# Relative clause in Zilo

#### G. Moroz

# August 2018, last version

# 1. Introduction

Zilo speakers uses participles for the formation of relative clauses. Relative clauses can either precede the head or follow the head without any known changes in meaning (see 1b–1e), so the topic of the possible word orders in relative clause and whether different orders have different meanings needs further investigation based on corpora data.

- (1) a. iʃ:i-χο joʃi j-iʔ-o we-AD.LAT girl F-come-PST(AOR) 'The? girl came to us'
  - b. di-<j>0 ts'inn-e joʃi [iʃ:i- $\chi$ 0 j-iʔ-0-b] I-<f>aff know-hab girl we-ad.lat f-come-pst-ptcp:pst 'I know the girl who came to us'.
  - c. di-<j>o ts'inn-e [iʃ:i-xo j-iʔ-o-b] joʃi I-<F>AFF know-hab we-ad.lat f-come-pst-ptcp:pst girl 'I know the girl who came to us'.
  - d. joʃi [iʃ:i-χο j-iʔ-o-b] di-<j>o ts'inn-e girl we-AD.LAT F-come-PST-PTCP:PST I-<F>AFF know-HAB
    'I know the girl who came to us'.
  - e. [iʃ:i-χο j-iʔ-o-b] joʃi di-<j>o ts'inn-e we-ad.lat f-come-pst-ptcp:pst girl I-<f>aff know-hab 'I know the girl who came to us'.

# 2. Positions that can be relativized

- (2) Absolutive argument of an intransitive verb
  - a. iʃ:i-χο joʃi j-iʔ-o we-AD.LAT girl F-come-PST(AOR) 'The? girl came to us'
  - b. [iʃ:i-xo j-iʔ-o-b] joʃi di-<j>o ts'inn-e we-ad.lat f-come-pst-ptcp:pst girl I-<f>aff know-hab 'I know the girl who came to us'.
  - c. [iʃ:i-xo j-iʔ-o-r-s:i] joʃi di-<j>o ts'inn-e we-ad.lat f-come-prog-attr girl I-<f>aff know-hab 'I know the girl who is coming to us'.
  - d. [iʃ:i-χο j-iʔ-ija] joʃi di-<j>o ts'inn-e we-ad.lat f-come-pst-ptcp:fut girl I-<f>aff know-hab 'I know the girl who will come to us'.

- (3) Ergative argument of transitive verb
  - a. maduhalſ-di χink'il-ol k'amm-i neighbour.obl-erg khinkal-pl eat-pst(AOR)
     'Neighbour ate khinkals'.
  - b. [xink'il-ol k'amm-i-b] maduhal di-<w>o ts'inn-e khinkal-pl eat-pst-ptcp:pst neighbour I-<m>Aff know-hab 'I know the neighbour who ate khinkals'.
  - c. [xink'il-ol k'amm-i-r-s:i] maduhal di-<w>o ts'inn-e khinkal-pl eat-pst-prog-attr neighbour I-<m>aff know-hab 'I know the neighbour who is eating khinkals'.
  - d. [xink'il-ol k'amm-ija] maduhal di-<w>o ts'inn-e khinkal-pl eat-PTCP:FUT neighbour I-<m>AFF know-hab 'I know the neighbour who will eat khinkals'.
- (4) Absolutive argument of transitive verb
  - a. maduhalſ-di χink'il-ol k'amm-i neighbour.obl-erg khinkal-pl eat-pst(AOR)
     'Neighbour ate khinkals'.

  - d. [maduhalʃ-di k'amm-ij-ol] xink'il-ol den-ni dzid-i neighbour.obl-erg eat-PTCP:FUT-PL khinkal-PL I-erg do-PST(AOR) 'I made khinkals that the neighbour will eat'.
- (5) Affective argument of < Aff, Abs > verb
  - a. woſi-<r>o reʃa ha?-o boy-<¬an2>aff tree see-PST(AOR) 'Boy saw the tree'.
  - b. [reʃa haʔ-o-b] woʃo di-<w>o ts'inn-e tree see-PST-PTCP:PST boy I-<M>AFF know-HAB 'I know the boy who saw the tree'.
  - c. [reʃa haʔ-o-r-sːi] woʃo di-<w>o ts'inn-e tree see-PST-PTCP:PST boy I-<M>AFF know-HAB 'I know the boy who see the tree'.
  - d. [reʃa haʔ-ija] woʃo di-<w>o ts'inn-e tree see-PTCP:FUT boy I-<M>AFF know-HAB 'I know the boy who will see the tree'.
- (6) Absolutive argument of <Aff, Abs> verb
  - a. woſi-<r>>o reſa ha?-oboy-<¬AN2>AFF tree see-PST(AOR)'Boy saw the tree'.
  - b. [woſi-<r>o ha?-o-b] reʃa di-<r>o ts'inn-e boy-<¬an2>aff see-pst-ptcp:pst tree I-<¬an2>aff know-hab 'I didn't see the tree that the boy saw'.

- c. [woʃi-<r>o ha?-o-r-s:i] reʃa di-<r>o ts'inn-e boy-<¬an2>aff see-pst-prog-attr tree I-<¬an2>aff know-hab 'I didn't see the tree that the boy see'.
- d. [woʃi-<r>o haʔ-ija] reʃa di-<r>o ts'inn-e boy-<¬ам2>аff see-ртср:fut tree I-<¬ам2>аff know-нав 'I didn't see the tree that the boy will see'.

# (7) Absolutive argument of < Abs, Ins> verb

- a. joʃi haluҳ-onn-ij homoloʁil-qҳi girl miss-PST-PF friend.OBL-INST
   'Girl missed her friend'.
- b. [homoloßil-qxi haluxonn-i-b] joʃi di-<j>o ts'inn-e friend.obl-inst miss-pst-ptcp:pst girl I-<m>aff know-hab 'I know the girl who missed the friend'.
- c. [homoloßil-qxi haluxonn-i-r-s:i] joʃi di-<j>o ts'inn-e friend.obl-inst miss-pst-prog-attr girl I-<m>aff know-hab 'I know the girl who miss the friend'.
- d. [homoloʁil-qxi haluxonn-ija] joʃi di-<j>o ts'inn-e friend.овL-INST miss-PTCP:FUT girl I-<м>AFF know-нав 'I know the girl who will miss the friend'.

# (8) Instrumental argument of <Abs, Ins> verb

- a. joʃi haluҳ-onn-ij homoloʁil-qҳi girl miss-PST-PF friend.OBL-INST 'Girl missed her friend'.
- b. [joʃi haluxonn-i-b] homoloʁi di-<j>o ts'inn-e girl miss-pst-ptcp:pst friend I-<m>Aff know-hab 'I know the friend whom the girl missed'.
- c. [joʃi haluxonn-i-r-s:i] homoloʁi di-<j>o ts'inn-e girl miss-pst-prog-attr friend I-<m>aff know-hab 'I know the friend whom the girl miss'.
- d. [joʃi haluxonn-ija] homoloʁi di-<j>o ts'inn-e girl miss-ptcp:fut friend I-<m>Aff know-hab 'I know the friend whom the girl will miss'.

## (9) Absolutive argument of < Abs, Ad2 > verb

- a. woso imu-ts'u sir-iboy father.obl-Ad2 afraid-Pst(AOR)'The boy is afraid of [his] father'.
- b. [imu-t]'u sir-i-b] wo fo di-<w>o ts'inn-e father.obl-ad2 afraid-pst-ptcp:pst boy I-<m>aff know-hab 'I know the boy who was afraid of his father'.
- c. [imu-tʃ'u sir-i-r-s:i] woʃo di-<w>o ts'inn-e father.obl-ad2 afraid-pst-prog-attr boy I-<m>afr know-hab 'I know the boy who is afraid of his father'.
- d. [imu-tʃ'u sir-ija] woʃo di-<w>o ts'inn-e father.obl-ad2 afraid-ptcp:fut boy I-<m>aff know-hab 'I know the boy who will be afraid of his father'.
- (10) Ad2 argument of <Abs, Ad2> verb

- a. wofo imu-tʃ'u sir-i boy father.obl-Ad2 afraid-PST(AOR) 'The boy is afraid of [his] father'.
- b. [woʃo sir-i-b] ima di-<w>o ts'inn-e boy afraid-PST-PTCP:PST father I-<M>AFF know-HAB 'I know the father that boy was afraid of'.
- c. [woso sir-i-r-s:i] ima di-<w>o ts'inn-e boy afraid-pst-prog-attr father I-<m>aff know-hab 'I know the father that boy is afraid of'.
- d. [woso sir-ija] ima di-<w>o ts'inn-e boy afraid-PTCP:FUT father I-<M>AFF know-HAB 'I know the father that boy will afraid of'.
- (11) Dative argument of the <Erg, Dat, Abs> verb
  - a. dada-di j-oʃul-lu intʃi itʃ:-i father.obl-erg girl.obl-dat apple give-pst(aor) 'Father gave an apple to the daughter'.
  - b. [dada-di intʃi itʃ:-i-b] joʃi di-<j>o ts'inn-e father.obl-erg apple give-pst-ptcp:pst girl I-<f>Aff know-hab 'I know the girl that father gave an apple to'.
  - c. [dada-di intʃi itʃ:-i-r-s:i] joʃi di-<j>o ts'inn-e father.obl-erg apple give-pst-prog-attr girl I-<f>aff know-hab 'I know the girl that father gives an apple to'.
  - d. [dada-di intʃi itʃ:-ija] joʃi di-<j>o ts'inn-e father.obl-erg apple give-ptcp:fut girl I-<f>Aff know-hab 'I know the girl that father will give an apple to'.
- (12) Ergative argument of the <Erg, Dat, Abs> verb
  - a. dada-di joʃul-łu intʃi itʃ:-i father.OBL-ERG girl.OBL-DAT apple give-PST(AOR) 'Father gave an apple to the daughter'.
  - b. [joʃul-lu intʃi itʃ:-i-b] woʃo di-<w>o ts'inn-e girl.obl-dat apple give-pst-ptcp:pst boy I-<m>aff know-hab 'I know the boy that gave girl an apple'.
  - c. [joʃul-lu intʃi itʃ:-i-r-s:i] woʃo di-<w>o ts'inn-e girl.obl-dat apple give-pst-prog-attr boy I-<m>aff know-hab 'I know the boy that gave girl an apple'.
  - d. [joʃul-łu intʃi itʃ:-ija] woʃo di-<w>o ts'inn-e girl.obl-dat apple give-ptcp:fut boy I-<m>aff know-hab 'I know the boy that will give girl an apple'.
- (13) Absolutive argument of the <Erg, Dat, Abs> verb
  - a. dada-di joʃul-lu intʃi itʃ:-i father.obl-erg girl.obl-dat apple give-pst(aor) 'Father gave an apple to the daughter'.
  - b. [dada-di joʃul-łu itʃ:-i-b] intʃi den-ni k'amm-ija father.obl-erg girl.obl-dat give-pst-ptcp:pst apple I-erg eat-fut 'T'll eat the apple that father gave to the girl'.
  - c. [dada-di joʃul-łu itʃ:-i-r-s:i] intʃi den-ni k'amm-ija father.obl-erg girl.obl-dat give-pst-prog-attr apple I-erg eat-fut

- 'I'll eat the apple that father gives to the girl'.
- d. [dada-di joʃul-lu itʃ:-ija] intʃi den-ni k'amm-ija father.obl-erg girl.obl-dat give-ptcp:fut apple I-erg eat-fut 'I'll eat the apple that father will give to the girl'.
- (14) Absolutive argument of the <Abs, Com> verb
  - a. joʃi j-ik-on ritli-loj girl F-live.on-PST(AOR) meet-COM 'The girl live on meet'.
  - b. [ritł'i-loj j-ik-oni-b] joʃi di-<j>o ts'inn-e meet-com f-live.on-pst-ptcp:pst girl I-<f>aff know-hab 'I like the meet that girl lived on'.
  - c. [ritl'i-loj j-ik-oni-r-s:i] joʃi di-<j>o ts'inn-e meet-com f-live.on-pst-prog-attr girl I-<f>aff know-hab 'I like the meet that girl lives on'.
  - d. [ritl'i-loj j-ik-on-ija] joʃi di-<j>o ts'inn-e meet-com f-live.on-¬pst-ptcp:fut girl I-<f>Aff know-hab 'I like the meet that girl will live on'.
- (15) Comitative argument of the <Abs, Com> verb
  - a. joʃi j-ik-on ritl'i-loj girl F-live.on-PST(AOR) meet-COM 'The girl live on meet'.
  - b. [joʃi j-ik-oni-b] ritł'i di-<br/>b>o dʒi?-e girl f-live.on-pst-ptcp:pst meet I-<¬an1>aff love-hab 'I like the meet that girl lived on'.
  - c. [joʃi j-ik-oni-r-s:i] ritł'i di-<b>o dʒi?-e girl f-live.on-pst-prog-attr meet I-<¬an1>aff love-hab 'I like the meet that girl lives on'.
  - d. [joʃi j-ik-on-ija] ritł'i di-<b>o dʒi?-e girl f-live.on-¬pst-ptcp:fut meet I-<¬an1>aff love-hab 'I like the meet that girl will live on'.
- (16) Causee argument < Erg, Aff, Abs>
  - a. woſu-di joſu-<br/> boy.obl-erg girl.obl-< $\neg$ an1>aff khinkal-pl eat-caus-pst(aor) 'The boy made the girl to eat khinkals'.
  - b. [woʃu-di xink'il-ol k'amm-oł-i-b] joʃi iʃ:i-xo j-i?-o boy.obl-erg khinkal-pl eat-caus-pst-ptcp:pst girl we-ad.lat f-come-pst(aor) 'The girl who was made to eat khinkals came to us'.
  - c. [woʃu-di xink'il-ol k'amm-oł-i-r-s:i] joʃi iʃ:i-xo j-iʔ-o boy.obl-erg khinkal-pl eat-Caus-pst-prog-attr girl we-ad.lat f-come-pst(aor) 'The girl who is made to eat khinkals came to us'.
  - d. [woʃu-di χink'il-ol k'amm-ol-ija] joʃi iʃ:i-χο j-iʔ-o boy.obl-erg khinkal-pl eat-caus-ptcp:fut girl we-ad.lat f-come-pst(aor) 'The girl who will be made to eat khinkals came to us'.
- (17) Ergative argument of causative verb < Erg, Aff, Abs > (TO CHECK)
  - a. woſu-di joʃu-<b>o χink'il-ol k'amm-oł-i
     boy.obl-erg girl.obl-<¬an1>aff khinkal-pl eat-caus-pst(aor)
     'The boy made the girl to eat khinkals'.

- b. [jofu-<b>o γink'il-ol k'amm-ol-i-b] woſo iſ:i-yo j-i?-o girl.obl-<¬AN1>AFF khinkal-PL eat-CAUS-PST-PTCP:PST boy we-AD.LAT F-come-PST(AOR) 'The boy who made the girl to eat khinkals came to us'.
- γink'il-ol k'amm-ol-i-r-s:i] [jofu-<b>o woſo iſ:i-χo j-i?-o c. girl.obl-<¬AN1>AFF khinkal-PL eat-CAUS-PST-PROG-ATTR boy we-AD.LAT F-come-PST(AOR) 'The boy who make the girl to eat khinkals came to us'.
- γink'il-ol k'amm-ol-ija] woſo iſ:i-χο d. j-i?-o girl.obl-<¬an1>aff khinkal-pl eat-caus-ptcp:fut boy we-ad.lat f-come-pst(aor) 'The boy who will make the girl to eat khinkals came to us'.
- (18)Absolutive argument of causative verb < Erg, Aff, Abs>
  - woſu-di joſu-<b>o γink'il-ol k'amm-ol-i boy.OBL-ERG girl.OBL-<¬AN1>AFF khinkal-PL eat-CAUS-PST(AOR) 'The boy made the girl to eat khinkals'.
  - iofu-<b>o b. [wofu-di k'amm-ol-i-b-ol] χink'il-ol di-<b>o boy.obl-erg girl.obl-<¬an1>aff eat-caus-pst-ptcp:pst-pl khinkal-pl I-<¬an1>aff dzi?-e love-HAB

'I like khinkals that boy made the girl eat'.

[wofu-di iofu-<b>o k'amm-ol-i-r-s:-ol] γink'il-ol di-<b>o c. boy.obl-erg girl.obl-<¬an1>aff eat-caus-pst-prog-attr-pl khinkal-pl I-<¬an1>aff dzi?-e love-нав

'I like khinkals that boy make the girl eat'.

- k'amm-ol-ij-ol] d. joſu-<b>o γink'il-ol di-<b>o [woſu-di dzi?-e boy.obl-erg girl.obl-<pan1>aff eat-caus-ptcp:fut-pl khinkal-pl I-<pan1>aff love-hab 'I like khinkals that boy will make the girl eat'.
- (19) Genitive possessor (inalienable)
  - joſu-t�i re?a ruq'-u-r girl.OBL-GEN hand hurt-PST-PROG 'Girl's hand hurts'.
  - josi di-<j>o ts'inn-e b. [re?a ruq'-u-b] hand hurt-pst-ptcp:pst girl I-<f>Aff know-hab 'I know the girl whose arm hurt'.
  - josi di-<j>o ts'inn-e [re?a ruq'-u-r-s:i] c. hand hurt-PST-PROG-ATTR girl I-<F>AFF know-HAB

'I know the girl whose arm hurts'.

- d. [re?a ruq'-ija] josi di-<j>o ts'inn-e hand hurt-ptcp:fut girl I-<f>Aff know-hab 'I know the girl whose arm will hurt'.
- Genitive possessor (kinship) (20)
  - woſu-t�i jots:i j-iz-unn-ij boy.OBL-GEN sister F-be.born-PST-PF 'Boy's sister was born'.
  - [jots:i j-iz-unn-i-b] woso di-<w>o ts'inn-e b. sister F-be.born-pst-ptcp:pst boy I-<m>aff know-hab 'I know the boy whose sister was born'.

- c. [jots:i j-iz-unn-i-r-s:i] woso di-<w>o ts'inn-e sister f-be.born-pst-prog-attr boy I-<m>aff know-hab 'I know the boy whose sister is borning'.
- d. [jots:i j-iz-unn-ija] woſo di-<w>o ts'inn-e sister f-be.born-ptcp:fut boy I-<m>aff know-hab 'I know the boy whose sister will be born'.
- (21) Genitive possessor (alienable)
  - a. woʃu-tłi maʃina b.itʃ'-o boy.obl-GEN car ¬AN1.break.down-PST(AOR) 'Boy's car broke down'.
  - b. [maʃina b.itʃ'-o-b] woʃo di-<w>o ts'inn-e car ¬an1.break.down-pst-ptcp:pst boy I-<m>aff know-hab 'I know the boy whose car broke down'.
  - c. [maʃina b.itʃ'-o-r-sːi] woʃo di-<w>o ts'inn-e car ¬an1.break.down-pst-prog-attr boy I-<m>Aff know-hab 'I know the boy whose car brakes down'.
  - d. [maʃina b.itʃ'-ija] woʃo di-<w>o ts'inn-e car ¬an1.break.down-ptcp:fut boy I-<m>aff know-hab 'I know the boy whose car will brake down'.
- (22) Time
  - a. zełal wojo w-u?-o today boy M-come-PST(AOR) 'Today boy came'.
  - b. [woʃo w-uʔ-o-b] zubu boy M-come-PST-PTCP:PST day 'Day when the boy came'.
  - c. [woso w-u?-o-r-s:i] zubu boy m-come-pst-prog-attr day 'Day when the boy comes'.
  - d. [woʃo w-uʔ-ija] zubu boy м-come-ртср:FUT day 'Day when the boy will come'.
- (23) Spatial location
  - a. woso hon-tłi w-uz-un boy village.OBL-INTER.ESS M-be.born-PST(AOR) 'The boy was born in a village'.
  - b. [woʃo w-uʒ-uni-b] hon di-<r>o haʔ-o boy M-be.born-PST-PTCP:PST village I-<¬AN2>AFF see-PST(AOR) 'I saw the village, where the boy was born'.
  - c. [woʃo w-uʒ-uni-r-s:i] hon di-<r>
     boy M-be.born-PST-PROG-ATTR village I-<¬AN2>AFF see-PST(AOR)
    'I saw the village, where the boy is borning'.
  - d. [woʃo w-uʒ-un-ija] hon di-<r>o boy M-be.born-¬PST-PTCP:FUT village I-<¬AN2>AFF see-PST(AOR)
    'I saw the village, where the boy will be born'.

Since relativisation remove all relation markers from the head of the relative clause, the ambiguity arise: the relativised spatial goal and spatial source will be the same (but there is a lexical way to distinguish them

### anyway):

- (24) Spatial goal and spatial source
  - a. woso hon-tłi w-uts':-unboy village.OBL-INTER.LAT M-run-PST(AOR)'Boy ran to the village'.
  - b. woso hon-tłi-k:u w-uts':-un boy village.obl-inter-elat M-run-pst(aor) 'Boy ran from the village'.
  - c. [woʃo w-utʃ':-uni-b] hon di-<r>o boy M-run-PST-PTCP:PST village I-<¬AN2>AFF see-PST(AOR)
    'I saw the village that boy ran to/from'.
  - d. [woʃo w-utʃ':-uni-r-s:i] hon di-<r>
     boy M-run-PST-PROG-ATTR village I-<¬AN2>AFF see-PST(AOR)
     'I saw the village that boy ran to/from'.
  - e. [woʃo w-utʃ':-un-ija] hon di-<r>o boy M-run-¬PST-PTCP:FUT village I-<¬AN2>AFF see-PST(AOR)
    'I saw the village that boy will run to/from'.

In adpositional relative clause the adposition could be placed anywhere in a relative clause but the last position (see 25b-25e). Probably, participle should be placed in last position in a relative clause, but it should be investigated in more accurate way. The first informants' reaction is in example (25c).

# (25) Adpositional argument

- a. j-oſu-di k'amm-i intʃi haq'u-tʃ'u tleru girl.OBL-ERG eat-PST(AOR) apple hous.OBL-AD2 near 'The girl ate apple near the hous'.
- b. [tleru j-oʃu-di intʃi k'amm-i-b] haq'u di-<r>o near girl.obl-erg apple eat-pst-ptcp:pst house I-<¬an2>aff see-pst(aor) 'I saw the house near which the girl ate an apple'.
- c. [j-oʃu-di tleru intʃi k'amm-i-b] haq'u di-<r>o girl.obl-erg near apple eat-pst-ptcp:pst house I-<¬an2>aff see-pst(aor)
  'I saw the house near which the girl ate an apple'.
- d. [j-oʃu-di intʃi tleru k'amm-i-b] haq'u di-<r>o ha?-o girl.obl-erg apple near eat-pst-ptcp:pst house I-<¬an2>aff see-pst(aor) 'I saw the house near which the girl ate an apple'.
- e. \*[j-oʃu-di intʃi k'amm-i-b tleru] haq'u di-<r>o ha?-o girl.obl-erg apple eat-pst-ptcp:pst near house I-<¬an2>aff see-pst(aor) 'I saw the house near which the girl ate an apple'.
- f. [j-oʃu-di tleru intʃi k'amm-ija] haq'u di-<r>o ha?-o girl.obl-erg near apple eat-PTCP:FUT house I-<¬an2>aff see-PST(aor) 'I saw the house near which the girl will eat an apple'.

#### (26) Actant from the general question

- a. joʃi j-i?-o di-bolo dada-di rats':-in girl F-come-PST:(AOR) ?-INDEF father.OBL-ERG ask-PST(AOR) 'Father asked whether the girl came'.
- b. [dada-di j-i?-o di-bolo rats':-inni-b] joʃi di-<j>o ts'inn-e-ssu father.obl-erg f-come-pst:(AOR) ?-INDEF ask-pst-ptcp:pst girl I-<f>AFF know-hab-neg 'I don't know the girl about whom father asked, whether she came'.

- c. [dada-di j-i?-o di-bolo rats':-inni-r-s:i] joʃi di-<j>o ts'inn-e-ssu father.obl-erg f-come-pst:(AOR) ?-INDEF ask-pst-prog-attr girl I-<f>AFF know-hab-neg 'I don't know the girl about whom father asks, whether she came'.
- d. [dada-di j-i?-o di-bolo rats':-inn-ija] joʃi di-<j>o ts'inn-e-ssu father.obl-erg f-come-pst:(AOR) ?-INDEF ask-¬pst-ptcp:fut girl I-<f>AFF know-hab-neg 'I don't know the girl about whom father will ask, whether she came'.
- (27) Actant from the special question
  - a. maduhalʃ-ҳo i-m w-uʔ-o di-bolo dada-di rats':-in neighbour.obl-AD.LAT what-H M-come-PST(AOR) ?-INDEF father.OBL-ERG ask-PST(AOR) 'Father asked, who came to the neighbour'.
  - b. [dada-di i-m w-u?-o di-bolo rats':-inni-b] maduhal di-<w>o father.OBL-ERG what-H M-come-PST-PTCP:PST ?-INDEF ask-PST-PTCP:PST neighbour I-<M>AFF ts'inn-e-ssu

know-hab-neg

'I don't know the neighbour to whom father asked who came'.

c. [dada-di i-m w-u?-o di-bolo rats':-inni-r-s:i] maduhal father.OBL-ERG what-H M-come-PST-PROG-ATTR ?-INDEF ask-PST-PTCP:PST neighbour di-<w>o ts'inn-e-ssu

I-<M>AFF know-HAB-NEG

'I don't know the neighbour to whom father asks who came'.

d. [dada-di i-m w-u?-o di-bolo rats':-inn-ija] maduhal di-<w>o father.obl-erg what-h m-come-ptcp:fut ?-INDEF ask-¬pst-ptcp:fut neighbour I-<m>AFF ts'inn-e-ssu

know-hab-neg

'I don't know the neighbour to whom father will ask who came'.

- (28) So called relative clause without coreferential noun phrase in the modifying clause
  - a. [den-ni zĩw b-ertʃ'ː-i-b] ʃ:iw woʃu-di ts'ad-i
    I-ERG cow AN-milk-PST-PTCP:PST milk boy.OBL-ERG drink-PST(AOR)
    'Boy drank the milk from my milking the cow'.
  - b. [den-ni ma fina b-a xo-l-i-b] orsi di-<br/> orsi di-<br/> orsu I-erg car ¬an1-sell-caus-pst-ptcp:pst money I-<¬an1>aff see-pst(aor)-neg 'I didn't see the money from my selling the car'.
  - c. [woʃul-di orsi b-eq'aʃ:-i-b] χabar di-<br/>boy.obl-erg money ¬an1-steal-pst-ptcp:pst story I-<¬an1>aff know-hab 'I know the story about the boy stealing the money'
  - d. [joʃu-di  $\chi$ wami-lj-ez-a-b] fam di-<br/>b>o b-a $\chi$ o-r girl.obl-erg fish-pl f-cook-pst-ptcp:pst smell I-<\pan1>aff \pan1-smell-prog 'I pick up the smell of fishes that girl cooked'.
- (29) It is possible to omit head in RC without coreferential noun phrase in the modifying clause
  - a. [den-ni zĩw b-ertʃ':-i-b] woʃu-di ts'ad-i
    I-ERG cow AN-milk-PST-PTCP:PST boy.OBL-ERG drink-PST(AOR)
    'Boy drank (the milk) from my milking the cow'.
  - b. [woʃul-di orsi b-eq'aʃ:-i-b] di-<b>o tsinn-e boy.obl-erg money ¬anl-steal-pst-ptcp:pst I-<¬anl>aff know-hab 'I know about the boy stealing the money'

It is not possible to relativise object of comparison:

# (30) Object of comparison

It is not possible to relativise some non-obligatory adjuncts:

- (31) Comitative adjunct
  - a. dada joʃi-loj w-uʔ-o father girl-COM M-come-PST(AOR) 'Father came with the daughter'.
  - b. \*[dada w-u?-o-b] joʃi di-<j>o ts'inn-e father M-come-PST-PTCP:PST girl I-<F>AFF know-HAB 'I know the daughter that father came with'.

It is not possible to relativise from coordination island:

- (32) Coordination Island
  - a. woʃo-lo joʃi-lo w-u?-oboy-ADD girl-ADD M-come-PST(AOR)'A boy and a girl came'.
  - b. \*[woʃo-lo w-uʔ-o-b] joʃi di-<j>o ts'inn-e boy-add m-come-pst-ptcp:pst girl I-<f>aff know-hab 'I know the girl that boy and she came'.

# 3. Head properties

The head of the relative clause could be:

- (33) common noun
  - a.  $[i \text{ fii-xo} \quad j\text{-i?-o-b}] \quad j\text{ofi} \text{ di-<j>o} \quad ts'inn-e \\ \text{we-ad.lat f-come-pst-ptcp:pst girl I-<f>aff know-hab}$  'I know the girl who came to us'.
- (34) demonstrative pronoun
  - a. [hon-tłi w-uz-uni-b] hege-w hołu w-etʃ'uҳa w-uʔ-un village.OBL-INTER.ESS M-be.born-PST-PTCP:PST dem-м here м-big м-become-PST(AOR) 'He, that was born in village, grew up here'.
- (35) personal pronoun
  - a. [hon-tłi w-uz-uni-b] men hołu w-etʃ'uxa w-u?-un village.OBL-INTER.ESS M-be.born-PST-PTCP:PST you here M-big M-become-PST(AOR) 'You, that was born in village, grew up here'.
- (36) interrogative pronoun
  - a. χink'il-ol k'amm-i i-m-ві [iʃ:i-χο w-uʔ-o-b]? khinkal-pL eat-PST(AOR) what-H-WH we-AD.LAT M-come-PST-PTCP.PST 'Who from that who came ate khinkals?'
  - b. du-<br/>b. du-<br/>bo dzi?-e i-b-bi [maduhalʃ-di k'amm-i-b]? you.obl-<¬an1>aff like-hab what-¬h-wh neighbour.obl-erg eat-pst-ptcp:pst 'What from what the neighbour ate do you like?'
- (37) indefinite pronoun
  - a. [iʃ:i-χo w-uʔ-o-b] i-m-bolo di-<w>o ts'inn-e-ssu we-ad.lat m-come-pst-ptcp.pst what-h-indef I-<m>aff know-hab-neg

- 'I don't know somebody who came to us'.
- b.  $[maduhal \int di \quad k'amm-i-b] \quad i-b-bolo \quad di-< b>0 \quad ts'inn-e-ssu \\ neighbour.obl-erg eat-pst-ptcp:pst what-¬h-indef I-<¬an1>aff know-hab-neg 'I don't know something that neighbour ate'.$

## (38) heavy head

a. [iʃ:i-χο j-iʔ-o-b] j-etʃ'uχa j-ots:i aminat di-<j>ο dʒiʔ-e we-AD.LAT F-come-PST-PTCP.PST F-big F-sibling Aminat I-<F>AFF love-HAB 'I love older sister Aminat, that came to us'.

## (39) headless

- a. [iʃ:i-χο j-iʔ-o-b] di-<j>o ts'inn-e-ssu we-AD.LAT F-come-PST-PTCP.PST I-<F>AFF know-HAB-NEG 'I don't know (female) that came to us'.
- b. [xink'il-ol k'amm-i-b] di-<w>o ts'inn-e-ssu khinkal-pl eat-pst-ptcp:pst I-<m>aff know-hab-neg 'I don't know (male) who ate khinkals'.

# 4. Properties of the participle

There are several categories that could be expressed on participle:

## (40) number

- a. [maduhalʃ-di k'amm-i-b] χink'il den-ni dzid-i neighbour.obl-erg eat-pst-ptcp:pst khinkal I-erg do-pst(AOR)
   'I made khinkal that the neighbour ate'.
- b. [maduhalʃ-di k'amm-ija] xink'il den-ni dzid-i neighbour.obl-erg eat-ptcp:fut khinkal I-erg do-pst(aor) 'I made khinkal that the neighbour will eat'.
- d. [maduhalʃ-di k'amm-ij-ol] χink'il-ol den-ni dzid-i neighbour.OBL-ERG eat-PTCP:FUT-PL khinkal-PL I-ERG do-PST(AOR) 'I made khinkals that the neighbour will eat'.

## (41) negation

- a.  $[i \text{f:i-xo} \quad j\text{-i?-o-ssu-b}] \quad jo \text{fi} \quad di\text{-<j>o} \quad ts'inn\text{-e} \\ \text{we-ad.lat f-come-pst-neg-ptcp:pst girl I-<f>aff know-hab}$  'I know the girl who didn't come to us'.
- b. [iʃ:i-xo j-iʔ-essa] joʃi di-<j>o ts'inn-e we-ad.lat f-come-neg.ptcp:fut girl I-<f>aff know-hab 'I know the girl who won't come to us'.
- (42) class agreement (only with absolutive from relative clause, if the verb have an agreement slot)
  - a.  $[\hbar a]$  wo fo di-<w>o ts'inn-e ram ¬an1-slaughter-pst-ptcp:pst boy I-<m>aff know-hab 'I know the boy who slaughter the ram'.
  - b.  $[woful-di \ b-iq\chi-u-b]$  hajman di-<w>o ts'inn-e boy.obl-erg ¬an1-slaughter-pst-ptcp:pst ram I-<m>aff know-hab 'I know the ram that boy slaughtered'.

- (43) case (only on headless relative clauses)
  - a. [iʃ:i-χο j-iʔ-o-b]-di χink'il-ol k'amm-i we-ad.lat m-come-pst-ptcp.pst-erg khinkal-pl eat-pst(aor)
  - b. [iʃ:i-xo j-iʔ-o-b] joʃi-di xink'il-ol k'amm-i we-AD.LAT M-come-PST-PTCP.PST-ERG girl.OBL-ERG khinkal-PL eat-PST(AOR)
  - c. \*[iʃ:i-xo j-iʔ-o-b]-di joʃi-di xink'il-ol k'amm-i we-ad.lat m-come-pst-ptcp.pst-erg girl.obl-erg khinkal-pl eat-pst(aor)
  - d. \*[iʃ:i-xo j-iʔ-o-b]-di joʃi xink'il-ol k'amm-i we-ad.lat m-come-pst-ptcp.pst-erg girl.obl-erg khinkal-pl eat-pst(aor) '(The girl), who came to us, ate khinkals'.

# 5. Resumptives

During the elicitation tasks native speakers didn't produce any resumptives by themselves. Even if informants allow to use reflexive pronouns as a resumptives, they still find this sentences little bit strange (44a). No attempts to use demonstratives as a resumptive succeeded. In example (44b) demonstrative tend to be a modifier of relative clause head *josi*, but more work should be done on this topic. In the most natural example (44c) unfortunately it is not clear, whether *ensuro* is in relative clause or it is a head of the NP with a relative clause modifier. This should be investigated more precisely, when the Zilo corpora will be available.

- (44) a.  ${}^?[en \int u \langle r \rangle o$  re $\int a ha?-o-b]$  dada i $\int i \cdot \langle r \rangle o$  w-u?-o RFL.OBL- $\langle r \rangle a$ N2>AFF tree see-PST-PTCP:PST father we-AD.LAT M-come-PST(AOR) 'Father that saw a tree came to us'
  - b. hege-j [iʃ:i-xo j-iʔ-o-b] joʃi di-<j>o ts'inn-e dem-f we-ad.lat m-come-pst-ptcp:pst girl I-<f>aff know-hab 'I know this girl who came to us'.
  - c. enfu-<r>o refa ha?-o-b iʃ:i-xo w-u?-o-do RFL.OBL-<¬AN2>AFF tree see-PST-PTCP:PST we-AD.LAT M-come-IMP-JUS 'That who saw a tree let's come to us!'

# Glosses

AD = Ad location, AD2 = Ad2 location, ADD = additive, AFF = affective case, AN = animal class, AOR = aorist, ATTR = attributive particle, CAUS = causative, COM = comitative, DAT = dative case, DEM = demonstrative, ELAT = ellative direction, ERG = ergative case, ESS = essive direction, F = female class, FUT = future, GEN = genitive case, H = human, HAB = habitual, IMP = imperative, INDEF = indefinite, INST = instrumental case, INTER = Inter location, JUS = jussive, LAT = lative direction, M = masculine class, NEG = negation marker, OBL = oblique stem, PF = perfect tense, PL = plural, PROG = progressive, PST = past tense, PTCP = participle, RFL = reflexive pronoun, WH = special question marker,  $\neg$ AN1 = first non-animated class,  $\neg$ AN2 = second non-animated class,  $\neg$ H = non-human,  $\neg$ PST = non-past forms.