

# The functions of inferential evidential in first and second person in Nganasan<sup>1</sup>

Kitti Vojter (Szeged)

## Abstract

The paper focuses on the differences between the first-, second- and third-person-use of particular evidential categories from a functional point of view. The purpose of the study is to support Curnow's theory (2002) about the possible presence of the first-person effect in the use of inferential markers by analyzing the Nganasan -HA<sub>2</sub>TU- suffix. In addition to looking for specific functions associated with the first person, the study also aims to offer a thorough description of functions in the second-person occurrences. After a short overview of evidentiality and the evidential system of Nganasan, the research method and the results will be presented. The study material consists of 818 occurrences of the inferential suffix in the *Nganasan Spoken Language Corpus* (Brykina et al. 2018). By analyzing the 49 first- and 71 second-person markers, some presumed and some unexpected functions proved to be present, including meanings that are typical to a specific person category. Moreover, the marking the source of inference and assumption seems to be a function primarily associated with the use of the inferential in the third person.

**Keywords:** Nganasan, evidentiality, first person-effect, lack of control, second person evidentials, evidentiality and person

## 1 Introduction

The linguistic phenomenon of *evidentiality* is defined as “the linguistic encoding of information source” (Verhees 2019: 114) and is present only in a quarter of the languages in the world. It has therefore only become a frequently researched topic in the last couple of decades, hence there is still much work to be done on the phenomenon in general and on the systems of particular languages. This also concerns Samoyedic languages, which have their own uncertainties and contradictions regarding their ways of marking sources.

Some works stand in contradiction concerning the joint usage of particular evidential markers and personal markers. Aikhenvald (2004) states that there is no specific difference in the usage of inferential markers with first, second, and third-person participants regarding the function of the evidential marker.

<sup>1</sup> The research was supported by NKFIH (National Research, Development and Innovation Office, Hungary) in the framework of the project *Evidentiality in Uralic languages* (K139218, 2021–2024) at the University of Szeged.

In other words, there is no specific meaning expressed using the inferential marker with first person if there is no such thing in second and third person. Aikhenvald (2004) claims that there is no ‘first-person effect’ present in the inferential evidential category, contrary to other kinds of evidential markers that can convey other meanings than ‘source of knowledge’ when used together with first person. On the other hand, Curnow’s earlier study (2002) proved the opposite: his paper claims that the first-person occurrence of inferential morphemes can express dissimilar semantic contents to second or third person, implicating the so-called first-person effect.

Since mostly the use of third-person evidential forms are researched (Curnow 2002: 178), as they are claimed to occur more frequently (Aikhenvald 2018: 27), there has been no explicit solution for the contradiction forementioned. Hence, the present study intends to support Curnow’s statements by taking a closer look at the evidential of Nganasan, setting up a hypothesis that there is indeed a first-person effect in the inferential category of this language. The research is also extended to the second-person use of this category due to its low number of occurrences, leading to the idea of searching for a possible specific second-person function too.

This paper is a corpus-based study, hence the next chapter (1) describes the one used as the base of this research and the language observed in it. After defining evidentiality in general, some of the more specific concepts and questions of the paper are to be explained, such as the category of inferential or first-person effect (2). Section (2) also contains the description of the evidential system in Nganasan. The paper gets to its actual topic – namely the inferential in the first and second person in Nganasan – in section (3).

## 1.1 The Nganasan language and its corpus

Nganasan belongs to the Samoyed branch of the Uralic language family. According to the Russian Census in 2020, the number of the population is 687, the number of the speakers is 264 (Rosstat 2020). Being the northernmost spoken Uralic language, the speakers of Nganasan mostly live in settlements to the east from the river of Yenisey, which administratively belong to the Taymyrsky Dolgano-Nenetsky District. Villages on the eastern part of the Taymir peninsula, Ust-Avam and Volochanka have the highest percentage of all Nganasan population, but a smaller number of their group lives in the western-located Novaya too. Their traditional way of living contained fishing, hunting and reindeer herding, but this all belongs to the past now: settling down and following a modern way of life has had its effects on their lifestyle nowadays. The differences between the dialects – Avam and Vadeyev – are not significant, mostly phonetical and lexicological dissimilarities distinguish the two groups (Wagner-Nagy 2019: 15).

Nganasan is typologically agglutinative, still, a morpheme in this language can have several functions at once. Its open word classes are noun, verb, adjective and adverb. Nouns can be declined for number (singular, dual, plural), moreover, possessive and seven case affixes can be added to them. Verbs have three separate conjugation paradigms: subjective, objective and reflexive. The sentence structure is usually SOV (Wagner-Nagy 2019: 18–20).

The *Nganasan Spoken Language Corpus* (Brykina et al. 2018) contains language data acquired in the last 30 years next to archive texts from Saint-Petersburg and Tomsk, and can be accessed in an electronic form via the *EXMAR-aLDA Corpus Manager (Coma)* application software. The corpus consists of 176 texts by 56 different speakers, from which 136 have an additional sound file of the particular texts. The number of tokens in the corpus is 143,993, while of words is 34,888 and sentences is 22,126. The tokens are glossed by giving their Russian and English meaning, and further annotations are provided too; most of the sentences also have a Russian and English, sometimes a German or Hungarian translation too.

The texts being mostly folklore texts contain the genres *dyurymy* and *sitaby*, namely the genre of the Nganasans' prose texts and tales and the genre of spoken and sung epics of their people. Since the latter is immensely harder to perform (Wagner-Nagy 2002: 16), there are fewer of them in the corpus too. Some of the folklore texts cannot be categorized. Apart from these, the corpus contains traditional songs and narratives with the topic of the speaker's personal life and family history. Even though they are present in the corpus, the number of dialogues can be considered marginal.

The name of the files indicates the name of the speaker, whose dialect and sub-dialect can be found in the metadata of the corpus – however, at the time of the official description, it only included texts originating from speakers of the Avam dialect. Besides marking the speaker, the names of the files are compiled of the title of the text and the date of the recording. A more detailed introduction to the corpus can be found in Wagner-Nagy et al. (2018).

## 2 Evidentiality in general

According to Aikhenvald (2004: 3), “evidentiality is a linguistic category whose primary meaning is source of information”. That is, a language that has evidential markers allows its speaker to express the origin of their knowledge only by using the proper grammatical unit. There is no clear agreement in the literature if evidentiality is a category of its own or a sub-category of modality, but in the last two-three decades the approach of Aikhenvald, supporting the former viewpoint, has been more broadly accepted. Consequently, the prior TAM (tense, aspect, mood) triad representing the main inflectional categories

of the verb is being extended to the tetrad of TAME (tense, aspect, mood, evidentiality), Verhees (2019: 114–115) claims.

## 2.1 Defining evidentiality

In Brugman and Macaulay's characterization (2015: 201–202), two properties are mentioned as obligatory for a linguistic unit to be considered evidential; these criteria are based on Aikhenvald's monograph (2004: 10–11). Firstly, the unit has to have the function of marking a source of evidence, and, secondly, it has to be a part of a closed grammatical system, e.g. a morphological paradigm. Therefore, evidentiality can be defined as a grammatical system (Aikhenvald 2004: 6), whose members carry the meaning of 'some source of evidence' as their primary function (Aikhenvald 2004: 3). However, some non-mandatory properties can also be connected to this phenomenon, which are cross-linguistically common in certain evidential systems. The lack of these attributes does not make a linguistic unit non-evidential in itself, but the high frequency makes them worth mentioning in describing the phenomenon.

One of these properties is the obligatory usage of the evidential marker. Even though Aikhenvald (2004: 2, 6) claims that it is a universal and defining criterion based on languages such as Tariana, several papers (Lazard 2001, Speas 2010, Brugman and Macaulay 2015) point out that it is clearly not true for every system. Regardless, plenty of languages with evidential systems require that the speaker chooses a source marker in order to produce a complete sentence.

A common characteristic of evidential markers is the presence of additional meanings in specific contexts next to the function of marking a source. One of them is epistemic assessment or modality, which marks the degree of the speaker's certainty about the accuracy and truthfulness of a particular statement (Brugman and Macaulay 2015: 205). The status of epistemic modality in the perspective of evidentiality is not completely clear. In a broader sense of evidentiality represented by Rooryck (2001: 125), using an evidential marker does not only have the function of marking the origin of knowledge but also of marking the degree of certainty. On the other hand, Willett (1988: 52) and Aikhenvald (2004: 3, 6) define it as a possible additional meaning. Givón (2001: 326) interprets it as an implicit content of evidentiality, similar to other additional meanings that are categorized as pragmatic-level values by Brugman and Macaulay (2015: 208–209). One of the pragmatic-level values is the degree of commitment, which can be considered stronger or weaker based on Faller's (2002) terminology.

Determining the differences between degree of certainty and the degree of commitment can cause difficulties, mostly because currently there is not much literature about the latter, in opposition to the other pragmatic-level value called mirativity. Mirativity shows the degree of informativity (Brugman and

Macauley 2015: 209) by which the speaker can express how a particular piece of information correlates with their previous knowledge, that is, how new, surprising or unexpected the information is. The relationship between evidentiality and mirativity is rather language-specific, hence no universals can be claimed. San Roque (2008: 305) states that in some cases the two values can connect and blend in the same system or morpheme, but on the other hand, in other languages, these functions emerge by distinct linguistic units and have no specific connections to each other (Brugman and Macauley 2015: 210, see also Aikhenvald 2012: 436).

The degree of certainty, degree of commitment, and degree of informativity are the most common additional contents connected to evidentiality, but not the only ones – some others will also be introduced in the latter parts of this paper (see 2.3, 3.3).

Aikhenvald's interpretation of evidentiality (2004) can be considered a narrower definition of the phenomenon, by which only morphemes belonging to complete systems and bearing the primary function of source-marking can be treated as evidential markers. That is, she only acknowledges the so-called grammatical evidentiality, which is lacking in many languages of the world. However, most of them have other ways to refer to the origin of their knowledge: adverbial expressions, particles or modal verbs can also express meanings connected to evidentiality (Aikhenvald 2004: 10). Aikhenvald calls this way of referring to a source of origin 'lexical evidentiality', which cannot be included in the term 'evidentiality' in her definition. The reason is the lack of two important criteria: lexical expressions are not only non-obligatory, which property is not decisive by all means based on Brugman and Macauley (2015: 230) but they are also not parts of a grammatical category connected by their functions. On the other hand, lexical evidentials tend to grammaticalize, thereby, later on, they can become parts of evidential systems at the end of the process, turning into linguistic units that can be considered evidentials by the narrower interpretation too (Verhees 2019: 116).

A third way to express evidential meanings are evidential strategies (Aikhenvald 2004: 105), meaning those grammatical categories that have source-marking only as their secondary function. Tenses, moods, modalities, and such phenomena as person marking, nominalization or reported speech can develop evidential functions. Evidential strategies cannot be treated as evidentiality in the narrower sense, since they lack the criterion of source-marking being the primary function. The number of strategies is usually contiguous with the complexity of the grammatical system of evidentiality; the more sources of origin can be expressed by grammatical evidentiality, the less is the chance of other linguistic units developing evidential meanings as secondary functions (Aikhenvald 2004: 146).

A broader definition, which classifies lexical evidentiality and evidential strategies under the term 'evidentiality', treats this linguistic phenomenon as a semantic category (see e.g. Hoff 1986, Hassler 2002). However, the next chapter presents the categorization of those languages only that possess grammatical evidentiality, based on the most well-known grouping written by Aikhenvald (2004).

## 2.2 The category of inferential in different systems

A person can gain knowledge in various ways. Based on Aikhenvald, six types of sources can be differentiated (2004: 63–65):

1. visual sensory: information acquired through seeing
2. non-visual sensory: information acquired through senses other than seeing, i.e., hearing, smell, taste, touch
3. inference: information acquired through visible or tangible evidence, clue, result of an event
4. assumption: information acquired through non-visible evidence, mostly by logical thinking or by using common knowledge
5. hearsay: reported information without marking a specific person as a source
6. quotative: reported information by marking a specific person as a source

Aikhenvald (2004), similarly to Willett (1988) and Plungian (2010), arranged the types of sources into direct and indirect groups based on the fact whether they refer to a cognition happened by the speaker's own experience or not. Thus, visual and non-visual sensory form the direct evidence types as these types need the speaker's personal and immediate involvement in the recognition process of an event they perceived. The information marked with such markers is also called firsthand information. The other four types of evidence make the indirect group by which a speaker marks non-firsthand information. These types can be separated into two subgroups. Inference and assumption can be grouped as inferred (Plungian: personal) while the quotative and reported evidence types can be grouped as reported (Plungian: non-personal)<sup>2</sup> evidentials. The significance of subgrouping lies in the fact that information sources of the same subgroup often tend to appear as functions compressed to the same morpheme.

Specific markers of evidential systems can express the aforementioned types of sources, but the complexity of the systems varies cross-linguistically,

<sup>2</sup> The terminology of Plungian (2010), namely the personal versus non-personal subgroup, less likely gives space to misunderstandings, since Aikhenvald (2004) names the subgroups after one type of evidence belonging to a specific group. It has to be kept in mind that the evidence type of inference and the subgroup inferred are not the same, neither are the type of reported and the subgroup reported.

meaning that not all languages with evidential systems can mark all types of sources with a separate morpheme. Some systems cannot express some types at all, and some only have a single morpheme for marking more types of sources together instead of developing separate morphemes for them (Aikhenvald 2004: 65). This is how some smaller and morphosyntactically less complex systems are made, e.g. in Jarawara there are two evidential morphemes available that distinguish firsthand and non-firsthand evidence. In opposition to that, Tariana has five different markers to express five different sources including sight, hearing, inference, assumption, and other people's reports. The morphosyntactic complexity of evidential systems in the world varies between two (A systems) and five (D systems) separate markers. In extreme cases, it is possible for a language to develop even six or seven evidential morphemes, but it occurs much more rarely than the systems shown in the following table.

Since the topic of this paper is the markers of the category of 'inference', this section describes this category in more detail considering all the systems with different numbers of choices. Inferred evidentiality is the subgroup of source types that refer to inference based on visual evidence or a result of a process, and assumption based on logical thinking or general knowledge. Plungian (2010) terms them indirect-personal sources since in these cases the information is not acquired through the speaker's own experience, nor it happens via other people's mediation. If there is such a category in a particular system, inferred sources mostly belong to the inferential evidential. However, since this does not apply to every evidential system, it is important to compare the realization of the source types of inferred subgroups in different variational patterns. Since the language observed in this paper can be categorized as a B4 (three-choice) system according to Aikhenvald's classification (see Aikhenvald 2004: 65), this section lays the most emphasis on languages with three choices available in their evidential systems.

In two-choice systems the inferred sources can be expressed by the non-first-hand category. Even though three-choice systems can have inferential categories of their own, it is not the case for every language of this structure: for example, the systems of B3 type does not only lack a distinct category to express inferred evidence, there are either no other evidential markers which would subsume the expression of inferred evidence into their meaning. B2 systems have their inferential morphemes, even though expressing inferred evidence can also share a marker with the reported subgroup. Nonetheless, other B groups do possess separate inferential categories with the primary meaning of evidence based on a visible result of a process or event (Aikhenvald 2004: 163–164), based on which a conclusion can be made. Besides, the marking of assumption can also be a function performed by the category of inferential evidentials.



Affixes of the inferential category can also be used to appoint information about someone's physical or physiological state. This can be traced back to the source of inference since in this case the speaker obtains a piece of information that is not available for them directly, only through monitoring the person's physical appearance and making a conclusion based on it. Also, reported information, mostly hearsay, can serve as a base for inference and assumption, hence the category of inferentiality can be semantically connected to that of reportativity too – that is how a joint category like in B2 systems can develop (Aikhenvald 2004: 163–164).

All the additional meanings mentioned in 2.1 can be expressed by the category of inferential in systems with three choices. Regarding epistemic modality, inferred morphemes usually refer to uncertainty, doubt or possibility in opposition to direct evidence, which can mark a higher degree of certainty about a particular information. Mirativity is also a common function in the use of inferential morphemes of three-choice systems, referring to surprise, new, or unexpected information. Finally, the use of inferential markers can express irony or sarcasm (Aikhenvald 2004: 166).

In systems of four or five choices, a joint inferential category can be in charge for marking inference and assumption, but some systems have distinct categories and markers for these two types of sources too, such as in C2 or D1. Furthermore, languages with considerably large systems distinguishing six choices (e.g. some languages spoken in Papua New Guinea), the subgroup of inferred types can be divided into not two but three morphemes, making the number of evidentials in the system unusually high. In larger systems, inferred sources are not likely to be connected to meanings as the degree of certainty or commitment, but the more they can express mirativity (Aikhenvald 2004: 200–202).

### 2.3 First-person effect

Our current knowledge about evidentiality is mostly based on evidential markers used in the third person (Aikhenvald 2018: 27), referring to the source of a piece of information about a third-person participant in a particular context. As a consequence, our whole picture of evidentiality is mostly compiled of experience regarding third-person usage, hence it is less accurate to first and second-person utterances specifically (Curnow 2002: 178). Supplementary studies (see e.g. Sun 2018, Kubitsch 2019) that focus on the joint use of evidentiality and different personal markers bear significant importance since these bring the often dissimilar functions of specific evidential categories used together with different personal markers to light. This is especially true for the first-person use of particular evidential markers. Aikhenvald (2004: 219–220) claims that dissimilarities in function in the first-person mostly occur when a



speaker talks about themselves using indirect types of sources, however, direct types can be affected by this phenomenon too. Curnow (2002) and Aikhenvald (2004) term this phenomenon as ‘first-person effect’, which affects the function and the frequency of evidential morphemes used with first-person markers (Curnow 2002: 180).

The frequency of a particular marker with specific personal markers cannot be defined easily, since its number does not only depend on linguistic matters, but also on the types of texts in the corpus that are used as the base of the research (Curnow 2002: 181). However, by collecting a sufficient amount of data, some reliable conclusions can be made. Evidentials cross-linguistically appear in third-person forms the most (Aikhenvald 2018: 27), and in first-person forms the least, since it is usually not necessary to refer to the source of a piece of information when speaking about ourselves and our own actions. In this case, the speaker mostly acquires the information through their own perception and experiences (Curnow 2002: 181). Hence, in some languages, specific evidential categories cannot appear in the first-person: for example, there is no possibility for a speaker of Wintu to create a sentence using inferred or assumed evidential referring to themselves (Curnow 2001: 5). The M̐ky language proves that even whole systems can have this kind of restrictions regarding first-person usage (Curnow 2002: 181–182). However, this is not a universal property of evidentiality: Nenets can have utterances that refer to the source of origin in first-person (Nikolaeva 2014: 94).

The reason behind fewer first-person occurrences in a specific language can be the smaller ratio of possible contexts a first-person evidential can appear in. In such cases, there are no functional differences between evidentials with specific persons, hence the first-person effect cannot be claimed as a reason for the differing amount of occurrences as the first-person evidential cannot express other meaning than in second- and third-person. This is true to the following (1) sentence, where Curnow sees the reason for using the inferential marker in the fact that this information about the speaker themselves comes from an inference based on reported statements.

- (1)      *“ta,      qa      ?ile      ep      ŋuə-ka,”      ikə      jə-kui*  
         INT    1SG    2PL    father   COP-INFER.1SG   thus   say-NAR  
         ‘He said, “Then, I am your father” [based on inference from what they  
         had just said]’ (LaPolla 2001, quoted by Curnow 2001: 5, Qiang)

In other cases, the reason can also be a functional difference between the more frequently used third and the less frequent first-person evidentials, when the latter can express a meaning that is different from, but is still somehow connected to marking a source type, creating the first-person effect. The func-

tional difference will only be considered a first-person effect if that specific function is only present in the first-person use of the marker. This means that dissimilar frequency itself will not prove the presence of a possible first-person effect. The first-person effect can appear as the primary meaning of the marker in first-person but it can also manifest as a semantic extension or an implicit pragmatic content – however, the manifestation form is not always clear and the categorization of a first-person effect can actually depend on the researcher’s own interpretation. Furthermore, a semantic extension can develop from pragmatic contents, and a complete change of the primary function can happen (Curnow 2002: 187), hence the manifestation of a first-person effect in a particular category can change in time.

Curnow (2002: 187–188) claims that the most common manifestation of the first-person effect is in the function of expressing non-volitionality, or in Aikhenvald’s terminology, lack of control, that is, marking that the speaker did not commit a certain action volitionally or consciously, therefore they cannot influence it or remember it happening (Aikhenvald 2004: 221). A typical example for this function is when the speaker only realizes falling asleep when they wake up the next morning. In a lot of cases, unintentional sleeping and memory loss can be caused by overconsumption of alcohol. The following sentences example these situations in the Jarawara language.

- (2)     *amo*     *o-waha-ni*  
           sleep   1SG.S-next.thing-**IMM.PAST.NONFIRSTHH.FEM**  
           *o-ke*                     *waha*  
           1SG-DECL.FEM   next.thing  
           The next thing was I fell asleep [I did it unconsciously and I do not remember the moment].’ (Aikhenvald 2004: 221)
- (3)     *o-hano-hani*   *o-ke*  
           1SG.S-be.drunk-**IMM.P.NONFIRSTH.FEM**       1SG-DECL-FEM  
           ‘I got drunk [and I do not recall it].’ (Aikhenvald 2004: 221)

In Jarawara, these sentences would lack the meaning of ‘accidental, non-voluntary, forgotten event’ without the non-firsthand markers, and by using the firsthand evidentials, these sentences could be transformed into utterances referring to voluntarily and consciously committed actions. That is, the non-firsthand marker expresses the lack of intentionality and consciousness (Aikhenvald 2004: 221).

Curnow describes lack of control as a rather common phenomenon that can be defined by two qualities. On the one hand, it can only be a function of evidentials used in first person, since a speaker can only talk about volitionality

when they are certain about the actor's intentions. Obviously, this can only happen when talking about themselves since it is very unlikely for someone to be able to read other people's thoughts. On the other hand, this meaning can only be present in utterances where the non-volitional event has already happened beforehand, since it is impossible to talk about unintentionality in the case of a present or future event (Curnow 2003: 43).

Mirativity can jointly appear with lack of control (Aikhenvald 2004: 221), and it is not always possible to distinguish the two functions from each other, since realizing an unintentional action only after it has been done never correlates with the speaker's previous knowledge. However, mirativity is not only a function of the first person, it can also appear in second and third person. If mirativity is not exclusively a function of the first-person evidential in a language, it cannot be considered as a manifestation of the first-person effect anymore. Then again, if it is only present in first person, it is indeed a consequence of the phenomenon mentioned before.

The second-person usage of evidentials also differs from third-person use in frequency, but there is no such thing as a 'second-person effect', that is, even if it has some kind of additional meaning next to source marking, the same meaning usually appears in the third use too. Aikhenvald mentions two exceptions: the reportative category of Jarawara, which has an exclusive second-person function of reminding someone of their past utterances (4), and the non-firsthand marker of Salar, which can be used to add a more polite undertone to a sentence (Aikhenvald 2004: 234).

- (4)     *ti-fimiha-mone,*                      *ti-na*  
         2SGS-be.hungry-**REP.FEM**            2SGA-AUX(say)FEM  
         'You were hungry, you said.'

The appearance of the first-person effect in a specific category depends on the complexity of the particular evidential system. In two-choice systems, the non-firsthand or the category of non-visual sensory sources can develop meanings that are only typical for first person. In systems with more than two choices, the category of non-visual sensory and the reportative can have a function creating the aforementioned phenomenon (Aikhenvald 2004: 237). In contrast, visual sensory (and sometimes even non-visual sensory) can express the intentionality of some action (Aikhenvald 2004: 220). Aikhenvald claims (2004: 220) that in some Tibeto-Burman languages the visual evidential can also refer to the non-volitionality of some event.

However, Aikhenvald (2004: 231) claims that no functional difference can be appointed in the first-person use of the inferential category. An inferential marker can participate in expressing lack of control in sentences where 'per-

son-marking' is used as an evidential strategy as it is shown in the example (6) from the Tsafiki language. Tsafiki marks an event in which the speaker has participated with a so-called 'conjunct' marker, and marks every other event that lacks the attendance of the speaker with a 'disjunct' (or egophoric) marker. Languages like this can express the non-volitionality of an action committed by the speaker by using the "wrong" disjunct marker, as shown in the next (5) sentence (Aikhenvald 2004: 125–127).

- (5)      *la*                      *kuchi=ka*                      *tote-i-e*  
          1MASC                      pig=ACC                      kill-**DISJ**-DECL  
          'I killed the pig [unintentionally].'

The inferential marker of the language can often be used in these kinds of sentences, but the use of the marker does not change the meaning of the event being unintentional.

- (6)      *la*                      *kuchi=ka*                      *tote-i-nu-e*  
          1MASC                      pig=ACC                      kill-**DISJ-INFER**-DECL  
          'I must have killed the pig [unintentionally, and realized this based on physical evidence].'

Comparing the two sentences, it is clear that the meaning 'lack of control' is not expressed by the inferential marker but by the disjunct marker. Adding the inferential extends the meaning only by explaining that the speaker realizes the unintentional act based on inference concluded by visual evidence. This means that the inferential keeps its original evidential function.

As mentioned before, evidentials may have a mirative use which can participate in the first-person effect, and mirativity can be expressed by inferential morphemes too. However, Aikhenvald's monograph (2004) does not mention any difference regarding the appearance of mirativity in first-, second- and third-person inferentials which means that she does not consider the mirative a possible consequence of the first-person effect in the inferential categories. The only dissimilarity in the joint use of inferential and particular person markers lies in the frequency of ironic undertone: she claims that it is most likely and frequently present in first-person inferentials. Nevertheless, it is still not exclusive to first person and there are many examples of irony in second- and third-person markers too, hence frequency alone cannot mean a possible first-person effect in the inferential categories (2004: 231).

On the other hand, Curnow's works (2001, 2002, 2003) try to prove different ideas, by which Aikhenvald's arguments can be called into question. His examples show utterances of inferential evidentials expressing lack of control,

post realization and non-volitionality being an exclusive function in the first person, thus, these sentences support the possibility of an existing first-person effect in these categories.

- (7)      *met*      *čohojo*      *joža:-l'el-d'e*  
I      knife      forget-**INFER**-INTR:1SG  
'I have forgotten my knife [accidentally and I have just realized it].'  
(Maslova manuscript, quoted by Curnow 2003: 51, Yukaghir)

However, Curnow emphasizes (2002: 53) that it does not indeed manifest the same way as in non-visual sensory or reportative categories, since here the primary evidential function can also be clearly detected, and the function of expressing lack of control is carried out by an implicit pragmatic content that is based on inference or assumption. At the same time, this is a valid form of manifestation, hence, claiming the lack of this phenomenon is incorrect: based on Curnow's ideas, it is possible for the first-person effect to be present in an inferential category.

Curnow's statement is also supported by Nikolaeva's Grammar of Tundra Nenets (2014), in which she claims that the inferential marker of Tundra Nenets can express lack of control when used in first person and since this function can only appear in first person, this language also has first-person effect in its inferential category.

- (8)      *ɲul'iq*      *pon°kuh*      *xon'o-we-d°m*  
completely      long      sleep-**INFER**-1SG  
'Apparently I have slept for a long time.' (Labanauskas 1995: 75, cited by Nikolaeva 2014: 94)

Considering that Tundra Nenets is a close language relative of Nganasan, and the two share a similar evidential system with each other which include an inferential marker, this statement by Nikolaeva is rather significant in setting up the hypothesis of this paper: it is reasonable to assume a possible first-person effect in the Nganasan inferential too. The following section presents a description of the language that is in the focus of the paper, including general information and a more detailed introduction to its evidentials.

## 2.4 Evidentiality in Nganasan

On the basis of Aikhenvald's categorization, Nganasan can be considered a member of the B4 group. The language has a three-choice grammatical evidential system: by choosing between the inferential *-HA<sub>2</sub>TU-*, the reportative *-HA<sub>2</sub>NHU-* or the auditive (non-visual sensory) *-munə<sup>2</sup>-* and *-munuj-+POSS*, the speaker can mark several types of sources in their utterances. The use of the evidential morphemes is not obligatory in the language: a sentence can lack markers if the speaker does not consider it important enough to use it. Thus, the lack of markers can be seen as the most neutral type of source, which in the context of Nganasan means the evidence type of visual perception. Another special case of lacking markers should be mentioned: even though the speaker most likely did not see the events of these stories, telling a myth or a folk tale does not require the use of evidential markers, except if there is a specific reason inside the text to do otherwise (Aikhenvald 2004: 49–50). This can be observed in the texts of the *Nganasan Spoken Language Corpus* too.

References in the following examples refer to the aforementioned *Nganasan Spoken Language Corpus* (Brykina et al. 2018). Although this paper follows Aikhenvald's narrower definition of evidentiality, this section also contains a description of evidential strategies and lexical ways of marking information source with the purpose of presenting evidentials and its properties in Nganasan in the most detailed way possible (cf. Wagner-Nagy 2019).

### 2.4.1 Inferential

The inferential marker *-HA<sub>2</sub>TU-* primarily marks inference based on visual evidence (Wagner-Nagy 2019: 275). In sentence (9), the speaker did not see the event that is mentioned, they only infer it based on the visibly unwell physical appearance of the addressed person.

- (9)    *Əi?*        *maa- gəličə-ndə*        *tə*        *kuə-baðu-ŋ*  
          oh        what-EMPH-LAT.SG        well        die-INFER-2SG  
          *tə?*                            *təšiəðə.*  
          you.know                now  
          'They have tortured you a lot.' (JSM\_080217\_FourBrothers\_fikd.253)

Aikhenvald (2004: 48) claims that the basis of inference can also be reasoning, like in the following sentence, where the people braked on the master's command.

- (10) *T'eli?imid'i-ʔə-ʔ*      *baarbə-ðuŋ*      *huntə-ðuŋ*  
 brake-PERF-3PL      master-3PL      authority-3PL  
*i-huadu*  
 be-INFER.3SG  
 'They braked [following the master's order]; [one infers that] their master was an authority for them.' (Aikhenvald 2004: 48)

The inferential can be used in every person and number, and, considering sentence types, it can appear in declarative and interrogative sentences (Skribnik and Kehayov 2018: 551). As in many other languages (Aikhenvald 2004: 195), mirativity can be expressed through the inferential marker presenting surprise, unexpectedness, and new information. When the suffix *-HA<sub>2</sub>TU-* is on a verb in the function of this meaning, it is frequent that an exclamation appears at the beginning of the sentence.

- (11) *ou*      *tə*      *taa-j*  
 EXCL      well      domestic.reindeer-ACC.PL  
*tətu-batu-ru?*      *kaj*  
 bring-INFER-2PL.S/O      yes  
 'Oh, you have brought reindeers too [I did not expect this].'  
 (MVL\_080226\_Deceit\_fld.43)

Expressing doubt and uncertainty (12) can also be functions of the inferential, moreover, irony and sarcasm too, but these are not as common meanings as the ones mentioned before (source, mirativity).

- (12) *Məkiʔa*      *ŋarəbtu-sa*      *kat'əmi-ʔə*      *kəndə-tu*  
 back      look.back-INF      see-PERF.3SG      sledge-GEN.3SG  
*ɲini*      *məkini-nti*      *ŋəmtə-baʔa-ʔ*      *ŋanaʔsa*  
 on      behind-OBL.3SG      sit-INFER-3SG.R      person  
 'Looking back, it seems to her as if a person was sitting on the sledge.'  
 (Gusev 2007: 425)

The inferential suffix leads back to the same origin as the reportative suffix, claims Gusev (2006: 69). The 'undivided' category was used in the function of inference and reported type of sources, which is still true to the closely related Enets language. The original value of this category was *\*-pɛ*, which became a *-ha-* in Nganasan, and by adding morphemes with uncertain origin to them, the two categories separated.



### 2.4.1.1 Inferential strategies and lexical evidentiality

Wagner-Nagy (2019: 277–278) mentions the so-called *speculative mood* with the value *PTCP.PRS-RəKU* that is capable of expressing inference based on evidence.

- (13)    *ma-tənu*                      *i-čuarəgu-ʔ*                      *təʔ*  
          tent-LOC                      be-SPEC-3PL                      you.know  
          *ɲanaʔsan-u-čü.*  
          person-EP-PL.3SGPOSS  
          ‘There is a guest inside [I am inferring this].’  
          (JSM\_090809\_Life\_nar.351)

The imperfective *ɲantid'i* ‘it seems (like)’ verb is a lexical way to express inferential meanings (Wagner-Nagy 2019: 278). The copula-like usage of this word is more frequent in quoted texts, and in the cases when the inferred information is more momentarily than general (14). There is another copula-like lexeme for the latter case: with more general statements, a Nganasan speaker can use the grammaticalized form of the be-verb with an inferential suffix (15).

- (14)    *bana-ʔa-m*                                      *ɲandi-ti.*  
          get.tired-PF-1SG                                      seem-PRS.[3SG.S]  
          ‘I got tired [it seems].’  
          (JSM\_080212\_Mosquitos\_flkd.119)

- (15)    *əiʔ*    *nəɣhuə*                                      *ɲanuə*    *nagür*    *d'aməðə-ɲku*  
          oh                      bad                                      real                      three                      wild.animal-DIM  
          *i-huəðu.*  
          be-INFER.3SG  
          ‘Three little bad, wild animals, so it seems [because they cannot be hunted down].’ (KNT\_960809\_WildAnimals\_flkd.017)

### 2.4.2 Reportative

The suffix *-HA<sub>2</sub>NHU-*, which can be originated from the same unit as the inferential suffix, can mark secondhand, that is, reported source of information. This morpheme is not only used when reporting a piece of information heard from a particular person (16) but also when a specific person cannot be appointed as a source and the information originates from the general knowledge of the speaker’s community (Wagner-Nagy 2019: 280). The latter is a definition of the type called hearsay (17).

- (16) *Tə təti ini-ʔia munu-haŋhu,*  
 well that old.woman-AUG say-REP.3SG  
*ńemi-nə ńuəčə-si əndi*  
 mother-GEN.1SG give.birth-INF sort.of  
*helisi-tiə munu-baŋhu [...]*  
 help-PTCP.PRS mond-REP.3SG  
 ‘The old woman said, who helped my mother (midwife) said: [...]’  
 (TLN\_061021\_MyName\_nar.008)
- (17) *təti-rə taharā̃ əmni heli-ʔ munu-ŋkə-ndu-ʔ*  
 this-2SGPOSS now here half-PL say-ITER-AOR-3PL  
*təti-rə tańd'a-ʔa-tu təi-s'üə*  
 this-2SGPOSS worker-AUG-3SGPOSS EX-PST.3SG  
*i-bahu, s'igiʔə.*  
 be-REP.3SG ogre  
 ‘Some people say that this (Dyaumaly) has a servant, an ogre.’  
 (TKF\_041210\_NenetsManAndGiant\_fkd.043)

The reportative is used when the shaman is transmitting the words of gods during ceremonies (Skribnik – Kehayov 2018: 552).

When a reportative and a future tense marker is jointly added to the verb, the sentence is able to express an order, command or demand.

- (18) *təndə ńakələ-tə-ḡiambi-m*  
 that.ACC take-FUT-REP-1SG  
 ‘I must marry her.’ (MVL\_080304\_NjomuKamleguNy\_fks.020)

Aikhenvald (2004: 226) states that similarly to the inferential suffix, the reportative morpheme can express the meaning of irony and sarcasm in the first person.

- (19) *d'esi i-bahu*  
 father be-REP  
 ‘He is reported to be her father [and yet he abandoned her, and she left her home].’ (Aikhenvald 2004: 183)

### 2.4.3 Auditive (non-visual sensory)

The auditive morpheme is used in the case of perception other than visual – hence, the traditional term does not cover all uses of the suffix. Wagner-Nagy (2019: 282) applies the term ‘sensory’ for this category in Nganasan.

- (20) *tahariabə*                      *ban-a-ʔku-kəi-čü*                      *logiaʔ-minəʔ*  
 now                      dog-EP-DIM-DU-3DUPOSS                      bark-AUD  
*bənti-ni.*  
 outside-ADV.LOC  
 ‘The two dogs are barking outside.’  
 (TKF\_031116\_ShamanBoy\_flkd.043)
- (21) *ma-tə*                      *kunsi-ə*                      *biə-ði*  
 tent-GEN.2SGPOSS                      inside-ADJ                      smell-3SGPOSS  
*hunsəə*                      *i-munu-ču.*  
 different                      be-AUD-3SGPOSS  
 ‘There is another smell in your tent.’  
 (TKF\_061023\_SmallBird\_flks.1100)

The forms created by using the auditive suffix are not verbal, but nominal: the use of the adverbial *-munəʔ-* and the nominalized *-munuj-*+POSS, is almost identical, however, the former one appears much more rarely. To refer to the person who is experiencing the perception, a possessive suffix is used in the case of the nominalized form – however, this is only true to the use of personal pronouns.

- (22) *tahariaa*                      *ʔonəə*                      *ba-mi*  
 now                      one.more                      dog-1DUPOSS  
*logia-mini-či.*  
 bark-AUD-3SGPOSS  
 ‘Now, our dog is barking.’  
 (TKF\_041210\_NenetsManAndGiant\_flkd.017)

If a speaker has seen and heard the event at the same time but the latter plays a more significant role in perception, the speaker will use the sensory evidential, even though they have seen the event in question too. This choice is even more certain when the speaker uses a verb implying some kind of sound such as *munud’a* ‘say’ or *hirkuðəsa* ‘say loudly’.

The marker of non-visual sensory can also mark internal endophoric experience such as pain.

- (23) *ʔojbuə-mə*                      *d’ari-mini-či.*  
 head-1SGPOSS                      hurt-AUD-3SGPOSS  
 ‘My head hurts.’ (ChND, 2008, quoted by Wagner-Nagy 2019: 284)

The marker of the category of non-visual sensory cannot appear jointly with an interrogative marker but it can be part of an interrogative sentence if there is an interrogative word in the sentence (Wagner-Nagy 2019: 282–284). In a reported content, it can appear with the additional meaning of uncertainty (Skribnik – Kehayov 2018: 551), hence it can be connected to epistemic modality too – however, this is not a very frequent function of the non-visual category cross-linguistically in three-choice systems (see Aikhenvald 2004: 163).

### **3 The functions of the inferential in the first and second person**

While the description of the Nganasan inferential provided a general overview on the category, it did not put emphasis on its specific use with particular personal markers. The following part presents the results: the possible differences in the use of the inferential evidential in first, second and third person which confirms the initial hypothesis.

#### **3.1 Method**

Evidential morphemes are the most common in third person (Aikhenvald 2018: 27). However, the presence of the first-person effect can influence the frequency of first-person occurrences (Curnow 2002: 180–181), hence, if the number of third-person occurrences is significantly higher than that of first and second person, a dissimilarity in their function can reasonably be suspected. Functional dissimilarities can have their effect on the number of occurrences in the second person too. Therefore, for researching the possible differences, the first step has to be a quantitative overview of all inferential tokens in the corpus divided to first, second and third person occurrences. That is, the inferential suffixes should be looked up with search terms that mark the presence of a specific personal marker on a verb next to the evidential suffix, such as INFER-1, INFER-2 and INFER-3. To find every occurrence of this particular suffix, it has to be kept in mind that Nganasan has three different conjugation types, which is also important in the search process.

The initial hypothesis of this paper focused on a possible difference in use in the first person, however, based on the results of the quantitative part of the research, the purposes of the study were extended to look for dissimilarities in function or in the frequency of meanings being expressed in the second person too. Adjustments were made in the hypothesis on the basis of evaluating sentences and texts in which a verb with a first or second person inferential was found, interpreting their contexts and examining the reason or purpose of their presence, that is, their function. Since the literature marks lack of control – and mirativity – as the most typical functions of evidential markers in the first person, such meanings were expected. In the second person, there were no fore-expected meanings. Besides, all the functions mentioned in 2.4.1 (mirativity, epistemic modality) also looked for in both persons.

3.2 Data

The quantitative research delivered the expected results: the occurrences of first- and second-person inferentials are significantly lower than the ones in the third person as the following table shows. During the queries, singular, dual, and plural verb forms have all been found with evidential markers, however, since the category of number does not cause functional dissimilarities, it can be considered irrelevant (Aikhenvald 2004: 217–218). Hence, the table only contains the instances grouped according to the category of person. The numbers represent the number of verbs with inferential markers.

Table 1. Inferential evidentials in NSLC by person

All inferentials	First person	Second person	Third person
818	49	71	698

Even though the number of third person occurrences is remarkably higher than that of the first and second person ones, this observation itself does not necessarily mean that the hypothesis is true. Besides the fact that evidentiality is most common in the third person, other non-linguistic factors, such as the genre of the texts in the corpus, can influence the outcome of the quantitative examination. Narrative genres, which *NSLC* mostly contains, operate with verbs in the third person more often. However, a corpus that mostly contains dialogues is likely to have more second-person occurrences (Curnow 2002: 181).

3.3 Analysis

Since our knowledge about evidentiality is mostly based on third person examples (Curnow 2002: 178), the former description of the inferential category in Nganasan can be regarded as a picture not exclusively, but mostly referring to the use of the marker in the third person. The following subsections present the results of analyzing the context of the occurrences of inferential markers in the first and second persons, from which their person-specific functions cleared up. During the analysis, it had to be kept in mind that one occurrence can have several functions at once, as mentioned in chapter 2.3: some functions can manifest in additional meanings or implicit pragmatic contents.

3.3.1 First person

The first person use of the inferential is significantly rarer compared to the total number of 818 verbs with this marker: only 49 tokens were found for the search term of INFER-1. However, in the case of three inferential tokens, the glossing was proven to be wrong during the analysis, supported by one of the creators of the corpus, Beáta Wagner-Nagy: the three markers in question turned out to be instances of the *irrealis* (epistemic) mood and not inferential suffixes. In

two other cases, no motivation was found for using the particular evidential marker. This leaves only 44 instances of first-person inferentials for analysis.

Moving on to the outcome: the inferential suffix is capable of marking the information source in the first person, that is, it keeps its original, evidential function. In the sentences of 35 verbs with this marker, inference based on visual evidence or result could be observed. This is true for the following example, in which the speaker concludes this given piece of information based on the bad state of their sensory organs.

- (24) *mənə*                      *ŋuə-gətə*                      *tohəðu-ru-bata-nə*  
 I                                  deity-ABL                      appoint-PASS-INFER-1SG.R  
 ‘I was created by God like this [I was figured by God to be like this].’  
 (JDH\_99\_ThreeTents\_fkd.281-2)

However, the marking of the information source as a sole function is marginal: the presence of inference usually provides a base for additional functions that are in a more emphasized position. There are three suffixes in the corpus with the exclusive function of source marking in first person, proving that it is possible to use this marker only to appoint this type of source, but only in a restricted number of semantic contexts (24).

The lack of mention of the assumption as a source marked by the inferential category of Nganasan (section 2.4.1) can be explained by its marginal presence: there were only two occurrences marking the source type of general knowledge or reasoning, and, just as in the case of inference, assumption served as a basis for other kinds of meanings (unintentionality and post-realization, new information) as well.

- (25) *tə*                      *l’üəs’itə-d’a*                      *təndə-mti*                      *ŋanabtaa-baðu-m*  
 well                      speak.Russian-INF                      that-ACC.3SG                      forget-INFER-1SG  
 ‘Well, I have forgotten it in Russian.’  
 (TKF\_990819\_SomatuShaman\_fkd.047)

Six verbs with inferential suffixes occurred in interrogative sentences, in which the speaker asks themselves the reason or the motive of their own previous thoughts and actions. By these, the speaker either orders themselves to think logically or words its former absence. In these cases, the inferred types of sources can be noticed in the background, however, the main function of the inferential suffix here is to form a rhetorical question. Aikhenvald (2004: 230–231) has already observed this phenomenon in Wanka Quechua but there was no mention of this function in connection with Nganasan before. Also, San Roque et al. (2017: 131) described a similar characteristic of Equadorian

Quechua, where the speaker uses an evidential marker in questions addressed to themselves in order to remember something that was forgotten by the speaker.

- (26) *maa-ðə-nə*                      *əmə-ʔ*    *d'aməðə-gümü-ʔ*  
 what-DST-OBL.1SG              this      wild.animal-EMPH-3PL  
*huj-<sup>hi</sup>adi-nə*                      *miñ-s'ia-raa-nə*                      *hotoobtaʔaʔ*  
 call-INFER-1SG.OP              we-EMPH-LIM-1SG                      (unknown)  
*kontə-nə*                      *taa-gətə-nə*  
 prey-GEN.SG.1SG              reindeer-ABL-GEN.SG.1SG  
 ‘Why have I invited all these animals, they have left me without the  
 reindeer, that was my prey.’ (TAM\_6810\_Reindeer\_flkd.032)

The analysis of the first-person occurrences refutes the statement of Aikhenvald that there is no first-person effect in the inferential category of any evidential system (2004: 231). In 28 instances, the inferential suffix was used with the sole purpose of marking that the action was non-volitional, not as a marker expressing lack of control as in example (6). Unintentionality is often accompanied by the post-realization of the speaker. Non-volitionality, being present in more than half of the occurrences, is the most frequent function of first-person usage. The function being possible only in the first person, makes the existence of the first-person effect in the category unquestionable.

- (27) [...] *ou*                      *tahar<sup>ia</sup>aa*                      *kaj*                      *təndə-mti*  
 [...] EXCL                      now                      yes                      that-ACC.3SG  
*ɲanabtaa-baðu-m*  
 forget-INFER-1SG  
 ‘[...] Ah, I have forgotten something.’  
 (TKF\_031117\_ThreeBrothers\_flkd.111)
- (28) [...] *mənə*                      *tahar<sup>ia</sup>aa*                      *taansa-mə*  
 [...] I.[NOM.SG]                      now                      lasso-ACC.SG.1SG  
*koi-b<sup>ia</sup>əðai-m*                      [...]                      [...]  
 leave-INFER.EXCL-1SG.S                      [...]                      [...]  
 ‘[...] I have left my lasso here [...].’  
 (ChND\_080729\_Mosquitos\_flkd.149)

Typical contexts of lack of control, as mentioned in chapter 2.3, were present in eleven sentences in the *Nganasan Spoken Language Corpus* too.



- (29) *ou tahariaa kuntu-bata-nə təʔ [...]*  
 EXCL now fall.asleep-**INFER**-1SG.R you.know [...]  
 'Ah, it seems to me that I have fallen asleep [...].'  
 (MVL\_090807\_Hungabtadja\_flks: 755)
- (30) *tahariabə miñt'əbtə-kümu-nə tahariabə*  
 now 1-EMPH-OBL.1SG now  
*huəŋku-btu-ru-hatu-nə [...]*  
 get.drunk-CAUS-PASS-**INFER**-1SG.R [...]  
 'I, for instance, got drunk [and I do not remember it].'  
 (TKF\_990812\_EvilSpirit\_flkd.364)

When the suffix expresses lack of control, the non-volitional event is recognized by the speaker based on the process of inference or assumption, and the lack of direct knowledge regarding their own action implicitly contains the meaning of unawareness and non-volitionality. Hence, non-volitionality manifests on the pragmatic level, just as it was claimed by Curnow (2002: 187, 2003: 53) in the case of inferential categories.

The additional meaning of mirativity can also be observed in 26 first-person occurrences, from which lack of control and mirativity are both present in 18 sentences, being in a hardly separable connection with each other. In these cases, the unexpectedness comes from performing an action that the speaker was not aware of, hence, mirativity can be explained as a consequence of lack of control (31). It can, however, appear separately from lack of control – in example (32), the speaker was aware of his actions – his arrival turning out to be useless is surprising, however, not necessarily something that could have been under or out of his control.

- (31) *ou tahariaa maa-gəl'tə-gətə*  
 EXCL now what-EMPH-ABL.SG  
*ñüə-gəi-ñə kasa-baəu-m təʔ*  
 child-DU-ACC.PL.1SG hardly-**INFER**-1SG.S you.know  
*hiəməu liku-m-ə-ʔ*  
 EXCL trouble-TRL-EP-CNG  
 'Ah, I was about to bring my children into trouble.'  
 (MVL\_080226\_TwoHorses\_flks. 807)

- (32) *ou tanîa i-hü-nə tə torəbtuma-rîai-ʔ*  
 EXCL so be-COND-OBL.1SG well useless-LIM-ADV  
*tuj-huaðə-m huəbtai-ʔə-m munu-ntu*  
 come-INFER-1SG.S be.late-PF-1SG.S say-PRS.[3SG.S]  
 ‘So I came in vain, I am late – he said.’  
 (JMD\_080219\_MyLife\_nar.051)

An emotional overtone, specifically anger and sudden temper could be noticed in four sentences, from which two were the consequence of surprise that came along with the newly acknowledged information about the speaker’s own self. Aikhenvald (2012) has already mentioned a connection between emotional overtones and mirativity, but it has not been observed in Nganasan previously. The emotional overtone is present in three interrogative sentences in the form of a rhetorical question, where the speaker expresses rage regarding a former act of their own, which is later considered as faulty by them.

- (33) *timinîa taharîaa maad’a ní-hîaði-m*  
 now now why NEG-INFER-1SG.S  
*taa-ðə-mə*  
 domestic.reindeer-DST-ACC.SG.1SG  
*taa-ði-nə* *hutorə-ʔ*  
 domestic.reindeer-DST-ACC.PL.1SG harness-CNG  
*ins’üðü-s’a tuj-huaðəðə-m ɣəndiāiʔ*  
 sledge-INF come-IRR-1SG.S probably  
 ‘Why haven’t I harnessed a reindeer, I could have come by sledge.’  
 (ChND\_080719\_Evenki\_flkd.061)

Other functions mentioned in chapter 2.4.1, such as epistemic assessment, irony or sarcasm were clearly not expressed by first-person inferentials – even though the latter ones being the most frequent in first person (Aikhenvald 2004: 231). Recognizing irony and sarcasm is a rather subjective task, however, there were no signs of its presence in the examined sentences at all.

The most frequent verbs in first-person usage are semantically connected to uncontrollable actions. The stem *kuntu-* ‘fall asleep’ occurred in several occasions, but *d’üt’iʔkə-* with a similar meaning (‘dream’) emerged too. Moreover, *huəŋku-* ‘get drunk’ and *ɣanabtaa-* ‘forget’ are also such verbs that appear in the corpus very often, see examples (25), (27), (29) and (30). The frequency of these particular verbs supports the hypothesis that the main function of first-person inferential forms is expressing non-volitionality.

### 3.3.2 Second person

The occurrences of second-person inferentials are slightly more than first-person ones, but compared to the total of 818, they can also be regarded as marginal. However, the expression of evidential meaning is incomparably more prominent here than in the first person since with the exception of two sentences, all examples contained marking an inferred source type. Out of the 71 second-person inferentials, 27 referred to inferred evidence without having an additional meaning. The speaker of example (34) stated the following, most likely based on their bad physical condition and pain that was caused by the torment of the addressed, without giving any signal of surprise or other semantic contents.

- (34)    *tə*            *taharīaa*            *s'üəbtiai-ʔ*            *mənə*  
         well    now            real-ADV            I.[ACC.SG]  
         *mut'ii-baðu-ŋ*  
         torment-INFER-2SG.S  
         'You have really tormented me.'  
         (MVL\_080304\_NjomuKamleguNy\_fks.494)

Not only inference but also assumption can be a source type marked by the inferential suffix, however, with only six occurrences, it is definitely a more rarely referred source of information.

- (35)    *maa-gəl'it'ə-gəṭə*            *háagəṭə-ŋ*            *ŋanaʔsanə-ŋ*  
         what-EMPH-ABL.SG            good-2SG.S            person-2SG.S  
         *i-huāðu-ŋ*  
         be-INFER-2SG.S  
         'You are a good man.'  
         (MVL\_080304\_TwoMeryde\_flk.367)

Second person inferential suffixes are present in interrogative sentences too, in which the speaker forms a question regarding the motive of an action committed by a second person or a reason for them enduring a specific event. The 29 questions of this kind contain the speaker's earlier will to make an inference or assumption, which proved inefficient. Some of these interrogative sentences can be regarded as rhetorical questions (36), which differ from first person in a way that the question is addressed to a second person, not to the speaker themselves. However, some questions are asked with the purpose of getting an answer, hence they are not rhetorical in every case. In sentences like (37), the presence of the marker might be explained by the epistemic authority (see Bergqvist and Kittilä 2020) – however, this explanation needs further investigation.

- (36) [...] *ou komənsəj kuniʔia*  
 [...] EXCL oh how  
*ni-hiaði-riʔ tagəta nemi-miʔ*  
 NEG-INFER-2SG.S/ then mother-ACC.SG.1PL  
*suə-lu-ʔ*  
 wander-CAUS-CNG  
 ‘[...] Why haven’t you brought our mother with you?’  
 (ChND\_061025\_Haljmira\_flks.369)
- (37) *maad’a ni-hiaði-ŋ maa-t’ə-küə*  
 why NEG-INFER-2SG.S what-EMPH-EMPH.[ACC.SG]  
*miəðə-ðə-mtə ŋəðə-ʔ*  
 string.of.sledges-DST-ACC.SG.2SG find-CNG  
 ‘Why don’t you marry (find a caravan, a wife)?’  
 (ChND\_061025\_Haljmira\_flks: 351)

Sometimes, additional meanings like mirativity or sudden temper can also be present in interrogative sentences.

- (38) *tahariaa maa-ðə-nduʔ tərəd’i*  
 now what-DST-GEN.2PL such.[ACC]  
*səəna-mun-ta-ʔa muu-ʔs’i-ðə-mtiʔ*  
 silly-DRV-PTCP.PRS-AUG.[ACC] guard-AGN-DST-ACC.2PL  
*huan-huaðu-ruʔ*  
 put-INFER-2PL.S/O  
 ‘Why have you appointed such a silly guard?’  
 (KSM-ChND\_061105\_Hotarye\_fld: 067)

The pragmatic value of mirativity, often accompanied by interjections in the sentences, can be observed in 32 examples, its rate of occurrences being approximately the same as in the first person. The difference between the mirative overtone in the first and second person is the person appointed as the origin of surprise: in second person occurrences, the new or unexpected information does not come from the speaker themselves, but from the addressee. However, the one surprised is the speaker. Here, mirativity is not connected to lack of control in any way, since the speaker cannot be aware of the motives of the addressed person – meaning that non-volitionality is completely absent from the 71 sentences.

- (39) *əi* *ńüə-ʔkü-mə* *hiri-ńiaði-ŋ*  
 oh child-DIM-NOM.SG.1SG be.tall-INFER-2SG.S  
*təə* *hiri-ńiaði-ŋ*  
 that.[GEN.SG] be.tall-INFER-2SG.S  
 ‘Oh, child, how much you have grown!’  
 (MVL\_080225\_SitiChimi\_flks: 426)

In the second person, the emotional overtone of anger or sudden temper is a lot more frequent than in the first person. In most of the 21 examples, this additional content manifests jointly to mirativity as a consequence of acknowledging the new piece of information (see 38). However, it can appear on its own too: in (36), the speaker was not particularly surprised by the action of their siblings, nevertheless, they express their rage caused by the choice of the addressee by using an interjection. Further example is the sentence (40).

- (40) *mənə* *munu-suðə-m* *maa-ðə-tə*  
 I.[NOM.SG] say-FUT-1SG.S what-DST-GEN.SG.2SG  
*torəu-ta-j* *koi-biaði-ŋ*  
 be.useful-PTCP.PRS-ACC.PL leave-INFER-2SG.S  
 ‘I am going to tell her: Why did you leave useful things all over?’  
 (KES\_080721\_Lemming\_flkd.073)

Irony and sarcasm were absent in the second person usage too. Expressing the lower degree of certainty, epistemic modality was clearly not a common characteristic feature of the inferential in this person neither, however, there is one sentence that can have some kind of uncertainty associated with it. In (41), the speaker does not know the sister-in-law’s and her children’s mental capacity, and by only inferring it, the statement cannot be taken as completely sure.

- (41) *təti* *ńüə-gəi-t’ə* *tahariaa* *tahariaa*  
 that child-DU-NOM.PL.2SG now now  
*D’üəðükə-iŋ* *ńia-i-ʔkü-mə*  
 Dyuozyuka-FEM.[NOM.SG] daughter-in-law-DIM-NOM.SG.1SG  
*tahariaa* *ńia-i-ʔkü-küə-mə* *tahariaa*  
 now daughter-in-law-DIM-EMPH-NOM.SG.1SG now  
*ŋontan-ə* *hon-tiə* *i-ńuaðu-ŋ*  
 thought-EP.[ACC.SG] have-PTCP.PRS.[NOM.SG] be-INFER-2SG.S  
 Dyuozyuka, my sister-in-law – you and your children seem to be smart.  
 (MVL\_090807\_Hungabtadja\_flks.670)

The inferential marker is put on the stems *tuj-* and *tüü-*, ‘arrive’ and ‘come’ the most frequently, usually when the speaker asks the addressee about the reason of their visit – often because they feel irritated or surprised about the person’s arrival (as in 42).

- (42)    *maad’a*                      *tuj-huāðu-ŋ*                      *na-na*  
           why                      come-INFER-2SG.S                      NEAR.[LATADV]-OBL.1SG  
           ‘Why did you come here?’  
           (ChKD\_72\_ManyTents\_flks: 144).

The frequency of these verbs can be explained by non-linguistic reasons. On the one hand, the narrative and folk-genres are in majority in the corpus, which often contain the theme of wandering, making the moment of arrival very significant; on the other hand, in a place such as the sparsely inhabited tundra, the appearance of a new person can be rather unexpected or surprising. Hence, the high frequency of these verbs enhances the significance of mirativity as a function in the second person.

The also frequent *i-* ‘be’ verb can be considered a grammaticalized unit mostly working as a copula. The negative verb *n’i-* is common mostly in sentences where the speaker is surprised or upset about another person not committing to an act previously expected by the speaker, e.g. in (36).

- (43)    *meruā-ŋku-ŋ*                      *i-huāðu-ŋ*  
           quickly-DIM-2SG.S                      be-INFER-2SG.S  
           ‘You were fast.’  
           (JDH\_99\_ThreeTents\_flkd.407)

### 3.4 Results

The results of the analysis point out the dissimilarities in the functions of the inferential suffix and the frequency of meanings expressed by this category used with specific person markers as well as revealing the reason behind the disproportionate distribution of the first, second and third person occurrences in the *Nganasan Spoken Language Corpus*.

As it could be expected, the main purpose for using the first person inferential is hardly ever only to express a specific type of information source. Apart from a marginal number of exceptions with rare and very specific contexts that allow the speaker to create a felicitous utterance by marking an inferred type of source when referring to themselves, most occurrences of the inferential have some additional meaning with more significance in the context too. Being present in more than half of the sentences, lack of control or non-volitionality is the most frequent function of the first person inferential, often – but not

exclusively – appearing in such contexts and situations when the speaker is drunk or falls asleep. Unintentionality emerges on an implicit pragmatic level that is based on the process of inference or assumption. Since it is logically impossible for lack of control to be present in other than the first person, it can already be claimed that the first-person effect is present in the first-person use of the inferential category.

Non-volitionality is not the only pragmatic value added to inference or assumption: mirativity occurs with approximately the same frequency in both the first and second person. The difference between first and second person mirativity is in the source of the new piece of information: while in the second person the addressee causes the surprise, in the first person the speaker acknowledges an unexpected piece of information about themselves. Hence, in the latter case, mirativity can often be a consequence of the notion of lack of control manifested jointly by the same marker – however, mirativity cannot be considered a part of first-person effect, since it is not a function associated exclusively with first-person forms. Moreover, it proves to be the most significant function of the use of the inferential evidential in the second person.

Usually, as a consequence of newly recognized information, an emotional overtone of anger or sudden temper can connect to the marker in both, but more frequently in the second person. This meaning, that was previously not mentioned concerning Nganasan, can be mostly observed in interrogative sentences.

As it was mentioned before, marking only the information source is a marginal function of the inferential in the first person – however, it is a more common one in the second person. The evidence types of inference and assumption can be expressed, both as the sole function of the inferential marker, both in connection with other meanings. However, assumption is not mentioned in the descriptions of the Nganasan evidential system and it is a minor function compared to the source type of inference from visual evidence or result.

Both first and second person inferentials appear in interrogative sentences, gaining a different meaning than in declarative ones. In the first person, the speaker questions the previous motive of their own action or their lack of logical thinking creating rhetorical questions addressed to their own selves. In the second person, the speaker expresses their incomprehension about an action committed – or the opposite, not committed – by another person, asking them about the reason for their way of thinking, which is considered unreasonable by the speaker. The difference, again, is the person whom the question is directed at; furthermore, while in the first person the question is always rhetorical, in the second person, there are both rhetorical and information seeking ones. The reason of their appearance in the latter ones may be to mark epistemic authority. These types of sentences are often accompanied by a mirative or an emotional overtone of anger or sudden temper.



Epistemic assessment, irony and sarcasm are unrepresented in both persons with the exception of one sentence in the second person in which the epistemic can be suspected. Since the presence of irony and sarcasm is common in the first person (Aikhenvald 2004: 231), their absence was rather unexpected as such overtones are mentioned as a function of the inferential category in Nganasan by Gusev (2007) and Wagner-Nagy (2019).

Even though the genre of the texts proved to have a significant impact on the number of possible contexts for the use of the inferential in the first and second person, the results of the analysis confirmed the initial hypothesis of the paper. The disproportionately low number of first and second person occurrences cannot be explained only by the general multitude of third person evidentials, but also by the functional differences observed in their use. In the first person, Curnow's ideas (2002) turned out to be correct, hence the presence of the expected first-person effect in the form of lack of control influences the frequency of inferential suffixes. Even though there is no specific function that would only be typical to second-person inferentials, the pragmatic value of mirativity proved more frequent than marking a source – therefore, a slight dissimilarity in functions can also be mentioned in the joint use with of the inferential evidential and the second person.

The analysis showed that marking the source of information is a function primarily observed in the third person since first and second person forms express other meanings as well. Connotations that are absent in the first and second person, such as epistemic modality, irony and sarcasm, can be the function of the inferential in the third person – however, since the research did not focus on this person specifically, a detailed description of its characteristics is beyond the scope of this paper.

To resume, even though the inferential suffix can be used to express the inferred source types – both inference and assumption – in Nganasan, most of the contexts do not require them for their evidential meaning in the first, and often in the second person either. Next to the characteristics of the genre of the texts and to the felicitous semantic contexts for each person, functional differences also play a part in the unequal frequency of occurrences.

#### 4 Conclusion

Numerous researchers are working on describing evidentiality more precisely and in more detail. Despite all the uncertainties and contradictions still present in the literature, the topic is continuously getting more and more explored. The significance of exploring the grammatical marking of information source in the context of the Samoyedic languages is not only for the better explanation of a less known linguistic phenomenon based on typologically peculiar languages

but also for gaining knowledge about these endangered languages in discourse as well as possible based on the linguistic data we currently have.

This paper was written for these purposes. Since the dissimilarities in functions in the joint use of the inferential category and specific person markers had not been explained coherently, this proved to be a topic worth examining with the motivation of expanding our current knowledge about evidentiality. Studying Nganasan showed that there are still plenty more details to discover. Besides its scientific results, this paper had the intention to set an example by showing how to work with languages that are less documented and are on the edge of disappearing.

The initial hypothesis of this paper proved true. In the first-person use, there were differences in function demonstrating the presence of the first-person effect. Even though there was no exclusively second person function, it was clear that the main reason for its use is usually not to express evidential meanings. During the research, I tried to find the functions that were mentioned in the previous literature, and succeeded to find out which ones are and which ones are not typical for the first and second person use, and which ones are more probable to be functions of the third person usage. In addition, some previously not mentioned meanings were found. All in all, all initial questions were answered in the process of the research.

## Abbreviations

1	first	DRV	derivational suffix
2	second	DU	dual
3	third	EMPH	emphasis
A	transitive subject function	EP	epenthetic
ABL	ablative	EXCL	exclamatory
ACC	accusative	FEM	feminine
ADJ	adjective	FUT	future
ADV	adverb	GEN	genitive
AGN	nomen agentis	IMM.PAST	immediate past
AOR	aorist	INF	infinitive
AUD	auditive	INFER	inferential
AUX	auxiliary	INT	interjection
CAUS	causative	INTR	intransitive
CNG	connegative	IRR	irrealis
CONJ	conjunct person-marking	ITER	iterative
COP	copula	LAT	lative
DECL	declarative	LIM	limitative
DIM	diminutive	LOC	locative
DISJ	disjunct person-marking	MASC	masculine
DST	destinative	MIR	mirativity

NAR	narrative	PL	plural
NF	non-final marker	POSS	possessive
NOM	nominative	PRES	present
NON-	non firsthand	PTCP	participle
FIRSTH			
O	transitive object function	R	reflexive
OBL	oblique	REP	reportative
OP	optative	S	(intransitive) subject function
P	person	SG	singular
PASS	passive	SPEC	speculative
PAST	past	T	temporal
PERF	perfect	TRL	translative

## References

- Aikhenvald, Alexandra 2004: *Evidentiality*. Oxford: Oxford University Press.
- Aikhenvald, Alexandra 2012: The essence of mirativity. *Linguistic Typology* 16/3, 435–485.
- Aikhenvald, Alexandra 2018: Evidentiality: The Framework. In Aikhenvald, Alexandra (ed.): *The Oxford Handbook of Evidentiality*. Oxford: Oxford University Press, 1–36.
- Bergqvist, Henrik & Seppo Kittilä (eds.) 2020: *Evidentiality, egophoricity, and engagement (Studies in Diversity Linguistics 30)*. Berlin: Language Science Press.
- Brugman, Claudia – Macaulay, Monica 2015: Characterizing evidentiality. *Linguistic Tipology* 19/2, 201–37.
- Brykina, Maria – Gusev, Valentin – Szeverényi, Sándor – Wagner-Nagy, Beáta 2018: *Nganasan Spoken Language Corpus (NSLC)*. Archived in Hamburger Zentrum für Sprachkorpora. Version 0.2 [http://hdl.handle.net/11022/0000-0007-C6F2-8 2022.06.18].
- Curnow, Timothy J. 2001: Evidentiality and Me: The Interaction of Evidentials. *Proceedings of the 2001 Conference of the Australian Linguistic*. [http://www.als.asn.au/proceedings/als2001/curnow.pdf]
- Curnow, Timothy J. 2002: Types of Interaction between Evidentials and First-Person Subjects. *Anthropological Linguistics* 44/2, 178–196.
- Curnow, Timothy J. 2003: Nonvolitionality expressed through evidentials. *Studies in Language* 27, 39–60.
- Faller, Martina 2002: *Semantics and pragmatics of evidentials in Cuzco Quechua*. Stanford: Stanford University doctoral dissertation.
- Givón, Thomas 2001: *Syntax: An introduction* Vol I. Amsterdam: Benjamins.

- Gusev 2006 = Гусев, Валентин 2006: О сохранении архаичных форм в неассертивных контекстах: материал самодийских языков. In: Проблемы типологии и общей лингвистики: международная конференция посвященная 100-летию со дня рождения проф. А.А. Холодовича. Санкт-Петербург: Нестор-История, 41–45.
- Gusev, Valentin 2007 = Гусев Валентин 2007: Эвиденциальность в нганасанском языке. In Храковский, Виктор (ред.): Эвиденциальность в языках Европы и Азии. Сборник статей памяти Наталии Андреевны Козинцевой. Санкт Петербург: Наука, 415–444.
- Hassler, Gerda 2002: Evidentiality and reported speech in Romance languages. In Güldemann, Tom – Manfred von Roncador (eds.): *Reported Discourse. A meeting ground for different linguistic domains*. Amsterdam: John Benjamins Publishing Company, 143–172.
- Hoff, Berend 1986: Evidentiality in Carib. *Lingua* 69, 49–103.
- Kubitsch, Rebeka 2019: Az evidencialitás és az első személy kapcsolata az udmurt nyelvben. *Nyelvtudományi Közlemények* 115, 85–108.
- Lazard, Gilbert 2001: On the grammaticalization of evidentiality. *Journal of Pragmatics* 33, 359–367.
- Nikolaeva, Irina 2014: *A Grammar of Tundra Nenets*. Berlin: De Gruyter Mouton.
- Plungian, Vladimir 2010: Types of verbal evidentiality marking: An overview. In Diwald, Gabriel – Smirnova, Elena (eds.): *Linguistic realization of evidentiality in European languages*. Berlin: Mouton de Gruyter, 15–58.
- Rooryck, Johan 2001: Evidentiality Part I. *Glott International* 5, 125–133.
- Rosstat 2020. *Всероссийская перепись населения 2020 года* [[https://rosstat.gov.ru/vpn\\_popul](https://rosstat.gov.ru/vpn_popul)]
- San Roque, Lila 2008: *An introduction to Duna grammar*. Canberra: Australian National University doctoral dissertation.
- San Roque, Lila – Floyd, Simeon – Norcliffe, Elisabeth 2017: Evidentiality and interrogativity. *Lingua* 186–187, 120–143.
- Speas, Peggy 2010: Evidentials as generalized functional heads. In Di Sciullo, Anna Maria – Hill, Virginia (eds.): *Edges, heads, and projections: Interface properties*. Amsterdam: John Benjamins Publishing Company, 127–150.
- Skribnik, Elena – Kehayov, Petar 2018: Uralic Languages. In Aikhenvald, Alexandra (ed.): *The Oxford Handbook of Evidentiality*. Oxford: Oxford University Press, 525–553.
- Sun, Jackson T.-S. 2018: Evidentials and person, in Alexandra Aikhenvald (ed.): *The Oxford handbook of evidentiality*. Oxford: Oxford University Press, 47–63.
- Verhees, Samira 2019: Defining Evidentiality. *Voprosy Jazykoznanija* 6, 113–133.

- Wagner-Nagy, Beáta (ed.) 2002: *Chresthomathia Nganasanica*. Szeged – Budapest: SUA Supplementum 10. SZTE Finnugor Tanszék – MTA Nyelvtudományi Intézet.
- Wagner-Nagy, Beáta – Szeverényi, Sándor – Gusev, Valentin 2018: *User's Guide to Nganasan Spoken Language Corpus*. WPCL 1. Szeged – Hamburg [<https://ojs.bibl.u-szeged.hu/index.php/wpcl/issue/view/810> 2022.06.18.].
- Wagner-Nagy, Beáta 2019: *A Grammar of Nganasan*. Leiden: Brill.
- Willett, Thomas 1988: A cross-linguistic survey of the grammaticization of evidentiality. *Studies in Language* 12, 51–97.

**Kitti Vojter**

University of Szeged, Department of Finno-ugrian Philology, Faculty of Humanities and Social Sciences, Egyetem u. 2, 6722 Szeged, Hungary  
E-Mail: [vojter.kitti@gmail.com](mailto:vojter.kitti@gmail.com)