Towards an electronic dictionary of Tamajaq language in Niger

School editorial dictionary:
Dictionnaire Tamajaq-français destiné à l'enseignement du cycle de base 1

5,390 entries:
- 3,648 nouns
- 1,450 verbs
- 137 complex nouns
- others

ăbada *sn. flanc* Tasăga meɣ daw ădăg ǝyyăn. Imǝwwezla ǝklăn dăɣ ăbada n ǝkašwar. **Anammelu.:** azador. **tǝmust.:** yy. **Ǝsǝfsǝs.:** ă. **Iget:** ibadan.

aɣru *nml. lire étudier* Exǝrdi n ăkatab. Ɣusman yǝnn-as muše-net aɣru telemǝt-năk kǝllu. **Anammelu.:** xardăt.

Awǝy-ǝhuḍ *snẕwn. cerf-volant* Addăl yǝgân dăɣ alkaḍ tǝggǝz tenalle medăɣ azǝrki imi-net yǝbǝt-tu aḍu. Imăɣran ǝssânăn ekǝnni n awǝy-ǝhuḍ. **tǝmust.:** yy. **Ǝsǝfsǝs.:** a **Iget:** imawayăn-n-ǝhuḍ.

Tamajaq linguistic terminology
anamal (nml.): verb
anammelu: synonym
awdǝkki (wdk): singular
ǝsǝfsǝs (sfss): annexation state
iget (gt.): plural
isǝn (sn.): noun
isǝn iẕẕǝwen (snẕwn.): complex noun
tǝmust: gender
yey (yy): masculin

Verbs

Classification according to the number of consonants of the lexical root and in different types.
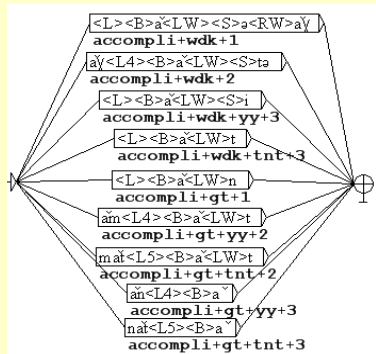Three moods:
- imperative;
- simple injunctive;
- intense injunctive.
Three aspects:
- accomplished: intense or negative;
- non accomplished: simple, intense or negative;
- aorist future: simple or negative.

ǝktǝb (to write): triliteral verb, type 1
ǝmǝl (to say): biliteral verb, type 1
akǝr (to steal): biliteral verb, type 2
awǝy (to carry): biliteral verb, type 3
ăru (to love): monoliteral verb, type 2
ăru (to open): monoliteral verb, type 3

Nouns

Irregular plural forms

telmust (secret marriage) → telmusen   *[rule 7]*
aḍaḍ (finger) → iḍǝḍwan   *[rule 13]*
alămăyya (intestine) → ilămăyyan   *[rule 14]*
teɣăre (phone call) → tiɣǝrra   *[rule 89]*

126 flexional rules calculate the plural forms of 2932 nouns

[rule 7]	en/Iget
[rule 14]	<B>an<LW><S>i/Iget
[rule 13]	wan<L4><B>ǝ<LW><S>i/Iget
[rule 89]	<B>a<L><D><L2><B>ǝ<L2><B>i/Iget

Annexation state is determined by the modification of the first vowel

ajaɣalɣol (lamb) → ăjaɣalɣol   *[rule A1ă]*
temǝjirt (cicatrix) → tǝmǝjirt   *[rule 13]*

13 flexional rules are enough for all the 987 nouns with an annexation state

[rule A1ă]	<LW><S>ă/sfss
[rule A2ǝ]	<LW><R><S>ǝ/sfss

Complex nouns

Several lexical units (nouns, determiners, prepositions, verbs) connected together by hyphens.

Results

6,378 entries in the Nooj dictionary
11,223 entries in the inflected dictionary

Nooj Software

Linguistic development environment: tools to create and maintain large-coverage lexical resources, morphological and syntactic grammars, fully compatible with Unicode.

Future work

Conversion into XML format
Automatic search of flectional rules
Completion, enrichment and correction of the lexical resource

Chantal Enguehard chantal.enguehard@univ-nantes.fr
Laboratoire d'informatique de Nantes Atlantique, Université de Nantes, France

Issouf Modi modyissouf@yahoo.fr
Ministère de l'Education Nationale du Niger
Direction des Enseignements du Cycle de Base1, Section Tamajaq