# Spurious coordination in Vlach multiple *wh*-fronting

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## 1   The phenomenon

Many (perhaps all?) multiple *wh*-fronting languages allow for what I will call a 'spurious coordinator' to appear between fronted wh-items:

(1)   Vlach[1]

   a.  acari  či    ari viǰutu̯?
      *who   what has seen*   'Who saw what?'

   b.  acari s    či    ari viǰutu̯?
      *who   and what has seen*   'Who₁ saw something and what did they₁ see?'

(2)   Russian (Kazenin 2002, Grebenyova 2004, Gribanova 2007)

   a.  Kto začem prixodil?
      *who why    came*   'Who came for what reason?'

   b.  Kto i    začem prixodil?
      *who and why    came*   'Who came and for what reason?'

(3)   Hungarian (Lipták 2003)

   a.  Ki   mikor látta Marit?
      *who when  saw  Mari*.ACC 'Who saw Mari when?'

   b.  Ki   és   mikor látta Marit?
      *who and when  saw  Mari*.ACC 'Who saw Mari and when?'

- Also found in Serbo-Croatian (Browne 1972), Romanian (Comorovski 1996, Gribanova 2007), Czech (Skrabalova 2006) and perhaps Turkish (Merchant 2001)

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[1]Vlach (or Vlah, Greek βλαχικά) is an endangered minority Romance language (whose two main variants are Aromanian and Megleno-Romanian) spoken in parts of Albania, Macedonia, Bulgaria, and northern Greece by 50,000 people by some estimates; see Friedman 2001 for ethnographic discussion. All Vlach data not otherwise sourced come from my fieldwork in Katerini, Greece in August 2007; many thanks to Sakis Gaitanis, my primary informant (a 40-year-old Greek-Vlach bilingual male).

# 2  Main properties

## 2.1  Single-pair answers required

Spurious coordinated questions only allow *single pair* answers, not the *pair-list* answers that are usually required in multiple *wh*-questions in these languages (Wachowicz 1974, Rudin 1988, 2007, Kazenin 2002, Bošković 2002):

(4)   a.  Q: Who brought what to the potluck?
         A: Abby brought the hotdogs, Ben brought the beer, and Cherlynn brought the dessert.

       b.  'pair-list': What are the pairs $< x, y >$ such that $x \in \{abby, ben, cherlynn\}$ and $y \in \{hotdogs, beer, dessert\}$ and $[\![brought(x,y)]\!]$ is true?

       c.  $[\![bring]\!] = \{< abby, hotdogs >, < ben, beer >, < cherlynn, dessert >\}$

       d.  presupposition: there is more than one pair $< x, y > \in [\![bring]\!]^M$

(5)   a.  Q: Who did you see, and where?
         A: I saw Mr. Plum in the library.

       b.  Q: Who hit who first?
         A: Sheila hit Rex first.

       c.  'single-pair': What is the unique pair $< x, y >$ such that $x \in \{sheila, rex\}$ and $y \in \{sheila, rex\}$ and $[\![hit.first(x,y)]\!]$ is true?

       d.  $[\![hit.first]\!] = \{< sheila, rex >\}$

       e.  presupposition: there is a unique pair $< x, y > \in [\![bring]\!]^M$

(6)   Acari #( s    ) kundu̧ ari  vatimatə muma-ts?
     *who      and   when  has killed    mother-your*

     'Who killed your mother, and when?' (cf. #*Who killed your mother when?*)

- Without the conjunction *s* 'and', the question is infelicitous, due to the one-time-only nature of the predicate.

## 2.2  Superiority effects are maintained

In multiple *wh*-fronting languages with superiority effects (Hungarian, Macedonian), these effects persist in spurious coordinated questions (Lipták 2003).

(7)   Hungarian
     a.  Ki  és  kiről       beszélt?
        *who and who.*ABOUT *talked*

       'Who talked and about whom?'

     b.  ??? Kiről       és  ki  beszélt?
          *who.*ABOUT *and who talked*

(8)   Macedonian

    a.  Koj i    kade  odi?
        *who and where go.3s*

        'Who is going and where?'

    b.  ?? Kade i    koj odi?
          *where and who go.3s*

## 2.3   Spurious *wh*-coordination involves conjunction

Only conjunctions show this behavior, not disjunctions

(9)   * Acari i   kundụ ari  vatimatə muma-ts?
      *who   or when  has killed    mother-your*

## 2.4   Spurious *wh*-coordination is always 'unbalanced'

The 'coordinated' *wh*-phrases cannot occur in 'balanced' coordinations:

(10)   a.  * S    acari s   či    ari viǰutụ?
          *and who  and what has seen*    (intended =(1b))

      b.  *cf.* S   fičorlụ s   fiata    anu vijutụ muma-ts.
          *and the.boy and the.girl have seen   mother-your*

        'Both the boy and the girl saw your mother.'

## 2.5   Spurious *wh*-coordination only occurs in multiple *wh*-fronting languages

These structures only occur in languages that allow multiple fronting of *wh*-elements already (whether such fronting is obligatory, as in Russian, or optional, as in Hungarian and Vlach).

(11)   * Who and when did you see?

(12)   * Wie en   wanneer heb je   gezien? (Dutch)
      *who and when    have you seen*

(13)   * Pjon ke  pote idhes? (Greek)
      *whom and when saw.2s*

# 3   Previous analyses

## 3.1   Previous strategy 1: Backwards sluicing

Spurious *wh*-coordination involves coordinated CPs with a backwards ellipsis operation (like sluicing) that reduces the first conjunct to just a *wh*-phrase (variously Bánréti 1992, Giannakidou and Merchant 1998, and Camacho 2003):

(14)  a.  acari s    či    ari viǰutụ?
      *who   and what has seen*   'Who$_1$ saw something and what did they$_1$ see?'

   b.
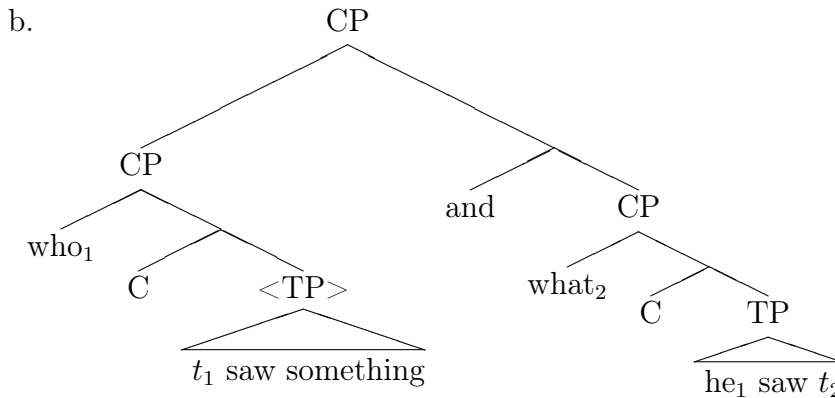

**Advantages**
**1.** Gets the restriction to single-pair answers for free

**Problems**
**1.** Not all the predicates that can occur in spurious coordinations allow for indefinite null arguments (Kazenin 2002, Lipták 2003, Gribanova 2007):

(15)  a.  Kto      i    kakoj gorod    zaxvatil?
      *who*.NOM *and which city*.ACC *conquered.3s*

      'Who conquered which city?'

   b.  [$_{CP}$ Kto$_1$ <[$_{TP}$ $t_1$ ~~zaxvatil ec$_2$~~]>] i [$_{CP}$ [kakoj gorod]$_2$ [$_{TP}$ *pro$_1$* zaxvatil $t_2$ ]]

   c.  * Kto       zaxvatil   i    kakoj gorod    zaxvatil?
      *who*.NOM *conquered.3s and which city*.ACC *conquered.3s*

**2.** Hungarian definiteness agreement (object agreement on the verb) should be obligatory, and is in fact disallowed (Lipták 2003):

(16)  a.  Érdekel    (hogy) mit        csinálsz      és   hogyan csinál-od/*-sz.
      *interest.3s (that)  what*.ACC *do.2s*.INDEF *and how     do.2s*.DEF/*INDEF

      'I care about what you do and how.'

   b.  Érdekel    (hogy) mit        és   hogyan csinál-*od/-sz.
      *interest.3s (that)  what*.ACC *and how     do.2s*.*DEF/INDEF

      'I care about what you do and how.'

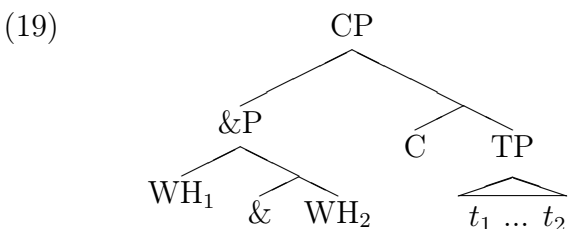**3.** Backwards sluicing obeys the Backwards Anaphora Constraint (Ross 1969):

(17)  a.  Although I don't know who, I know he wants to see someone.

   b.  Although I know he wants to see someone, I don't know who.

   c.  I know he wants to see someone, although I don't know who.

   d.  ?*I don't know who, although I know that he wants to see someone.

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**4.** In Vlach, the otherwise obligatory clitic in the second conjunct (cf. (18b)) cannot appear:

(18)  a.  Acari s    kundu̯ (*łu̯)  ai       viǰutu̯?
          *who  and when  (him)  have.2s  seen*       'Who did you see, and when?'

   b.  Acari ai       viǰutu̯ s    kundu̯ *(łu̯) ai       viǰutu̯?
       *who   have.2s seen   and when  (him)  have.2s  seen*

## 3.2   Previous strategy 2: Coordination of the *wh*-phrases

The second general strategy (Kazenin, Lipták, Gribanova) has been to claim that the *wh*-phrases are themselves coordinated:

(19)

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                    CP
                   /  \
                  /    \
               &P       \
              /  \     C    TP
           WH₁   \          /\
                  \        /  \
              &   WH₂    t₁ ... t₂
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**Advantages**

**1.** Gribanova 2007: Can capture the lack of pair-list readings, by assuming a strict structural locality condition on Quantifier Absorption, an operation that takes $n$ adjacent unary quantifiers and returns a single $n$-ary quantifier (Higginbotham and May 1981):

(20)  a.  Which man admires which woman?
          $[\text{WH}x : x$ a man$][\text{WH}y : y$ a woman$]x$ admires $y \rightarrow [\text{WH}_2{}^{1,2}x, y : x$ a man & $y$ a woman$]$ $x$ admires $y$
   b.  Assumption: "In order to undergo QA [Quantifier Absorption], ... quantifiers ... must be *structurally adjacent*" (Q1 c-commands Q2 and no head c-commands Q2 but not Q1) (similar to May's 1985 condition on $\Sigma$-sequence formation)

**2.** Captures some similar effects in Serbo-Croatian, where a *li* C intervening between two *wh*-phrases forces a single-pair answer (Grebenyova 2004, Gribanova 2007)

**Problems**

1. Movement to a non-c-commanding position (of the noninitial *wh*-phrase(s))

2. How to stop balanced coordinations from occurring?

3. No way to capture the correlation between spurious coordinations and multiple *wh*-fronting

4. Why should Superiority effects persist? (Grewendorf 2001 'cluster'-formation?)

# 4   Analysis

(21)
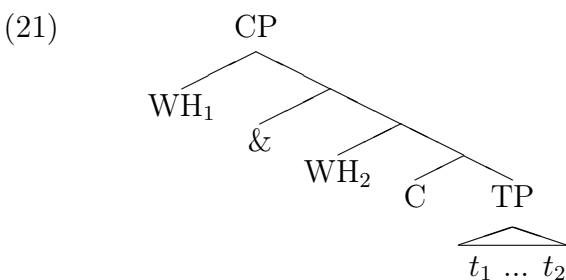


(22)   '&' ($s$, $i$, $\acute{e}s$) is spurious, used as a discourse marker, not meaning $\lambda p \lambda q[p \wedge q]$

**Advantages**

1. Piggybacks on *wh*-movements independently attested in the language: therefore only languages that multiply front *wh*-elements will have this

2. Whatever constraints operate on multiple *wh*-movements—such as Superiority—will continue to apply

3. Only conjunctive morphemes, not disjunctive ones, grammaticalize such discourse marker status

4. Left bracket coordinators don't occur in spurious uses:

    (23)   (*Both) one more step and I'll shoot you.
    (*Both) Two more beers and we're outta here. (Culicover and Jackendoff 1997)

5. Same account of lack of pair-list reading as on strategy 2: Assume that Quantifier Absorption is contingent on structural adjacency (à la Gribanova 2007 or Dayal 2002:513). Then the intervening conjunction will block QA.

(24)   Another possibility: the conjunction itself imposes the presupposition for a single pair answer (implemented as a partial identity function over partial question meanings)

(25)   Dayal 1996, 2002
    a.   Which philosopher likes which linguist?
    b.   [which linguist$_j$ [which philosopher$_i$ [$t_i$ likes $t_j$]]]
    c.   $Q = \lambda p \exists f_{<e,e>}[Dom(f) = philosopher' \wedge Range(f) = linguist' \wedge p = \cap \lambda p' \exists x[p' = x\ likes\ f(x)]]$
    d.   For example, if $philosopher' = \{a, c\}, linguist' = \{b, d\}$, then
    e.   $Q =$ {a likes b and c likes d, a and c both like b, a and c both like d, a likes d, c likes b}
    f.   $Ans(Q) = \iota p[^{\vee}p \wedge p \in Q \wedge \forall p' \in Q[^{\vee}p' \rightarrow (p \subseteq p')]]$

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### 4.1 A menagerie of nonconjunctive uses of conjunction morphemes

(26) a. shi ashi *foglich* [sic] 'therefore' (Boiagi 1915:127)

b. shi seste că *wenn auch* 'even if' (Boiagi 1915:127)

(27) Greek

a. K' omos     (erxete). ('verum focus')
   *and however come.3s*

   'He IS coming. Er kommt DOCH. Si, il vient. '

b. An ke   kseri,   fevgi.
   *if   and know.3s leave.3s*

   'Even though he knows, he's leaving.'

c. Oti     ke   na   pis,   fevgo.
   *whatever and* SUBJ *say.2s leave.1s*

   'No matter what you say, I'm leaving.'

(28) Russian

a. Ja daže i    ne  znal!
   *I   even and not knew*

   'I didn't even know!'

b. On predskazal, čto  my proigraem, čto   i    proizošlo.
   *he predicted    that we lose        which and happened*

   'He predicted that we would win, which indeed happened.'[2]

### Questions

1. How plausible is it to find independent, parallel grammaticalizations of conjunctive morphemes away from conjunctive semantics to focus, additive particles?

2. Could the regular conjunctive semantics with two CPs involving ellipsis be a source for such a path? Can we spot languages in intermediate stages? ('Reverse sluicing' in Greek a candidate?)

## 5   Conclusions and consequences

1. No movement to a non-c-commanding position is necessary

2. Conjunctive morphemes have more, and more puzzling, usages than classical logic leads us to expect

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[2]From community.livejournal.com/terra_linguarum/413531.html; thanks to V. Gribanova for the pointer.

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