An account of recent research on Nara: tone, plural and texts

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ABSTRACT

The present short paper gives an account of some findings on the Eritrean and Sudanese Nilo-saharan language Nara. The context is a recent four week long research conducted by the writer, partially in collaboration with Prof. Giancarlo Schirru, with two Nara speakers in Addis Ababa. The paper focusses on tone marking, plural formation and documentation. The data are preceded by some basic information on Nara and an overview of past research on the language.

Keywords: Nara, linguistic fieldwork, tone, plural

ISO 639-3 code: nrb

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1. Basic info on Nara

Nara is a Northern East Sudanic language, like other Nilo-saharan language subgroups such as Nubian, Tama and Nyimang. Its ISO code is nrb. It is spoken by about 100,000 (99,800 according to *Ethnologue* (Eberhard *et al.*, 2020) mainly in Eritrea, in the area of Barentu, and in Sudan, in Kassala. A diaspora exists in town. There are four Nara dialects: Higir, Koyta, Mogoreeb (or Mogoraayeeb) and Saantoorta ("three tents").

According to Thompson (1976b: 599):

There is considerable dialect difference among these sections of the tribe and even striking differences within each section from village to village. They can all communicate in direct conversation, but have considerable difficulty in overhearing people of other sections talking among themselves. The differences involve both vocabulary and grammar.

In Sudan, where Mogoreeb is spoken, the Nara are known by the older name $B\bar{a}ry\bar{a}$ or al- $B\bar{a}ry\bar{a}$ (الباريا). Barya (חכץ, Baria, Barea) occurs as an ethnic name in inscriptions of king 'Ezana, who ruled in the 4th century in Aksum. In Eritrea this name has been replaced by Nara in order to avoid the derogatory meaning "slave", "one who is in service of a demon", which barya has acquired in Ethiosemitic languages such as Ge'ez, Amharic, Tigre and Tigrinya. This development of the old name is probably due to the fact that the Nara-speaking communities were frequently raided for capturing slaves. Speakers of Nara link their self designation with nara 'sky, cloud'.

The language is commonly used in the Nara communities at home and for everyday communication, and it is transmitted to children. However, also Arabic and Tigre are widely used for intercommunication, and most literate Naras use Arabic as a written language. The diaspora in Arabic speaking countries like Sudan tends to use Arabic more and more, and also in the Nara-speaking areas in Eritrea Arabic is felt to be spreading.

Since 1988, a written form of Nara has been developed in Eritrea for schoolbooks and other publications addressed to the Nara-speaking community. It has a Roman orthography, and is based on Higir Nara, with a few items from other dialects.

2. Previous research on Nara

The first data on Nara were published by Reinisch (1874), who edited field notes by Werner Munzinger. The dialect of Nara described in Reinisch (1874) has still to be identified in full detail, but it appears to differ both from Higir and from Mogoreeb as they are spoken today. Thompson (1976) is a brief, 10-page, description of the Higir of Mogolo, one of the main Nara towns. The language in his article is called Nera, with e translitterating the first order of the Fidel script. The first topic it touches upon is phonology, which besides description of consonantal and vocalic inventories and syllables has two notes, one on stress and one on tone. About tone it is simply stated that there is a "normal" and a "high" tone (Thompson 1976: 484). What is called stress is rather tone in later descriptions by other authors. In terms of nominal morphology, there are a few lines of description for nouns, adjectives, pronouns, demonstratives and postpositions. As for verbal morphology, the description starts from the imperative and the jussive to aspect, tense and mood. Irregular and compound verbs close this section on verbal inflection. Verbs, however, are also treated in the section on verbal derivation. This includes also the formation of verbal nouns and adjectives. The article ends with a short section on word order and a few lines on the lexicon.

Hayward's and Dawd Abushush's studies all focus on Higir Nara. Abushush 1999 is probably the best account of Higir presently available. In 22 pages the author describes briefly the phonology of the language, stating that what Thompson described as stress it is actually tone. The overview continues with nouns, and their plural classes determined by suffixes and verbs with a number of paradigms, which are preceded by an explanation of phonological processes. The paper ends with a list of adjectives and examples of derivation. Abushush (no date) is a short, six-page paper which contains examples of the role of tone in some grammatical context. Hayward (2000, 23 pages) and Abushush and Hayward (2002, six pages) have roughly the same content. After discussing the inventory of Nara consonants and vowels, the papers go into details into the tone system of Higir. It is restated that there are two tones H and L but that some of the words have falling tones on short vowels, such as $b\hat{u}k$ "dove". It is also determined that no HLH sequence is allowed in the language and that a sandhi phenomena adjusts the situation when needed. Abushush and Hayward (2002), moreover, focus on the difference of vowel realisations in closed and open syllables.

Elsadig (2016) is the best account available of Mogoreeb Nara and Nara in general. It is a 76-page unpublished MA thesis which touches upon the phonology, the nominal morphology, the verbal morphology and the adjectives of Mogoreeb. It is the first work that shows the distribution of consonants and vowels in Nara. The section on tone, however, is quite short (only four pages) and shows examples of lexical and grammatical tone. The section on plural marking on nouns is quite rich, but no tones are marked.

Banti and Savà (2021) reports the achievement of other authors on Nara phonology based on Higir data collected by Giorgio Banti. The paper goes in deeper discussion of consonantal distribution and syllable structure.

In terms of lexicon, besides Reinisch's *Wörtenbuch* in his 1874 publication, Rilly (2010) has a comparative lexicon of the North East Sudanic languages to which Nara belongs. There is an indication of the dialect each Nara word comes from. The aim of

Rilly's book is to demonstrate that Meroitic is part of this group and, therefore, Nara and Meroitic would be historically connected to each other.

Savà (2018) mentions lexical research on Higir with data collected by Giorgio Banti which generated an unpublished wordlist of about 900 items.

The main sources on the history and social organisation of the Nara are Munzinger (1864: 373-536), Pollera (1913), and Conti Rossini (1916: 741-802). For more recent sociolinguistic, historical, and anthropological information, see Thompson (1975b: 598 f.), Treiber (2007), and Issa (2018).

2.1. Documentation

The only published texts for scientific aims are in Reinisch (1874). More volumes have been and are being published for pedagogical reasons and on other various topic by the Eritrean Ministry of Education.

In 2023 the present writer collected two texts from the Koyta speaker Issa Adem. The texts, of twenty minutes each, were translated and in a second phase, see next section, were transcribed by another speaker (see below). The next section also mentions the collection of two more texts in 2024.

3. My recent research

In Addis Ababa live two Naras, whose identity and names I do not reveal for privacy reasons. I will refer them as O. cand A. whenever needed. It is with them that I conducted my fieldwork for four weeks in December 2023-January 2024. I normally have been preferring to do data collection in the place where the language is spoken. However, in this case, for logistic, organisational and safety reasons this was not possible. Doing fieldwork in Nara locations in Eritrea is complicated if one has only four weeks to complete it, and in Sudan military actions are going on. Thanks to contacts established for me in Addis Ababa, by Moreno Vergari, Ethnorêma's director, to whom I wish to express my gratitude, I found the proper conditions to do my job on Nara in the Ethiopian capital, which I know very well. In particular, Vergari put me in contact with the two Nara speakers I worked with.

The working language was English and Amharic, the main language of Ethiopia (Savà 2023). O. was better in these languages than A., but A. had a better sense of linguistics analysis. It is important to notice that A. is a Koyta mother tongue speaker, though his mother is Kunama, a nearby ethnic group speaking another Nilo-saharan language. O.'s mother tongue is Mogoreeb. Most of my data, therefore, are Koyta, which is good as this Nara dialect, together with Saantoorta, is the least studied. The two consultants speak Tigrinya to each other because they feel too many divergences between the two Nara dialects they speak.

Logistically, I lived in a guesthouse, furnished with a common living room in which the consultants and me could work. O. and A. were employed as translators in Nara and this fact took time away from our interviews. In order to negotiate their availability, I talked to their supervisor Mr. Mohammed, who is not a Nara mother tongue speaker. I also had to skip working in festivities such as Ethiopian Christmas and Epiphany.

Mr. Mohammed profited a lot by attending our fieldwork sessions, as he came to understand more about the tone system of Nara and the necessity to mark tone in the translation.

The research was part of a three-year postdoctoral project for the creation of a textual database in Nara at the University of Naples l'Orientale. The University provided me not only funds for the research but also the necessary recording tools and a Macbook¹. In detail, the recording equipment I had at my disposal for the research is:

- 1 MacBook Pro 13"
- 1 Marantz digital recorder PD661MKII
- 1 Zoom digital recorder H4n Pro
- 1 Zoom digital recorder H1n
- 1 Rode binaural microphone NT4
- 1 Rode omni microphone Reporter
- 1 Shure headset microphone
- 2 Quiklok microphone small tripod
- 1 Sennheiser headphone HD 206
- 1 Sennheiser headphone HD 65 TV

Out of these I used mainly the Marantz recorder and the Rode NT5 microphone. When I interviewed both speakers, I used the Rode omni Reporter microphone.

3.1. Data collection

To start with, in order to get a grasp on the phonemes of Nara and their realisation(s), I had a look with my consultants at didactic texts produced by the Eritrean Ministry of Culture to promote the language. They are written in Nara standard orthography, as already stated. I acknowledge Giorgio Banti for providing me with some samples. We went through words, paying close attention to tones and plural forms, but without recording to make the consultant comfortable with the new kind of work that they were going to do. I took particular note of tonal minimal pairs such as (the transcription here and in the following is in Nara orthography):

làá	spear	<i>làà</i>	necklace
túsá	urine	tùsà	ears
kábá	kind of disease	kàbà	tree species
súm	poison	sùm	grass
káásà	shadow	kààsá	forest
nóótá	meat	nóótà	eyes
dààtá	six	dààtà	place for gathering crops
féétà	moon	fèètá	mice
káttà	ax	káttá	sisters
bállá	legs	bállà	leg
báná	language	bànà	speech
ásmá	cholostrum	àsmà	heart
tíí	child	tìì	bee

Eventually I asked A. to record all the words in singular and plural.

I went back to nouns later, because it was time to record texts, a real documentation activity. I asked A. to produce oral narrations of any kind he felt comfortable with. He

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¹ For this, I wish to express my deepest gratitude to Alessandra Gallo, head secretary of the Department of Asian, African and Mediterranean Studies, and Prof. Giancarlo Schirru, responsible for my research.

asked to think about it overnight. The day after he provided me with a very first complete text of about ten minutes on family love, followed by a five-minute long joke. We have immediately started transcription and translation of the first two minutes. A. revealed to be really great also at this job.

For text transcription and translation, I used PRAAT, a speech analysis tool developed by computational linguists and phoneticians at the University of Amsterdam. PRAAT allows time-aligned transcripts and translation contained in tiers with the support of various kinds of sound analysis such as wave forms, intensity, pitch and formants. This will greatly assist my phonetic transcription, but for that moment I used it for the orthographic transcription and the translation. At a certain point I asked A. to use PRAAT to do the job on his own. He did it wonderfully. The same occured when he elaborated a text I had recorded in Naples with Issa Adem. It is a personal story about, something funny but also slightly dramatic that happened to him in his youth. Issa's story was translated, therefore A. did only the transcription. It is 15 minutes long.

When we finished with the texts, we continued with identifying tones of nouns. I still had some uncertainty with some words, so I decided to write the words, classifying them according to their syllable structure. Here are some examples (notice that the character $\langle v \rangle$ indicates the phoneme $/\eta/$ in Nara orthography):

CVV		CVVC		CVCV		(C)VVCV	
dùù	sheep	sàày	summer	hárà	warthog	èèshí	hut
tíí	child	fáás	ax	wòsò	snake	tààfó	tukan
làá	spear	gàán	bowl			wáárí	egg
						sóórà	tree sp.

CVCCV	
sóllò	scorpion
lávvá	louse
ndàrtí	mat

In the last week of my stay I was joined by the research convenor Prof. Giancarlo Schirru. We worked together on plural formation, while he worked alone on personal pronouns, with particular attention to the first person plural inclusive and exclusive.

As for the plurals, we checked the lists found in Elsadig (2016), marking tones and plural formation differences. Our main collaborator was O., the Mogoreeb speaker, as, as already stated, this is the dialect described by Elsadig.

Nara has plural forms that can be organised into classes distinguished by suffixes. Elsadig (2016) identifies the following suffixes: -a, -ta, -ka, (C)-Ca, -la, (t)-ta, (k)-ka, (n)-na. There are also the following replacive phenomena: i-/-a, -e/-ta, -e/-ka, -o/-ta. Elsadig does not mark tones.

Going through the pluralised nouns, we found out several differences in plural formation as compared to Elsadig (2016). For example:

	Elsadig	O.	
dòvgòr	dòvgòrà	dòvgòrná	sister
kodóór	kodóóra	kòdóórná	hyena
tús	túsá	tússà	ear
túl	túlá	túllà	cheek
fàrà	fàràtà	fààràttà	horse

dùù	dùùtà	dùùttà	sheep
nòssál	nòssálà	nòssálkà	face
dàbál	dàbállà	dàbálkà	leather sack
bòò	bòòkkà	bòòttá	kind of tree
jàmmù	jàmmúkkà	jàmmúttà	cat
sèrèmé	sèrèmká	sèrrèmmèttá/sèrèmtá	gazelle
hàìmé	hàìmká	hàìmettá	deer
tóórò	tóórtà	tóórà	veranda (Arabic)

3.2. Post-fieldwork activity

In a post-fielddwork period I created a database of the material collected together with relevant metadata. The metadata entries in the table are structured in the following way:

ID	sound file	Nara orthography	phonetic form	English gloss
2024_01_22_NRB_lex	_27 1099.wav	kavvi	[kaŋ:i]	termite

Each identifier shows the date of the recording first, then the Nara iso-code, the kind of data ("lexeme" in the example) and a serial number for the *lex* category. The second column hosts the raw audio file names assigned by the recorder. Then, there is the utterance in Nara orthography followed by the IPA transcription. Finally, the gloss in English.

As for the texts, I have exported them from PRAAT into ELAN. This is a tool developed at the Max Planck Institute initially for the study of sign languages, but that is nowadays widely used for glossing. The text in this case, as in PRAAT, is timealigned, with tiers containing various grammatical annotation, such as morphological glosses and an indication of part of speech. In particular, I will make use of a special version of ELAN, ELAN-Corpa, created and maintained at the French CNRS research laboratory LLACAN by Christian Chanard and his collaborators. This version of ELAN allows semi-automatic glossing. In short, one associates a lexeme or a morpheme to a gloss on first occurrence and this automatically appears when the lexeme or the morpheme occurs again. This is valid for all the tiers and has the result of creating a grammatical glossary. It is a fantastic tool that allows saving a lot of time in a quite tedious operation. The glossary can be exported to other tools for the creation of a proper dictionary. These are FLEx (Fieldwork Language Explorer) and WeSay. Both software tools were created by SIL and run only on Windows (PRAAT and ELAN have versions for MacOS, Windows and Linux). In order to create a comfortable interface, I plan to install an emulator in my Mac so that I have one machine with two virtual machines, one with MacOS and one with Windows.

Another tool for sound editing is Audacity, an intuitive software widely used by linguists.

All mentioned software is freely downloadable and we have to be grateful to creators and developers, as well as those who provide funds, to make them available to everyone. I, myself, have contributed to spreading their use when I was teaching how to use them in courses at Addis Ababa University in 2008-2010, with great profit for my students.

4. Conclusions

This brief description of my research on Nara is not to be taken as an exhaustive analytic account. In fact, there is a lot to do in the analysis of the data and of the texts, in particular. Therefore, the paper is rather an example of how field research can be properly organised to improve our knowledge on a little-known language such as Nara. The friendly environment of the research was crucial for its success and for this I am deeply grateful to O. and A. The research could not have been organised also without the collaboration of Moreno Vergari and my host Yemamu Ahmed, to whom I am indebted.

References

- BANTI, Giorgio, and Graziano SAVÀ (2021) "Nara phonology", *Rassegna di Studi Etiopici*, 5 (third series): 235-268.
- CONTI ROSSINI, Carlo (1916) *Principi di diritto consuetudinario dell'Eritrea*. Rome: Ministero delle Colonie.
- DAWD, Abushush (no date) Effectiveness of tone in Nara. Asmara: unpublished ms.
- DAWD, Abushush (1999) *A brief essay on the phonology and morphology of the Nara language*. London, SOAS: unpublished ms.
- DAWD Abushush, and Richard HAYWARD (2002) *Nara, Journal of the International Phonetic Association* 32:2: 249-255.
- EBARHARD, David M., Gary F. SIMONS, and Charles D. FENNIG (eds.) (2020) *Ethnologue: languages of the world, 23rd edition.* Dallas: SIL International. [Online version: http://www.ethnologue.com].
- ELSADIG, Omda Ibrahim Elnur (2016) *Major word categories in Nara.* Cologne: University of Cologne. Unpublished MA dissertation.
- HAYWARD, Richard J. (2000) "Observations on tone in the Higir dialect of Nara". In VOSSEN, Reiner, A. MIETZNER, and A. MEISSNER (eds.), *Mehr als nur Worte... Afrikanistische Beiträge zum 65. Geburtstag von Franz Rottland.* Pp. 247-267. Cologne: Rüdiger Köppe Verlag.
- ISSA, Adem (2018) *The Nara culture: continuity & change A case study on rituals & means of livelihood.* Riga: Lambert Academic Publishing.
- KIEVIT, Dirk (2007) "Nara". In UHLIG, Siegbert (ed.), *Encyclopaedia aethiopica, Vol. 3 (He-N)*. Pp. 247-267. Wiesbaden: Harrassowitz Verlag.
- MUNZINGER, Werner (1864) *Ostafrikanische Studien*. Schaffhausen: Fr. Hurtersche Buchhandlung.
- POLLERA, Alberto (1913) I Baria e i Cunama. Rome: Reale Società Geografica.
- REINISCH, Leo (ed.) (1874) Die Barea-Sprache Grammatik, Text und Wörterbuch nach den handschriftlichen Materialien von Werner Munzinger Pascha. Wien: Wilhelm Braumüller.
- RILLY, Claude (2005) "Classification of Nara language in Eritrea". *Journal of Eritrean Studies* 4/1-2: 1-27.
- RILLY, Claude (2010) *Le méroitique et sa famille linguistique*. Louvain and Paris: Peeters.

- SAVÀ, Graziano (2018) "The Nara project: achievement and perspectives". *Rassegna di Studi Etiopici* 2 (third series): 145-156.
- SAVÀ, Graziano (2023) *Grammatica introduttiva della lingua amarica*. Naples, UniorPress.
- THOMPSON, E. David (1976a) "Nera". In BENDER, M. Lionel (ed.), *The non-Semitic languages of Ethiopia*. Pp. 484-494. East Lansing and Carbondale: African Studies Center of the Michigan State University and Southern Illinois University.
- THOMPSON, E. David (1976b) "Languages of northern Eritrea". In BENDER, M. Lionel (ed.), *The non-Semitic languages of Ethiopia*. Pp. 597-603. East Lansing and Carbondale, African Studies Center of the Michigan State University and Southern Illinois University.
- TREIBER, Magnus (2007) "Nara". In UHLIG, Siegbert (ed.) *Encyclopaedia aethiopica, Vol. 3 (He-N).* Pp. 1144a-1147a. Wiesbaden: Harrassowitz Verlag.