## Vertical Ellipsis in Tsakhur and Adyghe

Most theories of ellipsis have been based on data from languages which disallow what we call here vertical ellipsis (in the subordinate clause with an antecedent in the main clause, or vice versa), but allow horizontal ellipsis (between coordinated clauses), cf. the well-known restriction on Gapping:
(1) John played piano, and (*whenever) Max $\qquad$ sax

In some languages of the Caucasus, however, left-, right-, up- and downward vertical ellipsis is normal, cf. temporal converb constructions in -inGaI and -me in Tsakhur:
(2) šit'ē-n Xoče $\quad a-w-q_{0}-i n G a I, \quad o-p-x u n-n a$ bird-ERG snake. 3 3-catch.PF-CONV eat.PF-ATTR When the bird caught the snake, (the bird) ate (the snake).
(3)

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a. s o aXn-ē-qa i-w-č'-u-mē, __ gi-b-Rill-na
    bear.3 lair-IN-ALL 3-enter-PF-LIM 3-begin.PF-ATTR
    mir hā?-a.
    growl 3-do-IPF
b.
\begin{tabular}{llll} 
gi-b-Ril-na & mir & hā2-a, & aXn-è-qa \\
3-begin.PF-AA & growl & 3-do-IPF & lair-IN-ALL
\end{tabular}
sjo i-w-['-u-mE.
bear.3 3-enter-PF-LIM
When the bear got into the lair, it began to growl.
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With clausal arguments, however, upward ellipsis is normally impossible:


In Adyghe, with all kinds of subordinate clauses, both upward and downward vertical ellipsis is available:

| a. | [pŝaŝe-m | wered | qə- $?_{w e-n-e w ~}$ | Ø |
| :--- | :--- | :--- | :--- | :--- |
| girl-ERG | song | DIR-sing-POT-ADV Ø | faj |  |
|  | want |  |  |  |

b. $\varnothing$ faj [pŝaŝe-m wered qə-? ${ }_{w} \mathrm{e}-\mathrm{n}-\mathrm{ew}$ ] Ø want girl-ERG song DIR-sing-POT-ADV (She) $)_{i, j}$ wants the girl $l_{\mathrm{i}}$ to sing a song.
 girl-ERG 3SG-brother DIR-REL-see-ERG Ø DIR-cry-PST When the $\operatorname{gir}_{i, j}$ saw her brother, (she) $)_{i, j}$ cried.

Ø DIR-cry-PST girl-ERG 3SG-brother DIR-REL-see-ERG
(She) ${ }_{i, j}$ cried, when the $\operatorname{girl}_{\mathrm{j}}$ saw her brother.

In this respect, no difference can be seen between adjunct, argument and relative subordinate clauses.

Contrary to the widely accepted generalization that semantic binding requires syntactic binding (i.e. that the binder be coindexed with and c-command the pronoun) [Reinhart 1983; Heim and Kratzer 1998: 264], cf. (6), pronominal arguments in Adyghe (and the corresponding ellipsis sites of noun phrases) in the main clauses can be easily bound from within a subordinate clause:
(7) a. The secretary $h e_{i}$ hired thinks that Domingo $_{i}$ is despotic.
b. $\quad *$ The secretary $h e_{i}$ hired thinks that each of the tenors ${ }_{i}$ is despotic.
c. Each of the tenorsi thinks that the secretary hei hired is despotic.

b. [sabəjəрерč $\hat{\mathbf{s}}$ əhaftən qə-r-a-tə-n-ew] Ø me-g ${ }_{\text {wəre }}$ child every gift DIR-3SG-3PL-give-POT-ADV (he) DYN-hope $\mathrm{He}_{\mathrm{i}, \mathrm{j}}$ hopes, that every child ${ }_{\mathrm{j}}$ will be given a gift.
(9) Ø faj a zə-m š'ət $\chi_{w}$ - -n-x-ew
want he one-ERG praise-POT-PL-ADV
He wants only himself to be praised.
Only he wants to be praised.

That in (8) the quantifier belongs to the subordinate clause is seen from its case (object ergative), whereas the matrix verb would require the absolutive. Several competing analytical and theoretical approaches to the phenomena of vertical ellipsis and upward binding, with their advantages and drawbacks, will be considered in the paper.

## References

1. Heim, Irene, and Angelika Kratzer. 1998. Semantics in Generative Grammar. Oxford: Blackwell.
2. Reinhart, Tanya. 1983. Anaphora and Semantic Interpretation. University of Chicago Press.
