THE POLYSEMY OF RELATIVIZING AND NOMINALIZING MARKERS

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This paper deals with markers that can encode both clausal arguments and relative clauses (i.e. function like nominalizers and relativizers at the same time). We further discuss positions on the Keenan & Comrie Accessibility Hierarchy that can be relativized by such units, and make a proposal about restrictions on these positions.

1. Relativizing and nominalizing markers: outline of the problem

It is generally believed that different types of complex clauses are formed with different types of deverbal forms (and different conjunctions) − complements are formed with verbal nouns or infinitives, relative clauses with participles and verbal adjectives, and adverbial clauses with converbs. Most often, the decision which class a particular form (infinitive, converb, supine, etc.) belongs to is taken according to the type of complex clauses it usually appears in. However, many languages do not show the one-to-one correspondence between the verb form and the type of the dependent clause. For example, it is a well known fact that participles in Uralic and Altaic languages can be used both in a relative clauses, and in complement clauses, see the examples from Komi-Zyrian:

KOMI-ZYRIAN (URALIC, FINNO-UGRIC): ACTIVE-PASSIVE PARTICIPLE ON -*əm*

(1) a. [*mama-lɨʃʲ*   **vur-əm**]   *dərəm*   *me*   *koʃʲal-i.*
          mother-GEN2   sew-PART   shirt   I   tear-PST
   I've torn the shirt mother gave.

   b. [*mama-lən*   *dərəm*   **vur-əm**]   *menɨm*   *kaʒiʧʲ-ə.*
          mother-GEN1   shirt   sew-NZR   I.DAT   like-PRS.3
   I like the way mother has sewn the shirt.

In the first sentence (1a) the active-passive participle on -*əm* serves as an attribute of the head noun *dərəm* 'shirt', and hence builds a relative clause. In (1b) it is used as a subject of the verb *kaʒiʧʲɨnɨ* "to like" (Experiencer is marked with dative, and Stimulus with nominative), and has *dərəm* as its own argument. Hence, the whole phrase marked with the square brackets is a nominalized sentence "mother has sewn the shirt" (lit. "mother's sewing of the shirt") and functions as a complement of the main verb *kaʒiʧʲɨnɨ*.

The same distribution pattern is shown by participles in many Uralic and Altaic languages, cf.:

DUNSYAN (ALTAIC, MONGOLIAN): PAST PARTICIPLE IN **-sen**:

(2) a. *Aba-ni*   [*kɨvan   ire-**sen**-deni*]   *ajasudžɨve.*
         father-POSS   son   come-PART-DAT/LOC+POSS   rejoice
     The father rejoiced at his son's arrival. (Todaeva 1961: 47)

     b. [*Učuʐudu ire-**sen***]   *kunni   enede   šinladžɨ   ire.*
         yesterday   come-PART   man   here   invite   come
     Call the man who came yesterday. (ibid.: 48)

Linguists dealing with the syntax of Uralic and Altaic languages give different analysis of such verb forms: a number of linguists treat them as participles (see Cypanov 1997 on Komi, Sunik 1947 on Tungus-Manchu languages e.a.); another point of view is to call them participles in the relative clauses (1 and 2a), and verbal nouns in complement clauses (1 and 2b) (see Bubrix 1949 on Komi, Cincius 1947 on Even e.a.).
The property of participles to function as names of situations has been observed by typologists in many languages of the world (see, for example, Lehmann 1984, Noonan 1985 e.a.). Less attention has been paid to the fact that the same polysemy pattern is demonstrated by the complementizers:

ENGLISH ***that***

(3) a. *the meat* [***that*** *we eat*]

     b. *You see* [***that*** *we eat*].

In (3b) the complementizer *that* forms a relative clause, which modifies the head noun *meat*, while in (3a) it functions as a complementizer. The same is true for Lele referential marker *go*:

LELE (CHADIC)

(4) a. *bàyndi*   [***go***   *ŋ   bèy   kòyò   ko-noŋ*]
         person   REF   1SG   give-3M   hoe   GEN-1SG
     a man to whom I gave my hoe (Frajzyngier 2001: 445)

     b. *ŋ   sèn   [**go** mé   gírbí   kòjò   kèrè*].
        1SG   know   REF   2F   forget   hoe   GEN-2F
     I know that you forgot your hoe (ibid.: 384)

The relativizer/nominalizer polysemy [1] is wide-spread in the languages of the world: it is found in the languages of the Caucasus, in languages of Indo-European, Uralic, Altaic, Australian, Tibeto-Birman, Polynesian, Tupí-Guaraní language families etc.
Roughly speaking, it is common for relativizers to serve as nominalizers/complementizers. This phenomenon, though noted by typologists, has received only an intuitive explanation, see Lehmann 1984: "Der Untershied zwischen Relativ- und Substantivsatz… besteht… lediglich darin, dass der R[elativ]S[atz] eine freie Variable enthält, wo der Substantivsatz eine gebundene Variable oder eine Konstante hat" (Lehmann 1984: 153). The restrictions on this polysemy have not yet been worked out. In particular, the following questions arise when considering the data in (1)-(4) above:
   1) whether all the nominalizers and complementizers function as relativers;

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[1] Here and below we are not considering complements of perception verbs, as it is not always obvious, what kind of construction they form in a given language. It is also not obvious, what exactly is the semantic argument of a perception verb – the whole situation, or an object involved in this situation (see Letuchiy, Serdobolskaya 2005).

2) whether all the relativizers can function as nominalizers or complementizers;

3) if not, what are the syntactic/semantic restrictions on the markers allowing such a polysemy.

These questions constitute the goal of this paper. The first two questions denote the universality hypothesis of the polysemy pattern, which is going to be dealt with in the next section; the final section treats the problem of the syntactic restrictions on the polysemy observed.

2. Universality hypothesis

The hypothesis that all the complementizers and nominalizers can function in relative clause construction is disapproved; cf. deverbal nouns in *-ti-* in Sanskrit (Zalizniak 1978), or the complementizer *kē* 'that' in Beng that cannot participate in any relative clause:

BENG (SOUTH MANDE) *kē*

(5) *ó   wé   [kē   à   nɯ́   ɛ́]*
    1SG:PST+   reply   that   3SG:PST- come Neg
He answered that he wouldn't come

(6) *sɔ̀ŋ   [fɛ̰̄ (*kē)ā́ŋ   à   yè   nā̰]*
    person   REL   1PL:PST+   3sg   see   Rel
the person who we saw

Japanese and Ainu languages (see Josephs 1976, Refsing 1986) seem to present another counterexample to this hypothesis. These languages can form complement clause constructions as a relative clause modifying a head noun with the meaning 'the fact', or 'the way' etc. (cf. English *the fact that…* construction). So, nominalization constructions in such languages don't show relaivizing usages, though they contain a relative clause. Similarly, in Dravidian languages nominalizations are formed adding a special morpheme to a relative clause marker (Rajendran 2001)

We can also refute the hypothesis that all the relativizers can function as complementizers and/or nominalizers.

There are attested relativizing units that do not serve to form a complement clause. For example, the relativizing suffix *-(a)n* in Basque can only appear in relative clauses; the same restrictions are demonstrated by relative pronouns *kotoryj* in Russian, *lequel* in French, *a* in Irish, *si-* and *ni-* relativizers in Nias (Polynesian) etc.:

BASQUE

(7) [*arratčalde-an   horre-taz   hitz   egin   dud-an*]   *gizon-a*
    afternoon-LOC   this-INS   word   do   AUX.1SG.A-**REL**   man-DEF
    the man I talked to in the afternoon

RUSSIAN

(8) *Ищ-ете   подарок,   [котор-ый   их   обраду-ет]?*
    look.for-PRS.2PL present   which-NOM.M.SG they.ACC   make.happy-PRS.3SG
    You are looking for a present that would make them happy? (National Corpus of Russian)

It also has been argued for some languages that they lack complementizers and regular nominalizations at all (see Dixon 1995 about Dyirbal; the same is indicated about the Alutor language by the data in Kibrik, Kodzasov, Muravyova 2000).

Hence, the universality hypothesis of the observed polysemy pattern is refuted. Then, the question arises, if we can predict relativization/nominalization polysemy by the the syntactic/semantic

properties of the subordinative marker: hence, which syntactic/semantic properties favour the polysemy and which do not.

3. Syntactic properties of the relativizers demonstrating the REL/NOM polysemy

3.1. Positions in the Accessibility hierarchy

3.1.1. Quite often units used in nominalization relativize a wide domain of positions in the Acessibility Hierarchy. This is the case in Lele (Frajzynger 2001, 'referential marker' *go*; see also examples above), and in Pitta-pitta (Blake 1979):

LELE

(9) *bayndi* [**go** *na* *ày* *kùnáy* *gúyé*]
    person REF HYP take uncle-3M spider
  the person who would take his uncle Spider

(10) *jàw* *dí-ngà* [**go** *ngá* *gol-ge*]
   enemies GEN:PL-1DU:INCL REF 1DU:INCL see-3PL
  the enemies that we were going to see (Frajzyngier 2001: 438-440)

PITTA-PITTA

(11) [*ṬatYi-**ka**-inYa*], *mutYi-ka* *ṇari* *ṇanYtYa.*
    eat-PST-ABL sleep-PST now I
After the dinner he has slept (lit. after he has eaten). (Blake 1979: 218)

(12) *Ṭipu-ṇa* *ṇa-ṭu* *ṇatYi-ka* [*ṭarri-**ka**(-maru)-inYa-ṇa*].
    rock-ACC I-ERG see-PST jump-PST-CON-ABL-ACC
  I saw the rock he had jumped from. (ibid.: 218)

In standard Russian, *chto* can function as a complementizer or relativize the subject and direct object positions:

RUSSIAN (NATIONAL CORPUS OF THE RUSSIAN LANGUAGE) ***chto***

(13) *Я зна-ю,* [***что*** *земля* *враща-ет-ся* *вокруг* *Солнц-а*]
    I know-PRS.1SG that Earth go.round-PRS.3SG-REFL around Sun-GEN
  I know *that* the Earth goes round the Sun.

(14) *Кондуктор-а,* [***что*** *выда-л-а* *ему* *фальшивк-у*], *он* *увиде-л*
    conductor-ACC that gave-PST-F.SG he.DAT fake.ticket-ACC he see-PST.M.SG
  через *день в* *автобус-е* *друг-ого* *маршрут-а.*
    after day in bus-LOC other-ACC.M.SG route-ACC
  He met the administrator **who** gave him the fake ticket the next day in a bus of a different route.

(15) *...если учесть те* *крохи,* [***что*** *получа-ет* *основная масса* *пенсионер-ов*]*?*
    if consider those whim that receive-PSR.3SG main-F.SG body pensionary-GEN.PL
  …if we take into account the whim of money **that** most of the retired people receive…

Colloquial Russian, unlike standard Russian, allows the complementizer *chto* to relativize any argument position, including oblique argument (*быть влюбленным* 'be in love with' takes an oblique argument in Russian, like in English):

(16) *Где   эт-а   девушка, [**что** я влюблен]?*
     where this-F.SG   girl   that   I in.love.M.SG
   Where's this girl I'm in love with?

This is also the case for subordinative markers in Ulithian (Ho-min Sohn 1973), Woleai (Ho-min Sohn 1975), Tamil (Rajendran 2001), participles in *-tu* in Archi (Kibrik 1977), complementizer *je* in Bengali (Bykova 1966), relative markers in Australian languages such as Watjarri (Douglas 1981) and Gumbaynggir (Eades 1979), subordination markers in Tibeto-Birman languages e.a.

3.1.2. There also exist nominalizers/complementizers like French *que* that relativize DO position only:

  FRENCH
(17) *la   femme [**qui** m'   aime]*
     the   woman who   me   loves
   the woman who loves me

(18) *la   femme [**que** j' aime]*
     the   woman that I   love
   the woman I love

(19) *Je sais   [**que** cette femme m'   aime].*
     I know   that this woman me   loves
   I know that this woman loves me.

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S ——— DO ——— IO ——— Obl ——— POSS ——OComp
│      │
│      │
E ————┘
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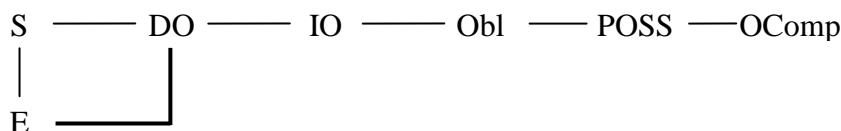
3.1.3. There are also nominalizers/complementizers that are used to relativize all the positions on the Accessibility Hierarchy except for the subject. One such language is Mari:
  MARI (DO AND LOWER POSITIONS ON THE HIRARCHY)
(20) [*jəvan petr-ən   kər-**əm**-əʒ*]   *detʃ' lyd-eʃ.*
     Ivan   Peter-GEN beat-PART-POSS.3SG   from is.afraid-PRS.3SG
   Ivan is afraid that tomorrow Peter will beat him.

(21) [*koka-m-ən   kalas-en   kod-**əmo**]   legend-əʒe
     aunt-POSS.1SG-GEN tell-CONV leave-PART   legend-POSS.3SG
   the legend told by my aunt

(22) [*məj-ən kup   gə-tʃ'   polʃ-**əmo**]   ajdeme
     1SG-GEN swamp   from-ABL   help-PART   man
   the man whom I helped to get out of the swamp

(23) [*mə-lam   kaj-aʃ   kyl-**me**]   jal   peʃ   toraʃte-ʒ-ak   ogəl.*
   1SG-DAT.1SG go-INF need-PART   village very far-POSS.3SG-EMPH NEG.3SG
   The village where I need to go is not too far.

(24) [*oksa   kij-**əme**]   kvartire   de-tʃ'   kl'utʃ   mə-lam   kyl-eʃ.*
    money lie-PART   apartment near-ABL key   1SG-DAT.1SG need-PRS.3SG.
   I need a key for the apartment where money is situated.

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S ——— DO ——— IO ——— Obl ——— POSS ——OComp
|          |
E ——————————
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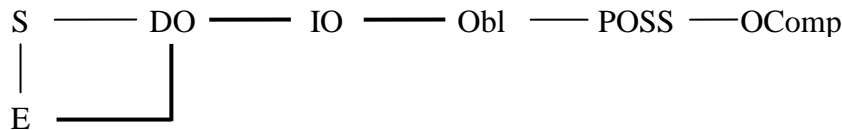
3.1.4. One example of a nominalizer relativizing the Subject position only is the English *ing*-form:

   ENGLISH -***ing***
(25) [*The actual writ**ing***] *would be easy.*
(26) *Audience much amused by shots of a great huge fat man* [*try**ing** to swim away with a*
      helicopter after him] (G. Orwell, 1984)

3.1.5. Finally, if we consider markers of that are specializing in relativization of lower positions on the Accessibility Hierarchy such as: French *dont* that relativizes Possessor and some Oblique positions, a special relativizing strategy for the instrumental argument in Tukang-Besi (Donohue 1995) etc., we find no examples among them that function as nominalizers or complementizers.

*3.2. Distinguishing between A and O relativizers*
It is interesting that some markers that can relativize the subject and the direct object are restricted to intransitive subjects (S + O relativizers, not A-relativizers). This is the case in Komi, cf. (1), Udmurt (Besermjan dialect), Beng (a Mande language) and in some Australian languages:

   BENG
(27) *ŋ-ó   [zr̀ìŋ̀   kásíé-**lɛ̀**] lú.*
    1sg-ST   corn   fry-NZR buy
   I'll buy some fried corn.

(28) [*dr̀ɛ̀   wō-**lɛ̀**]   ò   gēŋ̄.*
    work   do-NZR   3sg:HAB+ good
   It's good to work.

(29) [*ῑ gā̀ wῑ-**lɛ̀**]   ó   ῑ   sɛ̀.*
    1sg foot swell-NZR   3sg:PST 1sg ache
   My swollen foot ached.

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A ——— S ——— DO ——— IO ——— Obl ——— POSS ——OComp
         |        |
     E ——————————
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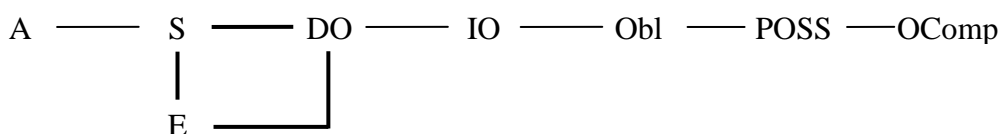
4. Conclusion

As we have noticed, a huge number of languages have some relativization marker that can function as a nominalizer.

It is quite common that such a "nominalizing" relativization marker operates in a very wide domain on the Accessibility Hierarchy, like *-əm-* suffix in Mari.

If, however, such a relativizer in a given language functions in a restricted domain, i.e. relativizes only one or few positions of the Accessibility Hierarchy, this domain is not random: nominalizers must relativize S or DO position[2].

Of course, this generalization needs to be explained. For the subject position the explanation could rely upon the definition of the subject as a priviledged syntactic position; and for the direct object position, upon its closest semantic relation to the verb. We will try to develop such an explanation in our further research.

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[2] An apparent exception in Adygh is analyzed by Gerasimov & Lander (to appear).

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