

# Relative clause in Zilo

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## 1. Introduction

Zilo speakers use 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.  $if:i-\chi o$   $jofi\ j-i\eta-o$   
we-AD.LAT girl F-COME-PST(AOR)  
'The girl came to us'
  - b.  $di-<j>o$   $ts'inn-e$   $jofi\ [if:i-\chi o\ j-i\eta-o-b]$   
I-<F>AFF know-HAB girl we-AD.LAT F-COME-PST-PTCP:PST  
'I know the girl who came to us.'
  - c.  $di-<j>o$   $ts'inn-e$   $[if:i-\chi o\ j-i\eta-o-b]$   $jofi$   
I-<F>AFF know-HAB we-AD.LAT F-COME-PST-PTCP:PST girl  
'I know the girl who came to us.'
  - d.  $jofi\ [if:i-\chi o\ j-i\eta-o-b]$   $di-<j>o$   $ts'inn-e$   
girl we-AD.LAT F-COME-PST-PTCP:PST I-<F>AFF know-HAB  
'I know the girl who came to us.'
  - e.  $[if:i-\chi o\ j-i\eta-o-b]$   $jofi\ di-<j>o$   $ts'inn-e$   
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.  $if:i-\chi o$   $jofi\ j-i\eta-o$   
we-AD.LAT girl F-COME-PST(AOR)  
'The? girl came to us'
  - b.  $[if:i-\chi o\ j-i\eta-o-b]$   $jofi\ di-<j>o$   $ts'inn-e$   
we-AD.LAT F-COME-PST-PTCP:PST girl I-<F>AFF know-HAB  
'I know the girl who came to us.'
  - c.  $[if:i-\chi o\ j-i\eta-o-r-si]$   $jofi\ di-<j>o$   $ts'inn-e$   
we-AD.LAT F-COME-PROG-ATTR girl I-<F>AFF know-HAB  
'I know the girl who is coming to us.'
  - d.  $[if:i-\chi o\ j-i\eta-ija]$   $jofi\ di-<j>o$   $ts'inn-e$   
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
- maduhalf-di      χink'il-ol    k'amm-i  
neighbour.OBL-ERG khinkal-PL eat-PST(AOR)  
'Neighbour ate khinkals'.
  - [χink'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'.
  - [χink'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'.
  - [χink'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
- maduhalf-di      χink'il-ol    k'amm-i  
neighbour.OBL-ERG khinkal-PL eat-PST(AOR)  
'Neighbour ate khinkals'.
  - [maduhalf-di      k'amm-i-b-ol]      χink'il-ol    den-ni dzid-i  
neighbour.OBL-ERG eat-PST-PTCP:PST-PL khinkal-PL I-ERG    do-PST(AOR)  
'I made khinkals that the neighbour ate'.
  - [maduhalf-di      k'amm-i-r-s:ol]      χink'il-ol    den-ni dzid-i  
neighbour.OBL-ERG eat-PST-PROG-ATTR-PL khinkal-PL I-ERG    do-PST(AOR)  
'I made khinkals that the neighbour is eating'.
  - [maduhalf-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'.
- (5) Affective argument of <Aff, Abs> verb
- wofi-<r>o      reja haʔ-o  
boy-<¬AN2>AFF tree see-PST(AOR)  
'Boy saw the tree'.
  - [reja haʔ-o-b]      wofo 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'.
  - [reja haʔ-o-r-s:i]      wofo 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'.
  - [reja haʔ-ija]      wofo 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
- wofi-<r>o      reja haʔ-o  
boy-<¬AN2>AFF tree see-PST(AOR)  
'Boy saw the tree'.
  - [wofi-<r>o      haʔ-o-b]      reja 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 haʔ-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-<¬AN2>AFF see-PTCP:FUT tree I-<¬AN2>AFF know-HAB  
'I didn't see the tree that the boy will see'.

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

- a. joʃi halux-onn-ij homoloʃil-qxi  
girl miss-PST-PF friend.OBL-INST  
'Girl missed her friend'.
- b. [homoloʃil-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. [homoloʃil-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. [homoloʃil-qxi haluxonn-ija] joʃi di-<j>o ts'inn-e  
friend.OBL-INST miss-PTCP:FUT girl I-<M>AFF know-HAB  
'I know the girl who will miss the friend'.

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

- a. joʃi halux-onn-ij homoloʃil-qxi  
girl miss-PST-PF friend.OBL-INST  
'Girl missed her friend'.
- b. [joʃi haluxonn-i-b] homoloʃi 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] homoloʃi 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] homoloʃi 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. woʃo imu-tʃ'u sir-i  
boy father.OBL-AD2 afraid-PST(AOR)  
'The boy is afraid of [his] father'.
- b. [imu-tʃ'u sir-i-b] woʃo 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>AFF 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-tʃʷu sir-i  
boy father.OBL-AD2 afraid-PST(AOR)  
'The boy is afraid of [his] father'.
- b. [wofo 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. [wofo sir-i-r-si] 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. [wofo 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-ɔʃul-ɬu intʃi itʃi-i  
father.OBL-ERG girl.OBL-DAT apple give-PST(AOR)  
'Father gave an apple to the daughter'.
- b. [dada-di intʃi itʃi-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 itʃi-i-r-si] 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 itʃi-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-ɬu intʃi itʃi-i  
father.OBL-ERG girl.OBL-DAT apple give-PST(AOR)  
'Father gave an apple to the daughter'.
- b. [joʃul-ɬu intʃi itʃi-i-b] wofo 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-ɬu intʃi itʃi-i-r-si] wofo 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-ɬu intʃi itʃi-ija] wofo 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-ɬu intʃi itʃi-i  
father.OBL-ERG girl.OBL-DAT apple give-PST(AOR)  
'Father gave an apple to the daughter'.
- b. [dada-di joʃul-ɬu itʃi-i-b] intʃi den-ni k'amm-ija  
father.OBL-ERG girl.OBL-DAT give-PST-PTCP:PST apple I-ERG eat-FUT  
'I'll eat the apple that father gave to the girl'.
- c. [dada-di joʃul-ɬu itʃi-i-r-si] 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 joful-ɬu itʃi-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. jofi j-ik-on ritʃi-loj  
girl F-live.on-PST(AOR) meet-COM  
'The girl live on meet'.
- b. [ritʃi-loj j-ik-oni-b] jofi 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. [ritʃi-loj j-ik-oni-r-s:i] jofi 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. [ritʃi-loj j-ik-on-ija] jofi di-<j>o ts'inn-e  
meet-COM F-live.on-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. jofi j-ik-on ritʃi-loj  
girl F-live.on-PST(AOR) meet-COM  
'The girl live on meet'.
- b. [jofi j-ik-oni-b] ritʃi di-<b>o dʒiʔ-e  
girl F-live.on-PST-PTCP:PST meet I-<AN1>AFF love-HAB  
'I like the meet that girl lived on'.
- c. [jofi j-ik-oni-r-s:i] ritʃi di-<b>o dʒiʔ-e  
girl F-live.on-PST-PROG-ATTR meet I-<AN1>AFF love-HAB  
'I like the meet that girl lives on'.
- d. [jofi j-ik-on-ija] ritʃi di-<b>o dʒiʔ-e  
girl F-live.on-PTCP:FUT meet I-<AN1>AFF love-HAB  
'I like the meet that girl will live on'.

(16) Causee argument <Erg, Aff, Abs>

- a. wofu-di jofu-<b>o χink'il-ol k'amm-oʔ-i  
boy.OBL-ERG girl.OBL-<AN1>AFF khinkal-PL eat-CAUS-PST(AOR)  
'The boy made the girl to eat khinkals'.
- b. [wofu-di χink'il-ol k'amm-oʔ-i-b] jofi if:i-χo j-iʔ-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. [wofu-di χink'il-ol k'amm-oʔ-i-r-s:i] jofi if:i-χo 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. [wofu-di χink'il-ol k'amm-ol-ija] jofi if:i-χo 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. wofu-di jofu-<b>o χink'il-ol k'amm-oʔ-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                      χink'il-ol   k'amm-oł-i-b]                      wofo ifi-χo                      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'.
- c. [jofu-<b>o                      χink'il-ol   k'amm-oł-i-r-s:i]                      wofo ifi-χo                      j-i?o  
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'.
- d. [jofu-<b>o                      χink'il-ol   k'amm-ol-ija]                      wofo ifi-χo                      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>

- a. wofu-di                      jofu-<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. [wofu-di                      jofu-<b>o                      k'amm-oł-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'.
- c. [wofu-di                      jofu-<b>o                      k'amm-oł-i-r-s:ol]                      χink'il-ol   di-<b>o  
boy.OBL-ERG girl.OBL-<¬AN1>AFF eat-CAUS-PST-PROG-ATTR-PL khinkal-PL I-<¬AN1>AFF  
dzi?-e  
love-HAB  
'I like khinkals that boy make the girl eat'.
- d. [wofu-di                      jofu-<b>o                      k'amm-ol-ij-ol]                      χink'il-ol   di-<b>o                      dzi?-e  
boy.OBL-ERG girl.OBL-<¬AN1>AFF eat-CAUS-PTCP:FUT-PL khinkal-PL I-<¬AN1>AFF love-HAB  
'I like khinkals that boy will make the girl eat'.

(19) Genitive possessor (inalienable)

- a. jofu-tłi                      re?a ruq'-u-r  
girl.OBL-GEN hand hurt-PST-PROG  
'Girl's hand hurts'.
- b. [re?a ruq'-u-b]                      jofi di-<j>o                      ts'inn-e  
hand hurt-PST-PTCP:PST girl I-<F>AFF know-HAB  
'I know the girl whose arm hurt'.
- c. [re?a ruq'-u-r-s:i]                      jofi di-<j>o                      ts'inn-e  
hand hurt-PST-PROG-ATTR girl I-<F>AFF know-HAB  
'I know the girl whose arm hurts'.
- d. [re?a ruq'-ija]                      jofi di-<j>o                      ts'inn-e  
hand hurt-PTCP:FUT girl I-<F>AFF know-HAB  
'I know the girl whose arm will hurt'.

(20) Genitive possessor (kinship)

- a. wofu-tłi                      jots:i j-iz-unn-ij  
boy.OBL-GEN sister F-be.born-PST-PF  
'Boy's sister was born'.
- b. [jots:i j-iz-unn-i-b]                      wofo di-<w>o                      ts'inn-e  
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-i3-unn-i-r-s:i] wofo 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-i3-unn-ija] wofo 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. wofu-tli mafina b.itf'-o  
boy.OBL-GEN car ¬AN1.break.down-PST(AOR)  
'Boy's car broke down'.
- b. [mafina b.itf'-o-b] wofo 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. [mafina b.itf'-o-r-s:i] wofo 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. [mafina b.itf'-ija] wofo 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. 3e1al wofo w-u?-o  
today boy M-come-PST(AOR)  
'Today boy came'.
- b. [wofo w-u?-o-b] zubu  
boy M-come-PST-PTCP:PST day  
'Day when the boy came'.
- c. [wofo w-u?-o-r-s:i] zubu  
boy M-come-PST-PROG-ATTR day  
'Day when the boy comes'.
- d. [wofo w-u?-ija] zubu  
boy M-come-PTCP:FUT day  
'Day when the boy will come'.

(23) Spatial location

- a. wofo hon-tli w-u3-un  
boy village.OBL-INTER.ESS M-be.born-PST(AOR)  
'The boy was born in a village'.
- b. [wofo w-u3-uni-b] hon di-<r>o ha?-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. [wofo w-u3-uni-r-s:i] hon di-<r>o ha?-o  
boy M-be.born-PST-PROG-ATTR village I-<¬AN2>AFF see-PST(AOR)  
'I saw the village, where the boy is borning'.
- d. [wofo w-u3-un-ija] hon di-<r>o ha?-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. wofo hon-tʰi w-utʃʰ:-un  
boy village.OBL-INTER.LAT M-run-PST(AOR)  
'Boy ran to the village'.
- b. wofo hon-tʰi-k:u w-utʃʰ:-un  
boy village.OBL-INTER-ELAT M-run-PST(AOR)  
'Boy ran from the village'.
- c. [wofo w-utʃʰ:-uni-b] hon di-<r>o haʔ-o  
boy M-run-PST-PTCP:PST village I-<¬AN2>AFF see-PST(AOR)  
'I saw the village that boy ran to/from'.
- d. [wofo w-utʃʰ:-uni-r-s:i] hon di-<r>o haʔ-o  
boy M-run-PST-PROG-ATTR village I-<¬AN2>AFF see-PST(AOR)  
'I saw the village that boy ran to/from'.
- e. [wofo w-utʃʰ:-un-ija] hon di-<r>o haʔ-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-oʃu-di k'amm-i intʃi haq'u-tʃʰu tʰeru  
girl.OBL-ERG eat-PST(AOR) apple hous.OBL-AD2 near  
'The girl ate apple near the hous'.
- b. [tʰeru j-oʃu-di intʃi k'amm-i-b] haq'u di-<r>o haʔ-o  
near girl.OBL-ERG apple eat-PST-PTCP:PST house I-<¬AN2>AFF see-PST(AOR)
- c. [j-oʃu-di tʰeru intʃi k'amm-i-b] haq'u di-<r>o haʔ-o  
girl.OBL-ERG near apple eat-PST-PTCP:PST house I-<¬AN2>AFF see-PST(AOR)
- d. [j-oʃu-di intʃi tʰeru k'amm-i-b] haq'u di-<r>o haʔ-o  
girl.OBL-ERG apple near eat-PST-PTCP:PST house I-<¬AN2>AFF see-PST(AOR)
- e. \*[j-oʃu-di intʃi k'amm-i-b tʰeru] haq'u di-<r>o haʔ-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 tʰeru intʃi k'amm-ija] haq'u di-<r>o haʔ-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) Adpositional argument

- a. den-ni ustulu-ʔa hiʔa-k:u kuruʃka b-iχ-i  
I.OBL-ERG table.OBL-SUPER.ELAT on-ELAT mug ¬AN1-take-PST(Aor)  
'I took the mug from the table'.
- b. du-<b>o haʔ-o ustul hiʔa-k:u den-ni kuruʃka  
you.OBL-<¬AN1>AFF see-PST(AOR) table on-ELAT I.OBL-ERG mug  
b-iχ-i  
¬AN1-take-PST-PTCP:PST
- c. du-<b>o haʔ-o ustul den-ni hiʔa-k:u kuruʃka  
you.OBL-<¬AN1>AFF see-PST(AOR) table I.OBL-ERG on-ELAT mug



b-iχ-i

¬AN1-take-PST-PTCP:PST

- d. du-<b>o                      ha?-o                      ustul den-ni                      kuruβka hi?a-k:u  
you.OBL-<¬AN1>AFF see-PST(AOR) table I.OBL-ERG mug                      on-ELAT

b-iχ-i

¬AN1-take-PST-PTCP:PST

- e. du-<b>o                      ha?-o                      ustul den-ni                      kuruβka b-iχ-i  
you.OBL-<¬AN1>AFF see-PST(AOR) table I.OBL-ERG mug                      ¬AN1-take-PST-PTCP:PST  
**hi?a-k:u**  
on-ELAT

‘You saw the table, I took the mug from’.

(27) Actant from the general question

- a. jofi 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]                      jofi 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]                      jofi 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]                      jofi 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’.

(28) Actant from the special question

- a. maduhalβ-χo                      i-m                      w-u?-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’.

(29) So called relative clause without coreferential noun phrase in the modifying clause

- a. [den-ni zīw b-ertf’:-i-b]                      βi:w wofu-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 mafina b-aχo-ʔ-i-b]                      orsi    di-<b>o       ha?-o-ssu  
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. [woful-di    orsi    b-eq'aʃ:-i-b]                      χabar di-<b>o       tsinn-e  
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. [jofu-di       χ<sup>w</sup>ami-l j-ez-a-b]                      jam di-<b>o       b-aχo-r  
girl.OBL-ERG fish-PL F-cook-PST-PTCP:PST smell I-<¬AN1>AFF ¬AN1-smell-PROG  
'I pick up the smell of fishes that girl cooked'.

It is even possible to omit head in some sentences with this type of relative clause.

- (30) a. [den-ni zīw b-ertʃʰ:-i-b]                      wofu-di              tsʰad-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. [woful-di    orsi    b-eqʰaʃʰ:-i-b]                      di-<b>o              tsinn-e  
boy.OBL-ERG money ¬AN1-steal-PST-PTCP:PST I-<¬AN1>AFF know-HAB  
'I know about the boy stealing the money'

It is not possible to relativise object of comparison:

- (31) Object of comparison
- a. wofo w-etf'uχa joful-tf'u      dzi  
boy M-big girl.OBL-AD2 COP  
'The boy is higher than the girl'.
- b. wofo w-etf'uχa dzi-b      jofi if:i-χo      j-iʔ-o  
boy M-big COP-PTCP:PST girl we-AD.LAT F-come-PST-PTCP:PST  
\*'The girl that is higher than the boy came to us'  
'The girl that has the big boy/son came to us'

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

- (32) Comitative adjunct
- a.   dada jofi-loj   w-uʔ-o  
      father girl-COM M-come-PST(AOR)  
      ‘Father came with the daughter’.
- b.   \*[dada w-uʔ-o-b]                               jofi 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:

- (33) Coordination Island
- a. wofo-lo jofi-lo w-uʔ-o  
boy-ADD girl-ADD M-come-PST(AOR)  
'A boy and a girl came'.
- b. \*[wofo-lo w-uʔ-o-b] jofi 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'.

From these examples it is clear that it is possible to relativise a really huge range of arguments. Compare with [Keenan, Comrie 1977].

### 3. Head properties

The head of the relative clause could be:

(34) common noun

- a. [if:i-χo j-iʔ-o-b] **jofi** 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'.

(35) demonstrative pronoun

- a. [hon-tʃi w-uʒ-uni-b] **hege-w** hoʃu w-etʃ'uʃa w-uʔ-un  
 village.OBL-INTER.ESS M-be.born-PST-PTCP:PST dem-M here M-big M-become-PST(AOR)  
 'He, that was born in village, grew up here'.

(36) personal pronoun

- a. [hon-tʃi w-uʒ-uni-b] **men** hoʃu w-etʃ'uʃa w-uʔ-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'.

(37) interrogative pronoun

- a. χink'il-ol k'amm-i i-m-ʃi [if:i-χo 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-<b>o dʒiʔ-e i-b-ʃi [maduhalf-di k'amm-i-b]?  
 you.OBL-<¬AN I>AFF like-HAB what-¬H-WH neighbour.OBL-ERG eat-PST-PTCP:PST  
 'What from what the neighbour ate do you like?'

(38) indefinite pronoun

- a. [if: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. [maduhalf-di k'amm-i-b] i-b-bolo di-<b>o ts'inn-e-ssu  
 neighbour.OBL-ERG eat-PST-PTCP:PST what-¬H-INDEF I-<¬AN I>AFF know-HAB-NEG  
 'I don't know something that neighbour ate'.

(39) heavy head

- a. [if:i-χo j-iʔ-o-b] j-etʃ'uʃa j-ots:i aminat di-<j>o 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'.

(40) headless

- a. [if:i-χo 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. [χink'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:

- (41) number
- a. [maduhalf-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. [maduhalf-di k'amm-ija] χink'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'.
  - c. [maduhalf-di k'amm-i-b-ol] χink'il-ol den-ni dzid-i  
neighbour.OBL-ERG eat-PST-PTCP:PST-PL khinkal-PL I-ERG do-PST(AOR)  
'I made khinkals that the neighbour ate'.
  - d. [maduhalf-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'.
- (42) negation
- a. [if:i-χo j-iʔ-o-ssu-b] jofi di-<j>o ts'inn-e  
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. [if:i-χo j-iʔ-essa] jofi 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'.
- (43) class agreement (only with absolutive from relative clause, if the verb have an agreement slot)
- a. [hajman b-iqχ-u-b] wofo 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. [wojul-di b-iqχ-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'.
- (44) case (only on headless relative clauses)
- a. [if:i-χo 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. [if:i-χo j-iʔ-o-b] jofi-di χink'il-ol k'amm-i  
we-AD.LAT M-COME-PST-PTCP:PST-ERG girl.OBL-ERG khinkal-PL eat-PST(AOR)
  - c. \*[if:i-χo j-iʔ-o-b]-di jofi-di χink'il-ol k'amm-i  
we-AD.LAT M-COME-PST-PTCP:PST-ERG girl.OBL-ERG khinkal-PL eat-PST(AOR)
  - d. \*[if:i-χo j-iʔ-o-b]-di jofi χink'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 (45a). No attempts to use demonstratives as a resumptive succeeded. In example (45b) demonstrative tend to be a modifier of relative clause head *jofi*, but more work should be done on this topic. In the most natural example (45c) unfortunately it is not clear, whether *enfiuro* 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.

- (45) a. ?[**enfu**-<r>o                      reʃa haʔ-o-b]                      dada ifi:i-χo                      w-uʔ-o  
REFL.OBL-<¬AN2>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 [ifi:i-χo                      j-iʔ-o-b]                      jofi 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                      reʃa haʔ-o-b                      ifi:i-χo                      w-uʔ-o-do  
REFL.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!'

Since basic word order is not so informative, I decided change it to the more informative one:

- (46) a. kurufka [ustul-ʔa                      hiʔa-s:i] di-<b>o                      dʒiʔ-e  
mug table.OBL-SUPER.ESS on-ATTR I-<¬AN1>AFF like-HAB
- b. kurufka [hege-b                      ustul-ʔa                      hiʔa-s:i] di-<b>o                      dʒiʔ-e  
mug DEM-¬AN1 table.OBL-SUPER.ESS on-ATTR I-<¬AN1>AFF like-HAB
- c. kurufka [ʒi-b                      ustul-ʔa                      hiʔa-s:i] di-<b>o                      dʒiʔ-e  
mug REFL-¬AN1 table.OBL-SUPER.ESS on-ATTR I-<¬AN1>AFF like-HAB  
'I like the mag that stands on the table.'
- (47) a. [studenta-di                      w-ets:iqχ-i-b]                      kwadaruqχan di-<w>o                      ts'inn-e  
student.PL.OBL-ERG M-praise-PST-PTCP:PST writer I-<M>AFF know-HAB
- b. [studenta-di                      hege-w w-ets:iqχ-i-b]                      kwadaruqχan di-<w>o                      ts'inn-e  
student.PL.OBL-ERG DEM-M M-praise-PST-PTCP:PST writer I-<M>AFF know-HAB
- c. [studenta-di                      ʒi-w                      w-ets:iqχ-i-b]                      kwadaruqχan di-<w>o                      ts'inn-e  
student.PL.OBL-ERG REFL-M M-praise-PST-PTCP:PST writer I-<M>AFF know-HAB  
'I know the writer who is praised by students.'

From these examples it is clear, that it is possible to use both demonstrative and reflexive pronouns as resumptives with only tiny difference in a semantics. It should be also noted that reflexive in relative clause could have antecedent in the main clause:

- (48) a. [enfu-*j<sub>i</sub>*                      baba haʔ-o-b]                      wofo<sub>i</sub> ifi:i-χo                      wuʔo  
REFL.OBL-<F>GEN mother see-PST-PTCP:PST boy we-AD.LAT M-come-PST(AOR)  
'The boy who saw his mother came to us.'
- b. [enfu-*j<sub>i</sub>*                      baba-<w>o                      haʔ-o-b]                      wofo<sub>i</sub> ifi:i-χo                      wuʔo  
REFL.OBL-<F>GEN mother-<M>AFF see-PST-PTCP:PST boy we-AD.LAT M-come-PST(AOR)  
'The boy who was seen by his mother came to us.'
- c. [ʒi-w<sub>i</sub>                      haʔ-o-b]                      wofo<sub>i</sub> ifi:i-χo                      wuʔo  
REFL-M> see-PST-PTCP:PST boy we-AD.LAT M-come-PST(AOR)  
'The boy who saw himself came to us.'

## Glosses