Attitude Sensitive Complementizers in Laz

Ömer Demirok & Balkız Öztürk*
Boğaziçi University

1 'Reported Discourse' Particles?

- South Caucasian languages have particles that have been traditionally called 'quotative' or 'instructional' particles.[1] (Boeder's (2002) terms for Georgian/Svan particles)

    - We focus on two such particles in Laz[2]: YA and ŞO. Typical occurrences of these particles are as follows:

        (1) [Oxoris vore   ] **ya**
               home   be.PRS.1SG   YA
             She/he/they said 'I am home'   'quotative'

        (2) [Oxoris vore   ] **şo**
               home   be.PRS.1SG   ŞO
             Say 'I am home'!   'instructional'

    - At first blush, YA and ŞO appear to be non-transparently inflected forms of 'say'.

        * Yet, both particles may be followed by an inflected verb of saying:

        (3) [Oxoris vore   ] **ya** t'k'-u
               home   be.PRS.1SG   YA say-PST.3SG
             She/he said 'I am home'

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[1]See Boeder (2002) for their distribution in Old/Modern Georgian and Svan. See Lacroix (2009) for Arhavi Laz where both particles are glossed as DR for 'discours rapporté'. See Öztürk and Pöchtrager (2011) for Pazar Laz. Our data comes from Pazar Laz.

[2]Laz is an endandered South Caucasian language spoken in Turkey. We are grateful to our Laz consultant Ismail Bucaklişi, who is the source of all uncited data.

(4)   [Oxoris vore   ] |şo| t'k'v-i
      home   be.PRS.1SG   ŞO say-IMP.SG
      Say 'I am home'!

- Our questions:

  * What is the syntactic status of these particles?

  * When do we get ŞO? & When do we get YA?

  * Is their variation phonological, morphosyntactic, or semantic?

2   What is the syntactic status of these particles?

- Examples like (5)-(6) suggest that these particles may be complementizers.

(5)   [Oxoris vore   ] |ya| t'k'-u   (6)   [Oxoris vore   ] |şo| t'k'v-i
      home   be.PRS.1SG   YA say-PST.3SG   home   be.PRS.1SG   ŞO say-IMP.SG
      She/he said 'I am home'   Say 'I am home'!

- We argue that this characterization is on the right track but there is more to it.

2.1   First, the uninteresting complementizer

- Laz has a run-off-the-mill complementizer (similar to English *that*). This is the proclitic NA.

  (7)   Mp'oli msk'va   on.
        Istanbul beautiful be.PRS.3SG
        'Istanbul is beautiful.'

  (8)   Arte-k   [Mp'oli msk'va |na|=on   ] t'k'-u
        Arte-ERG   Istanbul beautiful NA-be.PRS.3SG   say-PST.3SG
        'Arte said that Istanbul is beautiful.'

    - NA can subordinate pretty much any propositional attitude.

      (9)   [Mp'oli msk'va **na** on   ] iduşunams/ aceren/   uşk'un/ moivaru
            Istanbul beautiful NA be.PRS.3SG   thinks/   believes/ knows/ denied
            'She thinks/believes/knows/denied that Istanbul is beautiful.'

    - NA also appears in relative clauses (and embedded questions)

      (10)   [Nana-şk'imi-k   **na** ç'u   ] foga
             mother-my-ERG NA sew.PST.3SG   dress
             'the dress that my mother sewed'   (Öztürk and Pöchtrager, 2011), p.183

2.2 Then, what's special about YA and ŞO?

- YA and ŞO are special in that **indexicals in their scope shift**.[3]

(11)　Arte-k　［ma　noseri vore　　　**ya**］t'k'-u
　　　Arte-ERG　1.SG smart be.PRS.1SG YA　say-PST.3SG
　　　Lit: Arte said I am smart.
　　　'Arte$_1$ said that he$_1$ is smart.'　　　　　　　　　embedded 1SG = Arte

(12)　Arte-k　［ma　noseri vore　　　**şo**］t'k'v-a-s
　　　Arte-ERG　1.SG smart be.PRS.1SG ŞO　say-OPT-3SG
　　　Lit: Arte should say I am smart.
　　　'Arte$_1$ should say that he$_1$ is smart.'　　　　　embedded 1SG = Arte

- In contrast, indexicals don't shift in the scope of NA

(13)　Arte-k　［ma　noseri **na** vore　　　］t'k'-u
　　　Arte-ERG　1.SG smart NA be.PRS.1SG　say-PST.3SG
　　　'Arte said that I am smart.'　　　　　　　　embedded 1SG ≠ Arte
　　　(unavailable:) 'Arte$_1$ said that he$_1$ is smart.'

2.3 YA and ŞO are complementizers

- YA and ŞO **cannot co-occur** with NA, which suggest they have the complementizer status.

(14)　a.　Arte-k　［Mp'oli msk'va **na** on　　　(*ya)］t'k'-u
　　　　　Arte-ERG　Istanbul beautiful NA be.PRS.3SG　YA　say-PST.3SG
　　　　　'Arte said that Istanbul is beautiful.'

　　　b.　［Mp'oli msk'va **na** on　　　(*şo)］t'k'v-i
　　　　　Istanbul beautiful NA be.PRS.3SG　ŞO　say-IMP.2SG
　　　　　'Say that Istanbul is beautiful!'

- Furthermore, complements of YA and ŞO are not syntactically opaque, e.g. quotes. YA and ŞO genuinely subordinate clauses.

- their constituents can be questioned:

(15)　Arte-k　［ma　nak　vore　　　**ya**］t'k'-u
　　　Arte-ERG　1.SG where be.PRS.1SG YA　say-PST.3SG
　　　Lit: Where did Arte say I am?
　　　'Where did Arte$_1$ say that he$_1$ is?'　　　　　　embedded 1SG = Arte

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[3]See Demirok and Öztürk (2015) on the indexical shifting properties of *ya*. See, for example, Shklovsky and Sudo (2014) for an operator-based approach to indexical shift.

(16) Arte-k [ma nak vore   şo] t'k'v-a-s
      Arte-ERG 1.SG where be.PRS.1SG ŞO say-OPT-3SG
      Lit: Where should Arte say I am?
      'Where should Arte₁ say that he₁ is?'   embedded 1SG = Arte

   – their constituents can be relativized:

(17) [Arte-k   [e bdziri   ya] t'k'-u   ] na v-iduşun-am bere
      Arte-ERG   see.PST.1SG YA say-PST.3SG   NA 1-think-IMPF child
      'The child who I think Arte₁ said he₁ saw'   embedded 1SG = Arte

(18) [Arte-k   [e bdziri   şo] t'k'v-a-s   ] na b-gor-um   bere
      Arte-ERG   see.PST.1SG ŞO say-OPT-3SG   NA 1-want-IMPF child
      'The child who I want Arte₁ to say he₁ saw'   embedded 1SG = Arte

2.4   What's different between YA and ŞO: the <u>embedding</u> mood!

• YA and ŞO are in complementary distribution:

   – YA occurs under an attitude verb that is **indicative**

(19) a. Arte-k   [Mp'oli msk'va on   ya] t'k'-u
          Arte-ERG Istanbul beautiful be.PRS.3SG YA say-PST.3SG
          'Arte said that Istanbul is beautiful.'

     b. Arte-k   [Mp'oli msk'va on   ya] it'ur-s
          Arte-ERG Istanbul beautiful be.PRS.3SG YA say.IMPF-3SG
          'Arte is saying/says that Istanbul is beautiful.'

   – ŞO occurs under an attitude verb that is **optative/imperative**

(20) a. Arte-k   [Mp'oli msk'va on   şo] t'k'v-a-s
          Arte-ERG Istanbul beautiful be.PRS.3SG ŞO say-OPT-3SG
          'Arte should say that Istanbul is beautiful.'

     b. [Mp'oli msk'va on   şo] t'k'v-i
          Istanbul beautiful be.PRS.3SG ŞO say-IMP.2SG
          'Say that Istanbul is beautiful!'

   – complementary distribution:

(21) a. *[. . . [CP [TP Mp'oli msk'va on] şo] {t'k'u, it'urs }]
                                            INDICATIVE
      b. *[. . . [CP [TP Mp'oli msk'va on] ya] {t'k'vas, t'k'vi}]
                                            OPTATIVE-IMPERATIVE

4

2.5 Selectional restrictions on YA and ṢO

- CPs headed by YA and ṣo can only occur under a few attitude verbs:

  - YA can occur under *say, tell, think*;   but *believe, *know, *deny, . . .

    (22)   Arte-k   baba-muşi-s [oxoris vore   **ya**] u-ts'-u.
    Arte-ERG father-his-DAT home be.PRS.1SG YA 3.APPL-tell-PST.3SG
    'Arte$_1$ told his father that he$_1$ is home.'   embedded 1SG = addressee

    (23)   Bere-k   [nana-şk'imi-k livadi-s   lazut'i xaşk'-um-s   **ya**]
    child-ERG   mother-my-ERG garden-LOC corn   plan-IMPF-3SG YA
    iduşun-am-s
    think-IMPF-3SG
    Lit: The child thinks my mother is planting corn in the garden.'
    'The child$_1$ thinks that her$_1$ mother is planting corn in the garden.'

    (24)   *Arte-k   [Mp'olis msk'va   on   **ya**] moivar-u.
    Arte-ERG   istanbul beautiful be.PRS.1SG YA deny-PST.3SG
    'Arte denied that Istanbul is beautiful.'

    (25)   *Si [Mp'olis msk'va   on   **ya**] gaceren/gişk'un.
    You istanbul beautiful be.PRS.1SG YA believe/know.PRS.2SG
    'You believe/know that Istanbul is beautiful.'

  - ṢO can occur under *say, tell*;   but *think, *believe, *know, *deny, . . .

    (26)   Baba-sk'ani-s [oxoris vore   **şo**] u-ts'v-i!
    father-your-DAT home be.PRS.1SG ṢO 3.APPL-tell-IMP.2SG
    'Tell your father that you are home.'   embedded 1SG = addressee

    (27)   Aşela-k   baba-muşi-s [oxoris vore   **şo**] u-ts'v-a-s
    Aşela-ERG father-her-DAT home be.PRS.1SG ṢO 3.APPL-tell-OPT-3SG
    'Aşela$_1$ should tell her father that she$_1$ is home.'
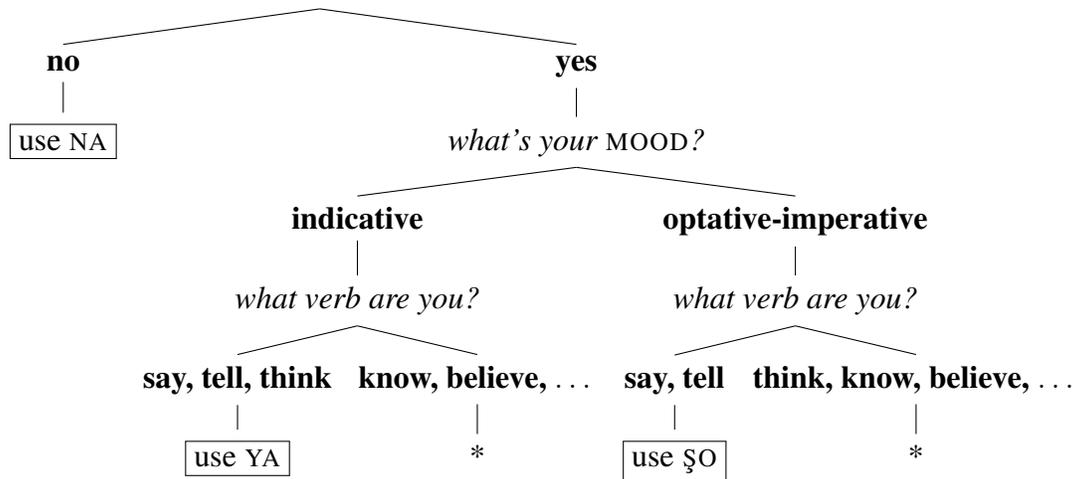
    (28)   *[Mp'oli msk'va   on   **şo**] iduşun-i!
       Istanbul beautiful be.PRS.3SG ṢO think-IMP.2SG
    'Think that Istabul is beautiful!'

    (29)   *Bere-k   [nana-şk'imi-k livadi-s   lazut'i xaşk'-um-s   **şo**]
    child-ERG   mother-my-ERG garden-LOC corn   plan-IMPF-3SG ṢO
    iduşun-a-s
    think-OPT-3SG
    Intended: 'Let the child$_1$ think that her$_1$ mother is planting corn in the garden.'

2.6 Interim Summary

In Laz, you ask an attitude verb:

Do you need the indexicals in your complement CP to shift ?

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                    Do you need the indexicals in your complement CP to shift ?
                   /                                    \
                 no                                     yes
                  |                                      |
             [use NA]                          what's your MOOD?
                                              /                    \
                                         indicative          optative-imperative
                                             |                        |
                                    what verb are you?        what verb are you?
                                     /           \            /            \
                            say, tell, think  know, believe,…  say, tell  think, know, believe,…
                                  |               |              |              |
                              [use YA]            *          [use ŞO]           *
```

3   Is it allomorphy?

Q: Is the variation between YA and ŞO a case of allomorphy?

Core fact to bear in mind:

- YA occurs under **indicative** verbs

- ŞO occurs under **optative-imperative** verbs

(30)   a.   Arte-k   [Mp'oli msk'va   on   ⬚**ya**⬚] t'k'-u
             Arte-ERG   Istanbul beautiful be.PRS.3SG YA   say-PST.3SG
             'Arte said that Istanbul is beautiful.'

       b.   Arte-k   [Mp'oli msk'va   on   ⬚**şo**⬚] t'k'v-a-s
             Arte-ERG   Istanbul beautiful be.PRS.3SG ŞO   say-OPT-3SG
             'Arte should say that Istanbul is beautiful!'

3.1   Not phonological conditioning

- One could claim that there is a special way to pronounce the 'indexical shifting' C when it
  is linearly adjacent to the optative-imperative marked *say/tell* verb forms.

  (31)   a. $C_{\text{indexical shift}} \rightarrow$ YA
         b. $C_{\text{indexical shift}} \rightarrow$ ŞO when adjacent to X
                                         where $X \in \{$[t'k'vi], [t'k'vas], [uts'vas], … $\}$

- Problem#1: There are many such forms; they do not form a distinctive phonological class, obviously.

- Problem#2: This would be a case of allomorphy looking at the phonological shape of an element upstairs. This is not expected under bottom-up insertion models of morphology.

- Problem#3: (fatal) A 2.PST verb form is always syncretic with a 2.IMP form

(32) şk'om-i
      eat-2
      'Eat it!' or 'You ate it.'

(33) şk'om-i-t
      eat-2-PL
      'Eat (pl) it!' or 'You (pl) ate it.'

- There is no distinct phonology to condition allomorphy on! In such cases, it is YA vs. ŞO that disambiguates the matrix mood.

(34) [Noseri vore   **ya**] t'k'v-i.
        smart be.PRS.1SG YA   say-2
      ✓ 'You said that you are smart.'
      × 'Say that you are smart!'

(35) [Noseri vore   **şo**] t'k'v-i!
        smart be.PRS.1SG ŞO   say-2
      ✓ 'Say that you are smart!'
      × 'You said that you are smart.'

3.2 Is it morphosyntactic-feature conditioning?

- Another hypothesis is that YA vs. ŞO alternation is upward-looking allomorphy sensitive to the morphosyntactic feature(s) associated with optative/imperative forms.

(36) a. C$_{\text{indexical shift}}$ → YA
      b. C$_{\text{indexical shift}}$ → ŞO [... [OPT or IMP

  – Allomorphy is taken to be restricted to fairly local (according to some, even structurally adjacent) nodes (Gouskova and Bobaljik, 2019).

  – Therefore, we think that allomorphy is highly unlikely to be the source of the variation here.

  – But let us seriously consider the idea that ŞO might be redundantly exponing **a formal feature**.

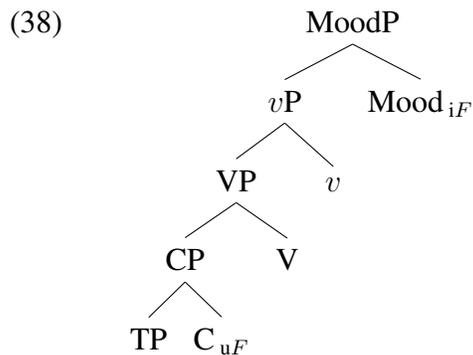 – Hence, next, we discuss the possibility of agreement.

4 Is it agreement?

- Hypothesis: YA vs. ŞO alternation is due to an upward[4] agreement relationship.

  - similar to the analysis of <u>Modal Concord</u> in Zeijlstra (2007)

    (37)   The general **demands** $_{i\text{-MOD}}$ that the troops **must** $_{u\text{-MOD}}$ leave

- For this to work, we would need to posit an interpretable mood feature F (common to optative and imperative) that downward-values the uninterpretable mood feature of the C head.

  à la Zeijlstra (2007)

(38)

```
                MoodP
              /       \
           vP         Mood iF
          /   \
        VP     v
       /   \
      CP    V
     /  \
   TP   C uF
```

- Notably, there is language internal support for such a proposal. Clausal negation has different Mood-dependent forms:

  (39)   Baba-sk'ani-k   si   haminepes **va**   g-dzir-u
             father-your-ERG you around.here NEG 2-see-PST.3SG
             'Your father saw you around here.'

  (40)   Baba-sk'ani-k   si   haminepes **mo**   g-dzir-a-s!
             father-your-ERG you around.here NEG.MOOD 2-see-OPT-3SG
             'Your father should not see you around here!'

  (41)   Haminepe-şe   **mo**   mulur!
             around.here-ALL NEG.MOOD come.IMP.2G
             'Don't come around here!'

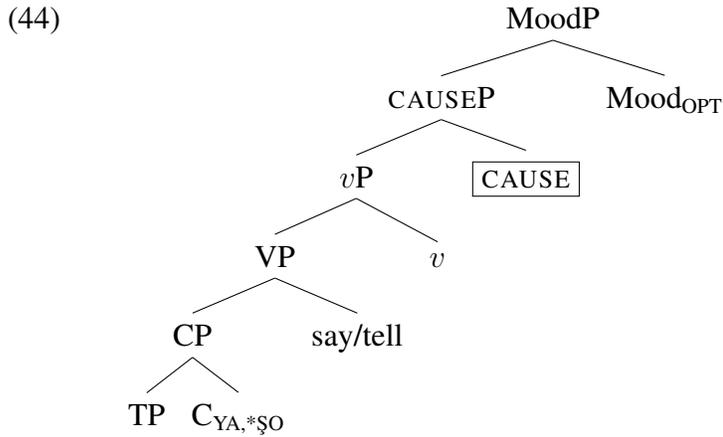- In what follows, we evaluate the agreement story against further data:

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[4]Instances of ϕ-agreement that appear to be upward (i.e. target is *lower* than the source) are attested. For example, in Lubukusu complementizers indexes the ϕ-values of the subject of the embedding verb (Diercks, 2013).

4.1 A causative layer blocks ŞO

- A layer of causative on top of the speech predicate blocks ŞO.

(42) Aşela-k   Arte-s   [noseri vore   **ya**] o-zit'-ap-a-s
     Aşela-ERG Arte-DAT smart be.PRS.1SG YA CAUS-say-CAUS-OPT-3SG
     'Aşela$_2$ should make Arte$_1$ say that he$_{1/*2}$ is smart'

(43) *Aşela-k   Arte-s   [noseri vore   **şo**] o-zit'-ap-a-s
     Aşela-ERG Arte-DAT smart be.PRS.1SG ŞO CAUS-say-CAUS-OPT-3SG

(44)

```
                        MoodP
                       /     \
                   CAUSEP     Mood_OPT
                   /    \
                 vP    CAUSE
                /  \
              VP    v
             /  \
           CP   say/tell
          /  \
        TP   C_YA,*ŞO
```

- This is consistent with the CAUSE layer breaking the locality required for agreement.[5]

4.2 All optatives are not created equal

- ŞO is impossible under FUTURE which obligatorily attaches to an optative stem.

(45) Arte-k   oşk'uri şk'om-**a**-s
     Arte-ERG apple   eat-OPT-3SG
     'Arte should eat the apple.'

(46) Arte-k   oşk'uri şk'om-**a**-s-**ere**
     Arte-ERG apple   eat-OPT-3SG-FUT
     'Arte will eat the apple.'   *şk'om-s-**ere**

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[5]Notably, the CAUSE layer **does** allow ϕ-agreement across it (Demirok, 2013). Yet, admittedly, a comparison between a potentially mobile object (DP) and a typically immobile object (Cᵒ) is not entirely justified.

- Here, the contrast between (47) and (48a) is crucial.

  (47) Aşela-k   baba-muşi-s   [oxoris vore **şo**] u-ts'v-$\boxed{a}$-s
        Aşela-ERG father-her-DAT home I.am ŞO 3.APPL-tell-OPT-3SG
        'Aşela$_1$ should tell her father that she$_1$ is home.'

  (48) a. *Aşela-k   baba-muşi-s   [oxoris vore **şo**] u-ts'v-$\boxed{a}$-s-**ere**
           Aşela-ERG father-her-DAT home I.am ŞO 3.APPL-tell-OPT-3SG-FUT
           Intended: 'Aşela$_1$ will tell her father that she$_1$ is home.'

        b. ✓Aşela-k baba-muşi-s [oxoris vore $\boxed{\textbf{ya}}$] u-ts'v-a-s-**ere**

- If what licenses ŞO is a formal feature F, why is it not licensing ŞO in (48a)?
  - Isn't the exact same morphosyntactic feature there?
- Here is a way to salvage the agreement story:
  - The optative under future is not interpreted (as an optative).
  - Hence, the relevant feature F, even if it is in syntax in (48a), is **not** an interpretable feature, hence cannot value the C° downstairs.
  - Therefore, we never find ŞO under future-marked say/tell.

5 Perhaps, it is not agreement

There is also data that suggest the YA vs. ŞO variation is not a result of agreement

5.1 Negation blocks ŞO **and** YA

- In the causative and future data we have discussed above, when ŞO is blocked, YA appears instead.
  - This is consistent with YA being the default- whereas ŞO exponing an additional feature as a result of agreement.
- However, there is an additional intervention effect, of a different kind
  - NEGATION blocks **both** ŞO and YA.

(49)　✓positive control sentences

　　a.　Arte-k　　[Mp'oli msk'va　on　　　**ya**] t'k'-u
　　　　Arte-ERG　Istanbul beautiful be.PRS.3SG YA　say-PST.3SG
　　　　'Arte said that Istanbul is beautiful.'

　　b.　Arte-k　　[Mp'oli msk'va　on　　　**şo**] t'k'v-a-s
　　　　Arte-ERG　Istanbul beautiful be.PRS.3SG ŞO　say-OPT-3SG
　　　　'Arte should say that Istanbul is beautiful!'

(50)　× negation cannot co-occur with ŞO and YA

　　a.　*Arte-k　　[Mp'oli　msk'va　on　　　**ya**] **va**　t'k'-u
　　　　Arte-ERG　Istanbul beautiful be.PRS.3SG YA　NEG say-PST.3SG
　　　　Intended: 'Arte didn't say that Istanbul is beautiful.'

　　b.　*Arte-k　　[Mp'oli　msk'va　on　　　**şo**] **mo**　　t'k'v-a-s
　　　　Arte-ERG　Istanbul beautiful be.PRS.3SG ŞO　NEG.OPT say-OPT-3SG
　　　　Intended: 'Arte should not say that Istanbul is beautiful!'

(51)　✓negation above NA

　　a.　Arte-k　　[Mp'oli　msk'va　**na** on　　　　　] **va**　t'k'-u
　　　　Arte-ERG　Istanbul beautiful NA be.PRS.3SG　NEG say-PST.3SG
　　　　'Arte didn't say that Istanbul is beautiful.'

　　b.　Arte-k　　[Mp'oli　msk'va　**na** on　　　　　] **mo**　　t'k'v-a-s
　　　　Arte-ERG　Istanbul beautiful NA be.PRS.3SG　NEG.OPT say-OPT-3SG
　　　　'Arte should not say that Istanbul is beautiful!'

- Not an anti-adjacency effect! Non-local NEG is bad too: (52b).

(52)　a.　[Arte-k　　[Mp'oli　msk'va　on şo] t'k'v-a-s　　　] b-gor-um
　　　　　Arte-ERG　Istanbul beautiful is　ŞO　say-OPT-3SG　1-want-IMPF
　　　　　'I want Arte to say that Istanbul is beautiful.'

　　b.　*[Arte-k　　[Mp'oli　msk'va　on şo] t'k'v-a-s　　　] **va**　b-gor-um
　　　　　Arte-ERG　Istanbul beautiful is　ŞO　say-OPT-3SG　NEG 1-want-IMPF
　　　　　'I don't want Arte to say that Istanbul is beautiful.'

　　c.　[Arte-k　　[Mp'oli　msk'va　**na** on] t'k'v-a-s　　　] **va**　b-gor-um
　　　　　Arte-ERG　Istanbul beautiful NA is　say-OPT-3SG　NEG 1-want-IMPF
　　　　　'I don't want Arte to say that Istanbul is beautiful.'

- We take the negation data to be outside the reach of an agreement account.
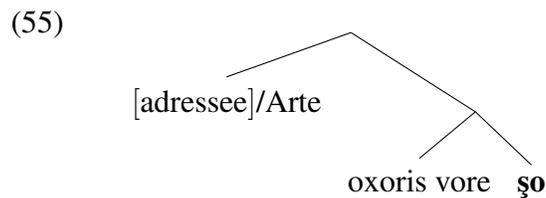
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5.2 Root ṢO clauses

- ṢO clauses can also appear without an embedding verb:

(53)   oxoris vore   **ṣo**!
      home   be.PRS.1SG ṢO
      'Say that you're home!'

(54)   Arte-k   oxoris vore   **ṣo**!
      arte-ERG home   be.PRS.1SG ṢO
      'Arte$_1$ should say that he$_1$ is home.'

- The obvious question:

  - Is (55) a licit/interpretable structure?

    (55)

    ```
              [adressee]/Arte
                             oxoris vore   ṣo
    ```

  - Or do we need to assume verb-ellipsis in verb-less strings like (53)-(54)?

- This is a difficult question. But there are certain structural asymmetries between verb-less strings and those with verbs:[6]

  - You can question a constituent of a ṢO-clause only if there is a verb following it.

    (56)   Arte-k   nak   vort'i   **ṣo** *(t'k'v-a-s)
           Arte-ERG where be.1SG.PST ṢO say-OPT-3SG
           'Where should Arte$_1$ say that he$_1$ was?'

  - If there is an overt addressee, the speech verb needs to be pronounced.

    (57)   Arte-k   <u>nana-s</u>   oxoris vore   **ṣo** *(u-ts'v-a-s)
           Arte-ERG mother-DAT home   be.1SG.PRS ṢO 3.APPL-tell-OPT-3SG
           'Arte$_1$ should tell the mother that he$_1$ is home.'

  - Perhaps, most importantly, a ṢO-clause cannot be further embedded without a verb!

    (58)   [Arte-k   [oxoris vore   **ṣo**] *(t'k'v-a-s)] b-gor-um
           Arte-ERG home   be.1SG.PRS ṢO say-OPT-3SG 1-want-IMPF
           'I want Arte$_1$ to say that he$_1$ is home.'

- We think that these may be good reasons for assuming that apparently verbless ṢO clauses might be genuinely verbless.

  - Then, (root) **ṢO introducing its own meaning seems inevitable.**

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[6]We find parallel data on *ya*, as reported in Demirok et al. (2019).

5.3 Taking stock

- We conclude that the variation between ŞO and YA

    - is not allomorphy

    - is possibly due to agreement with an <u>interpretable</u> MOOD feature. BUT

        * not obvious why a CAUSE layer should intervene

        * does not have a handle on NEGATION, which blocks YA and ŞO alike

        * If root ŞO clauses are genuinely verbless, ŞO cannot always be meaningless.

- In the next section, we entertain a semantic alternative.

6 Meaning matters

- Uttered in a context c:

(59) [Noseri vore   **şo**]!
       smart   be.PRS.1SG ŞO
       'Say that you are smart.'
       $\approx$ the speaker in c **wants** the addressee$_1$ in c to say she$_1$ is smart.

(60) Arte-k   [noseri vore   **şo**]!
      Arte-ERG   smart be.PRS.1SG ŞO
      'Arte$_1$ should[7] say that he$_1$ is smart.'
      $\approx$ the speaker in c **wants** Arte$_1$ to say he$_1$ is smart.

- Hypothesis: ŞO imposes a 'meaning requirement' (meant as a pre-theoretic notion)[8]

    (61)   Uttered in a context c :
            x [ϕ **şo**] = the speaker in c **wants** x to SAY ϕ

6.1 What we gain from a meaningful ŞO

- It will allow us to interpret root ŞO clauses. (assuming they are genuinely root clauses.)

- Notably, it might also allow us to understand the facts discussed in the previous sections:

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[7]We are using 'should' due to a lack of 3rd person imperative forms in English. The optative form in Laz doesn't allow an external-obligation reading.

[8]In particular, WANT here is a shorthand for whatever semantics is appropriate for imperative-optative. See Portner (1997, 2004); Kaufmann (2012, 2016) a.o.

- FACT#1: a causativized speech predicate cannot embed a ŞO clause.

(62) a. Aşela-k   Arte-s   [noseri vore   **ya**] o-zit'-ap-a-s
         Aşela-ERG Arte-DAT   smart be.PRS.1SG YA   CAUS-say-CAUS-OPT-3SG
         'Aşela$_2$ should make Arte$_1$ say that he$_{1/*2}$ is smart'

      b. *Aşela-k   Arte-s   [noseri vore   **şo**] o-zit'-ap-a-s

   – In (62a), what the speaker **wants** is not [x SAY ϕ], but rather [y MAKE [x SAY ϕ]].

   – [S wants [x SAY ϕ]] $\neq$ [S wants [y MAKE [x SAY ϕ]]].

   – Given that the meaning requirement of ŞO is not met, it is out.

- FACT#2: a speech predicate cannot embed a ŞO clause if it is future-marked, even though future-marking formally requires an optative base.

(63) a. Aşela-k   baba-muşi-s   [oxoris vore   **şo**] u-ts'v-a-s
         Aşela-ERG father-her-DAT   home be.PRS.1SG ŞO   3.APPL-tell-OPT-3SG
         'Aşela$_1$ should tell her father that she$_1$ is home.'

      b. *Aşela-k   baba-muşi-s   [oxoris vore   **şo**] u-ts'v-a-s-**ere**
         Aşela-ERG father-her-DAT   home be.PRS.1SG ŞO   3.APPL-tell-OPT-3SG-FUT
         Intended: 'Aşela$_1$ will tell her father that she$_1$ is home.'

   – ŞO is out in (63b), because there is nothing about the speaker's wishes in (63b). It just so happens that it is formally 'optative'.

- FACT#3: NEGATION blocks ŞO (and YA).

(64) *Arte-k   [noseri vore   **şo**] **mo**   t'k'v-a-s
      Arte-ERG   smart be.1SG ŞO   NEG.OPT say-OPT-3SG
      Intended: 'Arte$_1$ should not say that he$_1$ is smart.'

   – (64) should be able to mean: 'Speaker does not want Arte$_1$ to say he$_1$ is smart'.

   – Yet, if the meaning requirement for ŞO is right, it demands that (64) mean 'Speaker wants Arte$_1$ to say he$_1$ is smart'.

   – Therefore, we hypothesize that ŞO is out under negation because of this contradiction.

   – (something similar needs to be said for YA)

6.2   Remaining important challenges

- We have seen that having ṢO come with a meaning requirement helps us explain certain restrictions on where it may occur.

> (65)   Uttered in a context c :
> $x \, [\, \phi \, \textbf{ṣo} \,]$ = the speaker in c **wants** x to SAY ϕ

- The obvious — and more difficult— question at this point:

  - What exactly is this 'meaning requirement'?

  - at-issue content, presuppositional, or perhaps even postsuppositional?

- If ṢO provides at-issue content, how does α below compose with a verb of saying? How is the embedding achieved?[9]

(66)
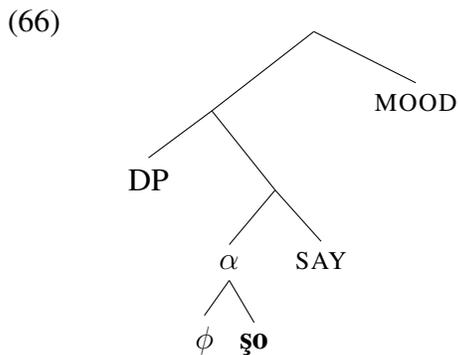
- In further embedding cases, the embedded optative, as well as our putative meaning for ṢO, needs to accommodate the shift in who the WANTing is anchored to. (i.e. (65) won't work)

(67)   Tanura-k   [Arte-k   [oxoris vore   ṣo] t'k'v-a-s   ] gor-um-s
       Tanura-ERG Arte-ERG home be.PRS.1SG ṢO   say-OPT-3SG want-IMPF-3SG
       'Tanura wants Arte$_1$ to say he$_1$ is home'

- To sum up, a meaningful ṢO is not a crazy idea.

  - in particular, if Laz has genuinely root ṢO clauses, this seems inevitable anyway.

- Nevertheless, compositionality problems might arise when ṢO is embedded.

  - perhaps, embedded ṢO only has a not-at-issue meaning?

  - or perhaps, embedded ṢO is not interpreted. agreement after all?

  - surely, further work is needed. (all comments are welcome!)

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[9]In Demirok et al. (2019), we claim that the denotation of a YA clause has the same semantic type as the verb and gets intersected with it à la Moulton (2009); Kratzer (2016). But it is not obvious if ṢO can be assigned a meaning that can be intersected with a verb of saying, giving the additional "WANT" layer in its meaning.

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