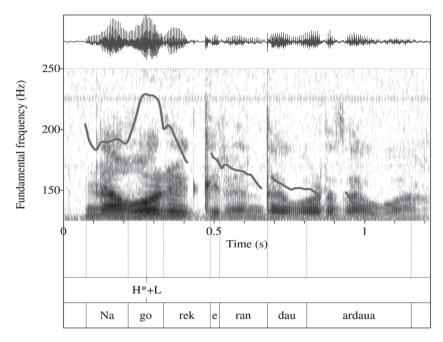
Figure 1

Representative F0 contour of an utterance with ENF on the subject:

*Na**go**rek eran dau ardaua*
Nagore-ERG. drink AUX wine-ABS
'Nagore has drank wine'

subject is pronounced in a narrow pitch range, and presents a low or descending intonational contour until the end of the utterance. Thus, in ENF utterances there is a big difference in F0 between the highest F0 value in the subject, obtained in the accented syllable of the subject, and the highest F0 value in the participial verb.

4.2. Non-Exhaustive Narrow Focus (NENF) on the subject

In cases of NENF on the subject, the general pattern observed is one in which the participial verb displays a pitch accent, unlike in ENF. Figure 2 is an illustrative example of a NENF utterance in Northern Bizkaian Basque. There, the pitch contour of the participial verb *eran* is substantially different from the comparable ENF utterance in Figure 1. Unlike the descending movement in the participial verb in Figure 1, in Figure 2 the trajectory that the pitch curve follows in *eran* changes from a descending movement after the subject to a rising movement on the accented syllable. This is an unmistakable sign of the presence of a pitch accent on the participial verb, that is, of a H*+L pitch accent. The H* tone is responsible for the rise in pitch on the second
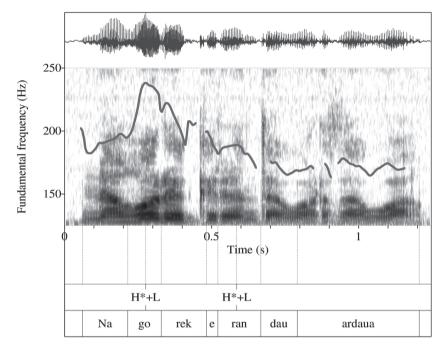
Figure 2

Representative F0 contour of an utterance with NENF on the subject:

Nagorek eran dau ardaua
Nagore-ERG. drink AUX wine-ABS
'Nagore has drank wine'

syllable of the participial verb, the accented syllable. Thus, the pitch level of the participial verb is higher than in ENF, although donn stepped with respect to the one in the subject. These differences between ENF and NENF for pitch height on the second syllable of the participial verb can be observed in the bar graphs in Figures 4-6, one for each speaker.

The interesting aspect of the presence of this pitch accent is that it appears on a word (the participial verb) that, as explained in the previous subsection, does not bear a lexical pitch accent; if it receives a pitch accent, it is because it bears narrow focus. But the participial verb should not be the narrow focus of the utterance, given that the previous question bears such a load on the subject. This is a crucial difference with ENF that we will discuss in section 5.

Another difference between ENF and NENF is observed in the subject, albeit subject to inter-speaker variation and hence not as solid and general as the one observed for the verb. Although in NENF the subject displays a H*+L pitch accent on the accented syllable, i.e., the penultimate syllable *go*, for one of the speakers the subject has a higher pitch in the accented syllable in NENF than in ENF (speaker AE). For another speaker (IS) there is peak delay on the subject in NENF, that is, the ac-

cent falls on the final syllable rather than on the penultimate one. This difference is categorical, that is, all peaks are aligned with the accented syllable in ENF and all peaks are aligned with the postaccentual syllable in NENF. It must be pointed out that both aspects, a higher F0 value in the subject and/or peak delay in the subject, are found for the other two languages studied in our ongoing project, French and Spanish, subject to speaker variation (cf. Elordieta and Irurtzun 2009).

4.3. *Verum* Focus (VF)

Figure 3 illustrates a case of VF. In these constructions, the polarity of the event is the focus of the sentence, and is intonationally realized on the participial verb, through a pitch accent. The subject also displays a pitch accent, and the pitch accent on the verb appears downstepped with respect to it. Unlike in the comparison between NENF and VF, no speaker had any differences in pitch height between VF and ENF or NENF. However, as in NENF, speaker IS also presented peak delay in VF constructions, although non-categorically; 83.30% of accentual peaks were aligned with the posttonic syllable.
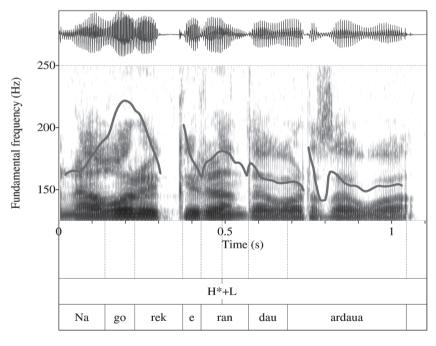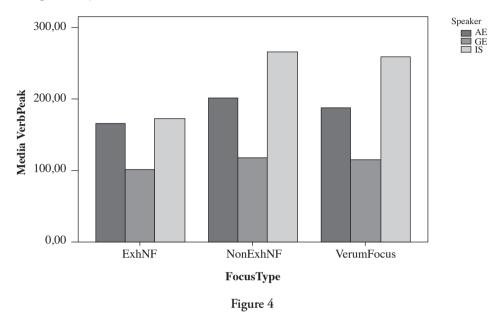

Figure 3

Representative F0 contour of an utterance with VF:

*Na**go**rek **era**n dau ardaua*
Nagore-ERG. drink AUX wine-ABS
'Nagore has (indeed) drunk wine'

4.4. A comparison of subject and verb peak heights in ENF, NENF and VF

4.4.1. Verb peak heights

The bar graph in Figure 4 presents F0 peak heights of accents in the verb in the three conditions, ENF, NENF and VF. The results for each speaker are presented independently.

Figure 4

Graph showing average F0 maxima in verb across focus types, per speaker

The bar graphs in Figure 4 show what Figures 1-3 already revealed, namely that verb F0 peaks are lower in ENF than in NENF and VF. In ENF, the compression of the pitch range after the focalized subject is responsible for such low F0 values in the periphrastic verb. In fact, no pitch accent and hence no F0 peak can be perceived in the verb in ENF. However, in order to be able to compare values of F0 maxima in the participial verbs across focus types, we measured the highest F0 value in the participial verb in ENF and took that value for the purposes of the comparison with the values in NENF and VF. The reduction in pitch range after the subject is not observed in NENF and VF, and hence the F0 maxima values are higher in this type of sentences. The average F0 heights for verb peaks in the different focus types were, for the three speakers together: ENF 146.42 Hz; NENF 194.87 Hz; VF 183.12 Hz.

A one-way ANOVA with 'Verb peak height' as dependent variable and 'Focus type' as independent variable showed that there is a significant effect of the latter on the dependent variable. ($F(2, 49) = 3.722$, $p = .031$), with significant differences between ENF and NENF ($p = .031$) but not between ENF and VF ($p = .142$) or between NENF and VF ($p = .811$). As already expressed in section 4.2, it is interesting to note that the intonational pattern of verbs in NENF is so different from ENF,

despite the fact that both types of sentences express answers to the same wh-question on the subject. This will be an important aspect to be discussed in the discussion section. In fact, the F0 maximum in the verb in NENF is so high that it is even higher than in VF, where supposedly the verb carries the narrow focus of the utterance. Nevertheless, the F0 maxima in the verb in NENF and VF are relatively similar, as the F0 measurements and the p value indicate.

There is a significant effect of the factor 'Speaker' on verb peak heights ($F(2,49) = 68.303$, $p < .001$), with differences between all speakers at significance levels of $p < .001$. Speaker AE had the following values: 165.25 Hz for ENF, 200.96 Hz for NENF, and 187.88 Hz for VF. Speaker GE had the following values: 101.94 Hz for ENF, 117.30 Hz for NENF, and 115.37 Hz for VF. Speaker IS had the following values: 172.06 Hz for ENF, 266.35 Hz for NENF, and 259.65 Hz for VF.

A multivariate general lineal analysis revealed an interaction between the two factors studied, 'Focus Type' and 'Speaker', for F0 peak heights in the verb ($F = 16.395$, $p < .001$). As Figure 4 shows, the three speakers do not have the same differences in verb peak heights across the three conditions: speaker GE has smaller differences between ENF and NENF/VF than speakers AE and IS, the latter being the speaker with the biggest difference in F0 values. Despite the differences in average values for F0 maxima in the verb, all speakers had statistically significant differences between ENF and NENF at $p < .001$. And a statistical analysis by speaker showed that all speakers had significant differences between ENF and VF as well, at $p < 0.001$ for Speakers GE and IS and $p = .023$ for Speaker AE. On the other hand, none of the speakers had significant differences between NENF and VF, as the general results already showed. The individual results by speaker thus show that F0 values in the verb accents are significantly higher in NENF or VF than in ENF. As already pointed out above, this contrast is expected for the comparison ENF-VF, as the verb is focalized in VF, but not for the comparison ENF-NENF, given that the triggering wh-question does not set the verb as narrow focus, but the subject. In principle, in both cases the verb would constitute given information, as the answer contains the verb repeated from the question. This is an issue we discuss in section 5.

4.4.2. *Subject peak heights*

The bar graph in Figure 5 presents F0 peak heights of accents in the subject. As in Figure 4, the results are presented per speaker.

As can be observed, the differences in F0 values are much smaller or hardly perceptible across focus types than in the verb. The average F0 heights for subject peaks in the different focus types were, for the three speakers together: ENF 211.72 Hz; NENF 217.69 Hz; VF 209.99 Hz.

Unlike for verb peaks, a one-way ANOVA showed that there is no significant effect of the factor 'Focus Type' on subject peak heights ($F = 0.056$, $p = .945$).

There is a clearly significant effect of the factor 'Speaker' ($F = 1513.093$, $p < .001$), with differences between all speakers at significance levels of $p < .001$. Speaker AE had the following values: 217.16 Hz for ENF, 231.53 Hz for NENF, and 222.77 Hz for VF. Speaker GE had the following values: 146.61 Hz for ENF,
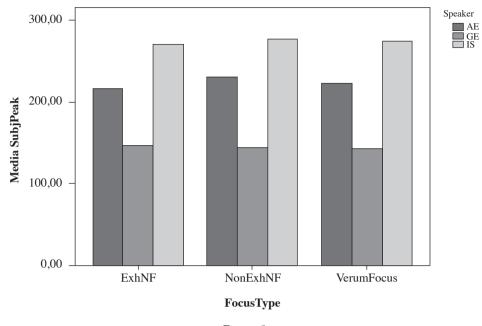
Figure 5

Graph showing average F0 maxima in subject across focus types, per speaker

144.68 Hz for NENF, and 143.56 Hz for VF. Speaker IS had the following values: 271.39 Hz for ENF, 276.87 Hz for NENF, and 276.94 Hz for VF.

There was no interaction between the two factors studied, 'Focus Type' and 'Speaker', for F0 peak heights in the subject (F = 2.275, p = .077). The differences in F0 values for the accents in the subject across focus types are not statistically significant for two of the three speakers, although the difference between ENF and NENF is significant for Speaker AE (p = .004). Interestingly, however, Speaker IS makes use of tonal alignment to establish differences in pitch accents across focus types. As already advanced in sections 4.2-4.3, this speaker shows peak delay for subject accents in NENF and VF, especially in NENF. In this focus type, all peaks are aligned with the posttonic syllable, and in VF they are aligned with the posttonic syllable in 83.30% of the cases. In none of the tokens in ENF does Speaker IS show peak delay. In other words, the peaks are strictly aligned with the accented syllable, i.e., the penultimate syllable in ENF (100% of the cases), but they are aligned with the postaccentual syllable, i.e., the final syllable in NENF and VF (100% and 83.30% of the cases, respectively). This is hence a solid contrast, as well as an interesting one, because peak delay is observed for some NBB speakers to signal given or topic information in contrastive narrow focus cases (i.e., corrective focus), as Ito, Elordieta and Hualde (2003) showed. Speaker IS shows that it is possible to find peak delay in NBB in contexts of non-contrastive narrow focus as well. The use of peak delay for VF by Speaker IS would be justified from the information structure point of view
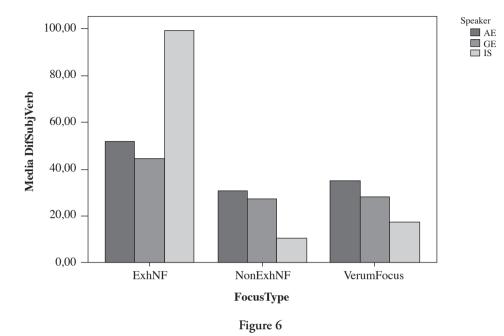
because in VF the subject is given information, but in NENF the subject is not supposed to be given information, but narrow focus. The triggering question demands the variable represented by the subject wh-particle *nok* 'who' to be filled. Thus, Speaker IS introduces another prosodic cue that contributes to make NENF distinct from ENF, and more similar to VF. In verb accents, this speaker establishes the distinction through F0 scaling, but in subject accents she does it through peak alignment. More speakers would be necessary in order to draw an estimate of how frequent in NBB the use of peak delay is to distinguish ENF and NENF.

4.4.3. *Differences between subject peak and verb peak*

We thought of measuring the differences in F0 maxima between the subject and verb accentual peaks within each utterance (that is, the F0 falls from the peaks in the subjects to the peaks in the verbs) as another cue distinguishing the different focus types. Given the differences in F0 maxima in subject and verb accents in ENF, NENF and VF, it would be interesting to see if the falls in F0 from the pitch accent in the subject to the one in the verb in the same utterance are of different sizes in the three focus types. The prediction is that in ENF the fall will be bigger than in NENF and VF, since in ENF the subject is the constituent bearing the main prominence in the utterance and the verb is in the region with depressed pitch range, whereas in NENF and VF the verb appears with a clear pitch accent and the F0 maxima in the verb are higher than in ENF. The prediction is borne out. The average values in Hz of the differences between subject peaks and verb peaks for each focus type were, for the whole set of data (i.e., the three speakers together): 65.30 Hz for ENF, 22.82 Hz for NENF, and 26.87 Hz for VF. Observe Figure 6 for values per speaker.

'Focus Type' had an effect on the F0 falls between subject and verb ($F(2,49) = 23.029$, $p < .001$), with significant differences between ENF and NENF and ENF and VF (both at $p < .001$), and non-significant differences between NENF and VF ($p = 0.835$). That is, the F0 falls from the accent in the subject to the accent in the verb are statistically similar in NENF and VF. On the other hand, 'Speaker' did not turn out to have an effect on F0 falls between subject and verb. That is, the differences in F0 falls were not statistically significant depending on the speaker. Nonetheless, there was an interaction between the two independent variables 'Focus Type' and 'Speaker' ($F = 16.018$, $p < .001$). Speaker AE had the following F0 falls: 51.91 Hz for ENF, 30.56 Hz for NENF, and 34.89 Hz for VF. Speaker GE, in turn, had the following F0 falls: 44.67 Hz for ENF, 27.38 Hz for NENF, and 28.18 Hz for VF. Speaker IS had 99.32 Hz for ENF, 10.51 Hz for NENF, and 17.28 Hz for VF. Thus, Speaker IS has the clearest differences in F0 falls from subject to verb between ENF on the one hand and NENF and VF on the other. But the differences between the F0 falls in ENF and the F0 falls in NENF and VF were significant for all speakers at $p < .001$, with the only exception of Speaker AE for the difference between ENF and VF, with a p value of .023. And there were no significant differences in F0 falls between NENF and VF for the three speakers. That is, the F0 falls are statistically similar in NENF and VF.

To sum up the results of the experiment, ENF is unambiguously distinguished from NENF intonationally. The differences are clearer in the verb; the participial
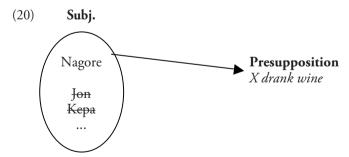
Figure 6

Graph showing average F0 falls or differences in F0 between subject
and verb across focus types, per speaker

verb in ENF is in the postfocal region, with a depressed pitch range, and there is virtually no pitch accent on it. In NENF, on the other hand, there is a clear pitch accent on the participial verb, and thus the F0 level is higher in NENF than in ENF. ENF and VF are also distinguished in the verb along the same lines. This is expected, since in VF the verb is focalized. What is not expected is the F0 height in the verb in NENF, since the triggering question does not set narrow focus on the verb, but on the subject. And curiously enough, ENF and NENF are less clearly distinguished in the subject. As in the verb, one of the speakers produces higher peaks in NENF than in ENF (thus having significantly higher subject and verb peaks in NENF than in ENF). Another speaker recurs to peak alignment rather than scaling to make a distinction between ENF and NENF. She always has peak delay in NENF, but never in ENF, and the interesting aspect of this fact is that peak delay is used by some speakers in NBB to signal topic or given information. The other speaker does not make a difference between ENF and NENF in the subject. As a consequence of the differences in subject and verb peak heights across focus types, the F0 falls from the subject's highest F0 point to the verb's highest F0 point are also significantly different in ENF and NENF, being much bigger in ENF than in NENF, due to the higher F0 value in the participial verb in NENF. Another important result is that NENF and VF do not appear as distinct focus types in NBB, as no significant differences were found in verb or subject peak height (and hence on F0 falls). We will discuss these results in the next section.

5. Discussion and analysis

We saw so far that the main prosodic difference between ENF and NENF is that in NENF there is an 'extra' pitch accent on the polarity-bearing verb, one that is not expected by the question. On the other hand, the semantic difference between ENF and NENF is the following: in an ENF answer to a preceding subject wh-question like (18A), the constituent in the subject fills the variable of the question exhaustively. The rest of the focal alternatives are cancelled by a conventional implicature encoded with the ENF intonational contour, as explained in section 2. In NENF, on the other hand, speakers convey the meaning that they cannot provide an exhaustive answer for the question that calls for narrow focus on the subject. That is, they express the meaning that the constituent they provide in the answer is not necessarily the only one satisfying the property expressed by the question, as they cannot commit to asserting that the other alternatives are cancelled.

Our proposal for formalizing the semantic difference between ENF and NENF is couched in the framework of Alternative Semantics of Rooth (1985, 1992). As we said before, according to this approach, a focused phrase brings about two types of meanings: an Ordinary Semantic Value (which is the standard denotation of the phrase) and a Focus Semantic Value, which is obtained with a substitution of the phrase with alternative values that match it in semantic type. Thus, in an ENF sentence, the constituent in subject position (e.g. *Nagore*) is associated to the property described by the question (i.e., the 'open proposition' that someone drank wine). The rest of the alternatives raised by the focal feature on the subject (Jon, Kepa, etc.) are cancelled as potential satisfiers of that property *via* the aforementioned conventional implicature that provides the complete answer. This is shown in (20), as a representation of the semantics of the ENF answer in (17B):

(20)   **Subj.**

In NENF, on the other hand, speakers only commit to asserting that the subject satisfies the property described by the question, in fact, they actually express that they are not in a situation to clarify whether all other alternative values also do.

Now, the question is: how is this expressed overtly in grammar? As (17)-(18) show, ENF and NENF answers have the same words and the same word order. So they are homophonous at the segmental level. Our claim is that prosody disambiguates the two types of constructions. ENF is conveyed by main prosodic prominence on the constituent that answers for the variable in the question followed by a reduction in pitch range. NENF is conveyed by prosodic prominence on the subject but without reduction or compression of pitch range in the following region. Actu-

ally, the participial verb (which expresses the event of the sentence) appears with a clear pitch accent, as the results of the experiment have revealed. In fact, the pitch value obtained on the verb in NENF utterances is similar to the one observed in VF constructions, where the polarity of the event denoted by the verb is the narrow focus of the utterance. We would like to propose that the F0 peak that we observe in the verb in NENF utterances is a prosodic correlate of having an extra focal feature in the polarity in these constructions. We also claim that in NENF utterances like (18B) we have a *split focus* construction where neither the subject nor the polarity marker is the focus of the sentence but rather the pair <Subject, polarity> is.[3]

Our idea is that having this extra focal feature brings about alternative values not only in the subject, but also in the polarity, whose alternative values are the positive polarity and negative polarity ('yes/no', for short). Thus, for a question like (17A) or (18A), in a NENF answer like (18B) a speaker only asserts that Nagore drank wine. This is obtained by having a focal feature in the subject (raising the alternative values just as in (20)) but also by a second focal feature on the polarity marker, which raises its alternative value (i.e., no). In a NENF sentence like (18B) we assert that *Nagore* is associated with the positive polarity, but having alternative values for both subjects and polarities brings about the question as to how to pair the rest of them, and we propose that in NENF it is precisely the openness of the other pairings that is being conveyed. That is, in a NENF sentence we assert that the phrase that substitutes the variable in the question is paired with the polarity expressed by the verb (i.e., <Miren, yes>), but we do not close other potential pairs (e.g., <Jon, yes/no>, <Kepa, yes/no>, <Itziar, yes/no>, <Amaia, yes/no>, etc). This is represented in the Venn-diagrams in (21):

(21)

Moreover, we can bring forth morphosyntactic evidence in support of the view that NENF answers are split foci of the <Subject, Polarity> sort. In Basque there are two types of verbs: synthetic verbs, where the verbal root appears sandwiched within inflectional morphology (aspectual and temporal markers, as well as agreement morphology), and periphrastic verbs, which show a lexical verb with aspectual markers and a separate auxiliary verb with temporal and agreement morphology. There are some verbs that can only appear in one of the two forms, but there are also some verbs that allow both synthetic and periphrastic forms. One such verb is the verb *ekarri* 'to bring'. See for example the verbal forms in (22a-b):

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[3] See Irurtzun (2007) for an analysis of answers to multiple-wh questions as *split foci*.

(22) a. *dakart*
　　　bring.1sgERG.3sgABS.PRES
　　　'I bring it'

　　 b. *ekartzen　dut*
　　　bring.IMPF AUX.1sgERG.3sgABS.PRES
　　　'I bring it'

Now, there is a positive polarity particle *ba-* (cf. *bai* 'yes') which is required in VF constructions with synthetic verbs. Syntactically, it sits in a higher functional projection (cf. Laka's 1990 ΣP) and procliticizes to synthetic verbs. This can be observed in (24a), as an answer to (23). The lack of this particle in *verum* focus constructions with synthetic verbs brings about ungrammaticality, as shown in (24b):

(23) *Azkenean, Jonek ekarriko al du ardoa?*
　　 'In the end, will Jon bring the wine?'

(24) a. *Bai, ba-dakar.*
　　　yes BA-bring.3sgERG.3sgABS.PRES
　　　'Yes, he is bringing it'
　　　(*lit.*, 'Yes, he does bring it.')

　　 b. **Bai, dakar.*
　　　yes bring.3sgERG.3sgABS.PRES
　　　'Yes, he is bringing it'
　　　(*lit.*, 'Yes, he does bring it.')

Our analysis of NENF explained above is that this type of narrow focus introduces a focal feature on the polarity of the event, expressed by the verb. Thus, both NENF and VF present focus on the verb (paired with focus on the subject, in NENF). The prediction would thus be that NENF constructions with synthetic verbs will require the particle *ba-*. This prediction is borne out: the proclitic particle *ba-* is also mandatory in NENF sentences. Thus, a subject wh-question with a synthetic verb like *jakin* 'to know' in (25) (which appears inflected as *daki*) can receive an ENF or a NENF answer. The ENF answer appears without the particle *ba-* ((26b)), and the NENF answer needs to have the particle *ba-* attached to the synthetic verb.

(25) *Nork daki errusiera?*
　　 'Who knows Russian?'

(26) a. *Nik ba-dakit.*
　　　I BA-know.1sgERG.3sgABS.PRES
　　　'I do' (*lit.*, 'I know')

　　 b. *Nik dakit.*[4]
　　　I know.1sgERG.3sgABS.PRES
　　　'I do' (*lit.*, 'I know')

Returning to our discussion, the interesting theoretical question that arises is whether ENF and NENF are two distinct types of narrow focus constructions, that is, two types of categories of information structure. Given the difference in meaning conveyed by the two types of constructions and the different prosodic patterns that serve to convey them, it would have to be concluded that indeed they are two types of narrow focus constructions. If what we are suggesting proves correct, it will have the interest and the relevance of discovering or putting light on a hitherto unstud-

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[4] In some dialects of Basque, focalized pronouns adopt the so-called intensive form (cf. Trask 2003: 152-4). In the case of (26b), the intensive form of the subject pronoun bearing ENF would be *neuk*. Interestingly, the pronoun in the NENF case (26a) cannot appear in the intensive form and has to appear in the ordinary, non-intensive form. The conclusion would thus be that the intensive forms are restricted to ENF.

ied type of narrow focus construction whose main characteristic is being a split focus composed by the phrase that stands for the wh-phrase and the polarity marker.

However, it is nonetheless also true that the results obtained from our experiment did not reveal intonational differences between NENF and VF constructions. The accentual peak height values in the subject and the verb were not significantly different between the two types of constructions. The speaker that used peak delay in the subject's pitch accent to distinguish ENF and NENF (i.e., having peak delay in 100% of the NENF utterances and 0% of the ENF utterances) did not distinguish NENF and VF, substantially at least; in VF, 83.30% of the cases had peak delay in the subject as well, and that is a significantly high number, smaller than 100% but undoubtedly high. So, given these results, would we have to conclude that NENF and VF are not intonationally distinct categories, in Northern Bizkaian Basque at least? Or that they are distinct categories but we have not managed to find yet where the differences lie? Or perhaps the differences between NENF and VF are gradient rather than categorical? These are interesting questions, for which we have no answer at the moment. We will suggest possible avenues for trying to answer these questions in the following section.

6. Issues for further research

There are certain aspects that have to be worked out in future work so as to make the conclusions drawn from this study more solid and reliable. First of all, a more complete analysis of pitch accents would be necessary. The results of our experiment regarding scaling and alignment of pitch accents in the subject showed that one of the three speakers does not make a distinction between ENF and NENF either in scaling or alignment. One of the other two speakers has significantly higher values for NENF than for ENF, and the other speaker makes a distinction between these two types of foci through strict alignment in ENF and peak delay in NENF. However, it would be worth measuring the alignment and scaling of the trailing L tones of the bitonal H*+L pitch accents. The words in subject position in our corpus receive penultimate accent, and the L tones are phonetically aligned with the end of the accented syllable or the following one, i.e., the final syllable. Given the compression of pitch range in ENF, it seems reasonable to expect lower L tones in ENF than in NENF. And in fact this is what can be observed in Figures 1 and 2. Since the L tone is part of the pitch accent in the subject, any differences in scaling and/or alignment of L tones should be taken as differences in the pitch accent in subject position.

Second, it would be necessary to collect more data than the 56 utterances of the present study, in order to draw statistically sound generalizations. The small number of tokens was sufficient to reach interesting preliminary conclusions, but they should be complemented with additional data.

Third, other tests would be necessary in order to elucidate how categorical or gradient these contrasts or distinctions between ENF, NENF and VF are, in the form of perceptual experiments.

Fourth, a complete comparison of peak scaling and alignment in the pitch accents in the subject and the verb in the other types of sentences should be carried out. That is, an analysis of the other types of sentences that we have designed in our

broader project: broad focus, subject as topic or given information, and answers to multiple wh-questions.

Fifth, it would be worth extending the analysis to cases of object focalization. That is, to compare tonal alignment and scaling values in sentences with ENF and NENF on the object, or with the object as topic or given information. Any similarities or differences with the findings obtained for subject focalization would advance our knowledge of the prosodic patterns of NENF in general.

Finally, and as stated in the introduction to this paper, the present study is only part of a broader, more ambitious project that aims at analyzing the intonational properties of NENF in other languages, and how these patterns differ from those in other types of sentences with a different information structure. We have already collected and analyzed for French and Spanish the same amount of data as the one for the present work (cf. Elordieta and Irurtzun 2009), but plan to extend the project to other languages. In this respect, English seems a good test language; it is our impressionistic observation that in this language NENF and ENF in the subject are distinguished not in F0 scaling or alignment in the subject or the verb, but in the F0 level at the end of the utterance, with NENF ending in a rising intonation. Thus, perhaps in this language NENF is realized prosodically through the use of boundary tones at the right edge of utterances.

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Appendix: Types of utterances recorded

   a) Broad Focus: all utterances are answers responding to an out-of: the blue question:

    Q: *Ze   pasa   da?*
         what.ABS happen AUX
         'What has happened?'

    A1: *Ainarak   liburua   erun dau.*
         Ainara.ERG book.ABS take AUX
         'Ainara has taken the book.'

    A2: *Nagorek ardaua eran dau.*
         Nagore.ERG wine.ABS drink AUX
         'Nagore has drunk wine'

    A3: *Mirarik   lorak   bialdu dotzos Ainhoari.*
         Mirari.ERG flower.ABS.PL send   AUX   Ainhoa.DAT
         'Mirari has sent flowers to Ainhoa'

b) Exhaustive Narrow Focus on the subject

Q1: *Nok   erun dau liburua?*
who.ERG take AUX book.ABS
'Who has taken the book?'

A1: *Ainarak   erun dau liburua.*
Ainara.ERG take AUX book.ABS
'Ainara has taken the book.'

Q2: *Nok   eran dau ardaua?*
who.ERG drink AUX wine.ABS
'Who has drunk wine?'

A2: *Nagorek   eran dau ardaua.*
Nagore.ERG drink AUX wine.ABS
'Nagore has drunk wine.'

Q3: *Nok   bialdu dotzos lorak   Ainhoari?*
who.ERG send   AUX   flower.ABS.PL Ainhoa.DAT
'Who has sent flowers to Ainhoa?'

A3: *Mirarik   bialdu dotzos lorak   Ainhoari.*
Mirari.ERG send   AUX   flower.ABS.PL Ainoa.DAT
'Mirari has sent flowers to Ainhoa.'

c) Subject as Topic or given information

Q1: *Ser   erun dau Ainarak?*
what.ABS take AUX Ainara.ERG
'What has Ainara taken?'

A1: *Ainarak   liburua   erun dau.*
Ainara.ERG book.ABS take AUX
'Ainara has taken the book'

Q2: *Ser   eran dau Nagorek?*
what.ABS drink AUX Nagore.ERG
'What has Nagore drunk?'

A2: *Nagorek   ardaua eran dau.*
Nagore.ERG wine.ABS drink AUX
'Nagore has drunk wine'

Q3: *Ser   bialdu dotzo Mirarik   Ainhoari?*
what.ABS send   AUX   Mirari.ERG. Ainhoa.DAT
'What has Mirari sent to Ainhoa?'

A3: *Mirarik   lorak   bialdu dotzos Ainhoari.*
Mirari.ERG flower.ABS.PL send   AUX   Ainhoa.DAT
'Mirari has sent flowers to Ainhoa'

d) Plural question, exhaustive

Q1: *Klasekuak   ser   erun dabe?*
classmate.ERG.PL what.ABS take AUX
'What have the classmates taken?'

A1: *Ainarak   liburua   erun dau, Mirenek   dirua,   eta Amaiak*
Ainara.ERG book.ABS take AUX Miren.ERG money.ABS and Amaia.ERG
baloia.
ball.ABS
'Ainara has taken the book, Miren has taken the money, and Amaia has taken the ball'

Q2: *Kuadrillakuak ser   eran dabe?*
friend.ERG   what.ABS drink AUX
'What have the friends drunk?'

A2: *Nagorek   ardaua   eran dau, Amagoiak   limonadia,   eta Irenek*
Nagore.ERG wine.ABS drink AUX Amagoia.ERG lemonade.ABS and Irene.ERG
ura.
water.ABS
'Nagore has drunk wine, Amagoia has drunk lemonade, and Irene has drunk water'

Q3: *Biarrekuak   ser   bialdu dotze Ainhoari?*
fellow worker.ERG.PL what send   AUX   Ainhoa.DAT
'What have her fellow workers sent to Ainhoa?'

A3: *Mirarik   lorak   bialdu dotzos, Unaiek   bomboiak,   eta*
Mirari.ERG flower.ABS.PL send   AUX   Unai.ERG bonbon.ABS.PL and
Gabik   dirua.
Gabi.ERG money.ABS
'Mirari has sent her flowers, Unai has sent her bonbons and Gabi has sent her money.'

e) Non-Exhaustive Narrow Focus

Q1: *Nok   erun dau liburua?*
who.ERG take AUX book.ABS
'Who has taken the book?'

A1: *Ainarak   erun dau liburua.*
Ainara.ERG take AUX book.ABS
'Ainara has taken the book.'

Q2: *Nok   eran dau ardaua?*
who.ERG drink AUX wine.ABS
'Who has drunk wine?'

A2: *Nagorek   eran dau ardaua.*
Nagore.ERG drink AUX wine.ABS
'Nagore has drunk wine.'

Q3: *Nok   bialdu dotzos lorak   Ainhoari?*
who.ERG send   AUX   flower.ABS.PL Ainhoa.DAT
'Who has sent flowers to Ainhoa?'

A3: *Mirarik   bialdu dotzos lorak   Ainhoari.*
Mirari.ERG send   AUX   flower.ABS.PL Ainoa.DAT
'Mirari has sent flowers to Ainhoa.'

f) Plural question, non-exhaustive

Q1: *Klasekuak   ser   erun dabe?*
     classmate.ERG.PL what.ABS take AUX
     'What have the classmates taken?'
A1: *Ainarak   liburua   erun dau.*
     Ainara.ERG book.ABS take AUX
     'Ainara has taken the book.'

Q2: *Kuadrillakuak ser   eran dabe?*
     friend.ERG   what.ABS drink AUX
     'What have the friends drunk?'
A2: *Nagorek   ardaua   eran dau.*
     Nagore.ERG wine.ABS drink AUX
     'Nagore has drunk wine.'

Q3: *Biarrekuak   ser   bialdu dotze Ainhoari?*
     fellow worker.ERG.PL what send   AUX   Ainoa.DAT
     'What have the fellow workers sent to Ainhoa?'
A3: *Mirarik   lorak   bialdu dotzos.*
     Mirari.ERG flower.ABS.PL send   AUX
     'Mirari has sent flowers to her.'

g) *Verum* Focus: Two assertions in a conversation

A1: *Ainarak   liburua   erungo   ebala esan eban, baiña ez   dakitx erun*
     Ainara.ERG book.ABS take.FUT AUX-C say AUX   but   NEG know take
     badau askanian
     AUX   finally
     'Ainara said she would take the book, but I don't know if she has, finally'
B1: *Ainarak   erun dau liburua.*
     Ainara.ERG take AUX book.ABS
     'Ainara has (indeed) taken the book.'

A2: *Nagorek   ardaua   erango   ebala esan eban, baiña ez   dakitx eran*
     Nagore.ERG wine.ABS drink.FUT AUX-C say AUX   but   NEG know drink
     badau askanian
     AUX   finally
     'Nagore said she would drink wine, but I don't know if she has, finally'
B2: *Nagorek   eran dau ardaua.*
     Nagore.ERG drink AUX wine.ABS
     'Nagore has (indeed) drunk wine'.

A3: *Mirarik   lorak   bialduko eutzalala Ainhoari   esan eban, baiña*
     Mirari.ERG flower.ABS.PL send.FUT AUX-C   Ainhoa.DAT say AUX   but
     ez   dakitx bialdu badotzos askanian
     NEG know send   AUX   finally
     'Mirari said she would send flowers to Ainhoa, but I don't know if she has, finally'
B3: *Mirarik   bialdu dotzos lorak   Ainhoari.*
     Mirari.ERG send   AUX   flower.ABS.PL Ainoa.DAT
     'Mirari has (indeed) sent flowers to Ainhoa.'