

Juha Janhunen, *Glottal Stop in Nenets*, Helsinki 1986

(MSFOu 196). 202 p.

In the doctoral dissertation under review Juha Janhunen, previously renowned mostly for his comparative «Samojedischer Wortschatz» (1977) and two important surveys of the Uralic proto-language (JSFOu 77; FUF XLIV), demonstrates his masterly skills in the technique of synchronic investigation. The study, centered around the glottal stop alternations and related phenomena, but actually covering the whole vast scope of Tundra Nenets (standard + partly also dialectal) morphophonemics, is based upon two main principles of generative phonology: differentiation between deep and surface phonological levels and adoption of the concept of markedness in rewriting (generative) rules. This approach results in a description which not only lists the complicated facts of Nenets morphophonemics (much more precisely than any other source) but also for the first time explains them, convincingly and uniformly, as results of natural phonetic processes. When reading a canonical treatise of Nenets we may only notice and try to remember that, e.g. the genitive *jaw'* 'of sea' differs from the nominative *jam'* through the alternation of the root consonant (which can hardly be identified with the supposed addition of the genitive marker ' < \*n). An attentive reader of J. Janhunen's new book will not be puzzled about such irregularities any more: the generative rules form unambiguous links between the deep level phonemic representations /jam/ (Nom.), /jam-n/ (Gen.) and their surface level realizations *jam'*, *jaw'*.

It is not easy for the reviewer to accept the rules of the linguistic game which — as it seems — the author plays so ingeniously throughout his book (with the exception of the third chapter, devoted to diachronic correlations). The maxim of this game is: let us imagine we have forgotten everything we know (or believe to know) about the history of Nenets, and let us consider only the current state of the language. Thus, while the deep level shapes of Nenets word forms (pp. 172—178) mostly coincide with the Common Samoyed (CS) reconstructions for the

corresponding forms (Janhunen 1980: 76—79), and the ordered sequence of generative rules (pp. 179—180) is reminiscent of the set of diachronic rules needed to produce Tundra Nenets forms from their CS sources (Janhunen 1980: 58—70; cf. also Janurik 1982; Хелимский 1984 and other current research on Samoyed phonetic history), the author keeps silence about the comparative considerations which substantiate his solutions. It is peculiar that, when discussing the possibility that consonantal palatalness might actually be a secondary reflection of an analogous correlation primarily characteristic of vowels (p. 145), J. Janhunen would refer to T.-R. Viitso's synchronic analysis of Nenets phonology (Вийтсо 1973 : 60), but not to his own paper where he demonstrated the development of CS \*tā : \*tā into Nen. *ta* : *t'a* etc. (Janhunen 1975—1976, cf. Sammallahti 1975).

This «puristic» approach to synchrony is valuable insofar as it stimulates the search for minute systemic details (which could otherwise miss our attention) and, at the far end, proves once more the parallelism between a (good) generative analysis and a (good) historical and comparative study. It also shows that «Tundra Nenets is a language which offers exceptionally good possibilities for a strictly material-oriented approach to phonological analysis» (pp. 3—4), so that it is fully conceivable that J. Janhunen's early attempts at a deep level treatment of Nenets grammar (1973—1974) contributed much to his later excellent work on CS reconstruction. On the other hand, the «puristic» restrictions make many ideas expressed in the monograph sound less persuasive than they actually are. Perhaps the insertion of a word-final deep level vowel into /xānā/ 'sledge' (the surface level shape is *xān*) will seem to a potential «ignorant» reader to be only one of the possibilities to account for the morphophonemic behaviour of this stem, but this technical device finds its ultimate proof in the correspondences from related languages (cf. En. *kodo*, Ngan. *kāntā*, Selk. *qančā*). When on pp. 94—95 the author discusses the

rule which transforms the sequence /*ntV*/ into /*nnV*/ (and, further, into /*nV*/), he mentions the existence of sequences contradictory to the process and gives a hint that they should be treated as containing the deep level sequence /*ɲtV*/. This unexpected and unsupported claim looks like «*deus ex machina*». Wouldn't it be more appropriate and more honest to refer to the diachronic data which clearly show that CS \**nt* > Nen. *n*, but CS \**ɲt* > Nen. *nd* (cf. Selk. *ɲntə* 'archer's bow' ~ Nen. *ɲin*, but Selk. *ɲɲtə* 'sharp edge' ~ Nen. *ɲand*)?

When discussing the rivalry of phonological theories, J. Janhunen remarks that «in the long run, a constructive synthesis has been inevitably sought» (p. 27). I am sure that the same can be said about the notorious dichotomy of synchrony vs. diachrony. The proper understanding of the structure of a language is either impossible or extremely difficult without an insight into its history — and the book under review certainly does not prove the opposite. The book is a success just because J. Janhunen, playing his game, only pretended to ignore the Nenets phonetic history — actually he failed to forget it... But I would not recommend anybody less competent in the history of the language under study to follow this example and play games with deep level morphophonemic descriptions. For a linguist it is almost as bad as for a medicine man to treat a patient without paying attention to his anamnesis.

So much for the dubious rules of the game: the game — the study itself — is of greater interest. The introductory first chapter (pp. 7—25) is mostly devoted to the history of «glottal stop controversy» in Nenets studies. M. A. Castrén was the first to describe the glottal stop («Aspiration») in Nenets and to introduce the graphic conventionality of distinguishing two types of glottal stops, depending on whether they alternate paradigmatically with obstruents (as in *ji*, *jid* 'water') or with nasals (as *ši*, *šin* 'lid'). Many works on Nenets use the concept of a single glottal stop with different (lexically determined) patterns of morphophonemic behaviour. However, since 1955 N. M. Tereščenko, the leading Soviet authority on Nenets, claims that the two glottal stops

differ not only in their morphophonemics, but also phonetically, one of them being «non-nasalized» («oral», «voiceless») and the other «nasalized» («nasal», «voiced»). This view is contradicted by many trained phoneticians on the basis of field materials (beginning with T. Lehtisalo and ending with the writer himself), who were able to discern in the pronunciation of native speakers only one glottal stop sound. But J. Janhunen, who had an opportunity to interview Tereščenko, confirms that in her articulation she makes efforts to distinguish the two glottal stops, releasing one of them through the nose. «The problem is, however, that the two segments can hardly, even with the most vivid imagination, be said to show any perceivable auditive difference. Summarizing the historical survey of the available material on Nenets, it can be stated that there are two forms of the language: one with a single glottal stop sound, and the other with two articulatorily — but not necessarily auditive — different glottal stops... The latter is reliably known only from the speech of a single non-native informant, Tereščenko herself... There are good reasons to regard the presence of a single glottal stop as the normal situation in native Nenets» (p. 23). In his comments on Standard Nenets orthography J. Janhunen agrees that the use of different symbols for «non-nasalized» and «nasalized» glottal stops ('' and ') may be didactically justified in normative sources (dictionaries, textbooks for higher education) as long as it is grammatically informative. But in common practice of writing it only creates unnecessary and often insurmountable difficulties and should be disregarded. (Cf. similar views expressed in Селицкая 1981 and — with reference to Enets — in Глухий, Сорокина 1985.)

While J. Janhunen's results leave little doubt that the presumed «nasalized» quality of some glottal stops is an illusion, it is important to note that certain word-pairs, differing in the standard orthography only with the symbols '' vs. ', actually do differ in their pronunciation, at least in some Tundra Nenets dialects. A good example from T. Lehtisalo's materials is cited on p. 125: *ɲōB'ʔ* (= *ɲōb''*) 'one', but *ɲōBʔ''* (= *ɲōb'*) 'at once'. Certainly, the distinction lies not in the quality of the

glottal stops but in the fact that the latter form preserves a trace of the vowel which once stood before the glottal stop (in the first form preserves a trace of the vowel which assumed that a similar distinction may exist between such forms that in the standard orthography are homographs or exhibit the opposite distribution of ' and ', e.g. [t̥r̥ʲ] (= *t̥r̥p*) 'hair' (Nom. Sg.), but [t̥r̥ʲʲ] (= *t̥r̥pʲ*) (Nom. Pl.) and [t̥r̥ʲʲ] (= *t̥r̥pʲ*) (Gen. Sg.).

The second chapter, «Glottal stop phonology» (pp. 26—148), demonstrates that the above mentioned controversy («One glottal stop or two?») lacks morphophonemic adequacy: it is necessary to distinguish three types of the word-final glottal stop, with a number of subtypes within them. The «derived non-nasalizable glottal stop» (morphophonemic symbol: <sup>9</sup>) approximately corresponds to the orthographic ' ; it is derived from the deep level stem-final /t/ or /s/ and, depending on its origin and on the quality of the following deep level segment, alternates paradigmatically with *d* (*d'*) or *s* (*s'*) and zero. The «derived nasalizable glottal stop» (<sup>n</sup>) approximately corresponds to the orthographic ' ; it is derived from deep level stem-final nasals and alternates paradigmatically with *n*, *ŋ*, *j* and zero. Besides, there exists the «added glottal stop» (<sup>o</sup>) which occurs word-finally after the deep level stem-final /m/, /r/, /l/ and /p/ and in N. M. Tereščenko's orthographic system is marked with ' (*ям'* 'sea') or '' (*цеп''* 'matter', *нэхол''* 'dirt', *һод''* 'one'); paradigmatically it alternates only with zero.

The book contains also an elaborated and irreproachably well founded classification of all glottal stop occurrences (in both word-final and medial positions). A glottal stop can be:

- a) lexical;
- b) phonological:
  - ba) derived:
    - baa) non-nasalizable:
      - baaa) ambiguous;
      - baab) unambiguous, deriving from:
        - baaba) /t/;
        - baabb) /s/;
    - bab) nasalizable:
      - baba) ambiguous;
      - babb) unambiguous, deriving from:
        - babba) /n/;

babbb) /ŋ/; babbc) /yn/ (or rather /ñ/, see below);

bb) added:

bba) postoral, added after /r/, /l/, /b/;

bbb) postnasal, added after /m/.

A lexical glottal stop is present in the lexical shapes of morphemes and never participates in alternations (e.g. in *t'u'u-* 'upper side'; there are reasons to assume the secondary nature of such examples, but no means to prove it by internal reconstruction). A phonological glottal stop is due to various phonological processes (derivation or addition). A phonological glottal stop can be ambiguous, if it occurs only prepausally or preconsonantly (which makes it impossible to identify its segmental source), or unambiguous, if its segmental source can also occur prevocally.

The step-by-step movement through this hierarchy gives the author the pretext to reveal the morphophonemic phenomena, directly or indirectly connected with the behaviour of glottal stops, and to establish the deep level structures and the generative rules responsible for these phenomena. To list all the results and to comment on them would mean to rewrite a good half of the book under review; below I shall mention only some of them which are especially interesting and important for the correct understanding of Nenets phonetic history and phonological structure.

— A relatively small set of primary obstruents (/p p̥ t t' s s̥ x x') is sufficient to yield the rich system of surface level obstruents of standard Nenets. Two processes are involved in the secondary obstruent synthesis: that of postconsonantal loss of markedness for continuantness (/s̥ s̥ x x'/ yield /c c̥ k k/; in the domain of resonants the same process transforms /r r̥/ into /l l'/), and that of postvocalic and postnasal laxness marking (/p p̥ t t' c c̥ k k/ yield /b b' d d' z z̥ g ğ/).

— Before an obstruent the nasals /n ŋ/ become regressively assimilated in regard to the place of articulation (cf. *te<sup>n</sup>* 'sinew': Dat. *ten-d<sup>n</sup>*, Loc. *teŋ-gānā*, der. *tem-boj* 'thread'). Thus, any morpheme-internal sequence of a nasal and an obstruent ex-

hibiting a surface level mutual agreement in regard to the place of articulation can be assumed to derive from a deep level sequence with the «neutral» nasal /n/ as the first component (/nǃ/ in *limb'ǎ* 'eagle' etc.).

— Deep level glides (/w j/) are deleted word-finally and preconsonantly (cf. *xa* 'ear', Gen. *xa-n* : Acc. Pl. *xaw-o*; *wano* 'root', Gen. *wano-n* : Acc. Pl. dial. *wanoj-o*). I would like to add that the last and similar examples, which I formerly failed to notice, support the conclusion (obtained by external comparison) that Nenets -o goes back to both CS \*-o (as in *jǎbto* 'goose', with Acc. Pl. *jǎbtu*) and CS \*-oj (as in *wano*), see Хелимский 1978.

— Some deep level phonemic sequences are supposed to undergo generative transformations, but they have surface level counterparts, e.g. while /np/ yields *mb* (see above), there are words like *wenpǎš* 'to stretch', and on a line with the deep level /mun/ (= *mu<sup>n</sup>*) 'sound' there exists the surface level *mun* 'piece'. J. Janhunen treats such surface level sequences as secondary and derives them by deletion of deep level vowels which can be phonologically identified with the short /ǎ/: *wenpǎš* = /wenǎspǎšǎ/, *mun* = /munǎ/. In view of its phonological effect, the deleted vowel is termed «the check segment». The process of deletion is governed by complicated rules fairly similar to the «Havlik's rule» for the deletion of Common Slavic weak reduced vowels (see Хелимский 1984). J. Janhunen believes that the development of /ǎ/ in word-medial syllables depends also on the ordinal number of the /ǎ/-containing syllable, but the examples he cites are not unambiguous; the problem deserves further study.

— The surface level *ǎ* in the positions where the deep level /ǎ/ is expected to be deleted is analyzed as the realization of the deep level /a/, while the surface level *a* in the same positions is considered to manifest the deep level vocalic sequence (/ǎǎ/ and others). In spite of seeming complexity of this analysis, it is the only reasonable way to account for the surface level picture; its validity can be proven by comparison with Enets and Nganasan.

It must be said that the author places special emphasis on discussing generative

rules in terms of features and markedness. It leads him to a number of interesting and shrewd observations — for example, when the unique position of the glottal stop within the Nenets phonemic system is explained as the result of its being marked only for segmentalness (and unmarked for all other features) or when coinciding morphophonemic properties of such seemingly different phonemes, as /c/, /k/ and /l/ (as opposed to /s/, /x/ and /r/) turn out to be related to their unmarkedness for continuantness. Still, the reviewer cannot agree that operating with features, and not phonemes, is always necessary — even within a generative description. The notion of feature is useful whenever it helps to identify a whole class of phonemes at once, instead of listing them one by one; but when, on the contrary, a whole bundle of features is written out instead of a single phoneme (and that is the case with many generative rules in the book), it seems to be a waste of space and efforts — and a bore. I believe anybody will agree that the generative rules from the «Summary of processes» (pp. 179—180), worded mostly in the terms of «classical» phonology, are hardly much less informative than the formulations of the same rules in terms of features and markedness on the pages of the second chapter. Besides, it must be borne in mind that the choice of features and of their values for a given phoneme is to a certain extent arbitrary, being dependent on the aims of description rather than on the immanent phonetic properties of the described phoneme. For example, in the present study J. Janhunen finds it appropriate to characterize Nenets glides as «m cns, m voc» (p. 31), whereas in an earlier article he described them as «u cns, u voc» (Janhunen 1984 : 26). (To be sure, this is not a great fault — les extrémités se touchent.)

The third chapter (pp. 149—168) deals with diachronic correlations. It is only here that the author reveals the far-going analogy between the deep level structures which underlie Nenets forms and their CS prototypes, and between the generative rules and the presumed processes of phonetic change. The comparison with other Samoyed idioms shows that those forms that end in a glottal stop contained origi-

nally a word-final consonant. The main historical predecessors of glottal stops mostly coincide with their deep level sources: *q* has developed from \**t* (and \**c*) or \**s* (and \**k*), *n* — from \**n*, \**ŋ*, perhaps also \**ñ*, *o* has been added after the word-final \**m*, \**r*, \**l*, \**p*. As long as all Samoyed languages, with the exception of Selkup, have phonetic phenomena more or less reminiscent of Nenets glottal stops, the author is undoubtedly right in suggesting that they inherited a CS phonetic presupposition of these phenomena — perhaps «a slight articulatory reduction of all prepausal consonants» (p. 167). The appearance of the glottal stop as of a distinct phonemic item may be an early development (the derived non-nasalizable type must have existed, according to the author, already in Common Northern Samoyed); on p. 166 we find the refutation of the claim that the western Forest Nenets dialects have preserved the original stem-final obstruents intact (cf. Hajdú 1968 : 20).

Beyond the three chapters, the book contains an excerpt from M. A. Castrén's unpublished manuscript on Nenets grammar, dealing with glottal stops; type paradigms of nouns and verbs, with each word form presented in three shapes (deep level, surface level, orthographic); summary of processes; sample text in phonemic transcription and standard orthography; list of references; Cyrillic index of Nenets words; Russian summary. Among these materials, two are of crucial importance for comparative and historical Samoyedology. The deep level representations of inflectional suffixes (in «Type paradigms») can be regarded as close approximations of their CS proto-forms. The ordered sequence of generative rules (in «Summary of processes») gives us a relative chronology of all major events in Nenets phonetic history, beginning with the processes that probably took place even before the disintegration of CS.

After this general discussion I would like to add several odd comments and remarks to the text of the book.

1. The new Nenets phonemic notation employed (for the first time) by J. Janhunen stays «certainly embarrassing to the conservative mind» (p. 32) of the reviewer. Graphic simplicity is the main (or the only?) advantage of the transcription. But

the price paid for it is too high: the new notation breaks with the earlier tradition and makes Nenets words unrecognizable (e.g. *ŋämzä* 'meat' is to be transcribed as *hamja*, *ña'* 'mouth' as *NAq*), while its applicability is narrowed down to a single language. (In this review the Nenets forms have been rewritten in the conventional fashion).

2. The extinct Nenets dialect, designated as «Jurackisch» in the only original source, can be termed in English «Yurak» or «Old Eastern» (see Хелимский 1976, while «Yurats» (employed e.g. on p. 165) is a clumsy truncation of Russian *юрацкий*).

3. The «standard Nenets» — the main object of J. Janhunen's study — is a relatively young literary language with a restricted domain of functioning, very far from being really «standard» as yet. The exact spelling rules for some phonetically and morphologically complicated cases are not fixed. Perhaps it is quite true that some abnormal forms which occur in Nenets textbooks are «due to normative sophistication in the course of language planning» (p. 74); the same can be said about the spelling variants with and without the insertion of *ä* after word-medial glottal stops (p. 127).

The remark about «those remaining speakers whose language is still free of literary influences» (p. 133) strikes me as curious: there are no traces of such influences in the speech of the vast majority of the Nenets (old, middle-aged and even young, in all three Nenets autonomous districts), who have learned their mother tongue at home rather than at school. Probably that was not the case with at least some of J. Janhunen's native Nenets informants — students of the Herzen Pedagogical Institute in Leningrad. But it is obvious that the best native speakers stay in tundra with their reindeers without bothering about further education... It is my sincere wish that J. Janhunen would get at last the opportunity to meet them.

4. In view of what has been said above about the «standard Nenets» it would be rather pointless to argue whether the phonemic system of this language form includes long vowels (originating from diphthongs); they are not differentiated from their short counterparts in practical ortho-

graphy, though sporadically marked in N. M. Tereščenko's dictionary (Терещенко 1965). J. Janhunen's view concerning the origin and phonological nature of Nenets vowel length practically coincides with that of mine (cf. Helinski 1984 : 16—17; Janhunen 1984 : 22). «For the sake of simplicity» the author considers the absence of long vowels, observed in at least some idiolects, «to be the situation in an ideal form of standard Nenets» (p. 117). I think it were more appropriate to describe the situation with the non-reduced phonemic system. The transition rules from this system to the simplified one appear to be quite trivial.

5. The form *xar<sup>h</sup>mt<sup>v</sup>* (from T. Lehtisalo's records) is to be phonemicized as *xäräm<sup>h</sup>dä*, and not *xärmdä* (cf. p. 124): the syllable boundary mark before *r* indicates the presence of a syllabic element which can be identified only as *ä*.

6. The generative explanation given on pp. 93—94 to the suffix-initial alternation of the nasal *n* with the obstruents *t* and *d* (the deep level shape of the alternating segment is /*nt*/) is absolutely valid for the personal ending *-n* ~ *-t* ~ *-d* (Vx2Sg.) and the case ending *-n'* ~ *-t'* ~ *-d'* (Dat. Sg.). The situation with the participial suffix *-nä* ~ *-dä* ~ *-tä* is, however, more complicated: cf. *pedä* 'being', *gamñälädä* 'tasty, delicious' and other participial forms having *-dä* (instead of the expected allomorph *-nä*) after vowel stems. Therefore it is necessary either to introduce additional complications into the deep level representations of corresponding verbal stems, or (contrary to what the author writes on p. 94) to consider them as examples of lexically determined allomorphy.

7. In his description J. Janhunen envisages three processes responsible for the rise of word-final glottal stops: (a) the nasals /*n* *ŋ*/ are denasalized prepausally into /*t* *k*/; (b) the obstruents /*t* *s* *k*/ are reduced prepausally (and also preconsonantly) to the glottal stop; (c) the glottal stop is added prepausally after the four remaining consonants /*p* *m* *r* *l*/.

It seems more realistic from the historical viewpoint (and hardly any worse from the viewpoint of morphophonemic synchrony) to interpret any word-final glottal stop as (originally) added. The

development can be brought down to the following two processes: (a) the glottal stop is added prepausally after any consonant; (b) the resulting clusters /*t* *s'* *n'* *ŋ'*/ are simplified due to the deletion of their first components.

Within the framework of the proposed treatment, the glottal stop is originally a non-phonological segment appearing obligatorily between a consonant and a pause (just as the initial *ŋ*-, characteristic of Nenets, was originally a non-phonological segment appearing obligatorily between a pause and a vowel). A very important evidence in favour of this treatment is found in those Forest Nenets dialects, which have *-ŋ'* as the counterpart of the Tundra Nenets glottal stop alternating with *ŋ* (p. 152). If the order of development was *-ŋ* > *-ŋ'* > *-'*, then these dialects simply preserve the intermediary stage of it. In general, it is possible to show that my approach might give a more coherent picture of the development of word-final consonants in the Northern Samoyed dialectal zone.

8. There are reasons to believe that postulating the deep level word-final /*ñ*/ in such stems as *po'* 'space, interval' : *poj'* (Gen. Sg.) : *pond'* (Dat. Sg.) will be a better solution than deriving them from the deep-level /*jn*/-stems, even if it necessitates the reconsideration of some other details of the system. J. Janhunen discusses the alternative choice between /*ñ*/ and /*jn*/ as a diachronic possibility (p. 161). But there are also synchronic arguments in favour of /*ñ*/ . Without going into details of this extremely intricate problem, I would indicate that, on the one hand, /*jn*/ appears to be the only consonant cluster occurring stem-finally; so its substitution for /*ñ*/ eliminates this exception to the phonotactic rule. On the other hand, reconstructing the deep level shape of the dual marker as /-*xäñ*/ ~ /-*xäñu*-/ (with variants) gives an adequate answer to the problems encountered in connection with this suffix (pp. 140—141).

9. The development of the stem-final deep level /*p*/ (and, accordingly, of the CS \*-*p*) into *-b<sup>o</sup>* (pp. 64—65, 161—162) took place probably only in monosyllabic stems. For non-monosyllabic stems we have to consider the development of \*-*p* into *-a* (alternating with *-s*), as indicated by at

least one example: Nen. *tawi'* ~ *tawis-* 'Nganasan', cf. En. *taw'* ~ *taub-* (\**tawip*).  
10. J. Janhunen's suggestion that the unusual morphophonemic behaviour of Nen. *jepä* 'brook, stream' may indicate that this word has actually a deep level medial nasal sequence (/ -*ng-*/) (p. 119), can be corroborated diachronically by the fact that this word is probably related to Tungus (Ewenki) *э́н(')э́* 'речка, ручей (высохший), овраг'.

11. It is true that in modern Enets the morphophonemic processes connected with the glottal stop are active only within the limits of a word (p. 154). Formerly, however, the situation in Enets must have been the same as in Nenets, where we have such sandhi examples as *xobä* 'skin': *ti<sup>n</sup> xobä* [*tiggobä*] 'reindeer skin'. This previous state is attested by a small group

of Enets words beginning with *d-* and *g-* instead of the expected *t-* and *k-*: *dexone* 'during, in (of time)', *dubone* 'during', *ga'i* 'mouth (of a river)', *gāne* 'except', *gudo* 'length'. The common feature of all these words (three of them are postpositions) is their constant use in the position of the second component of a genitive construction; as a result, the sandhi phenomenon determined by the genitive ending \*-*n* became fossilized in its phonetic shape.

To conclude, I liked the new book by J. Janhunen very much, but when writing this review I did not try to hide my objections or doubts. The level of the investigation carried out by Juha Janhunen is so high that it can endure even the most carping criticism.

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