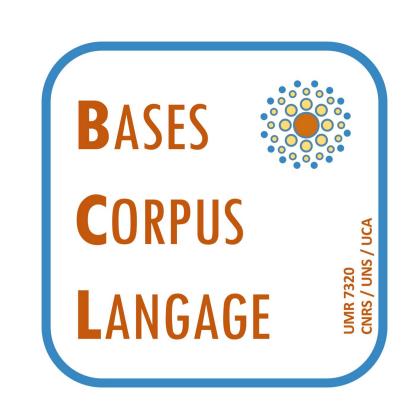
# Believing p, discovering p: meğer and epistemic shifts

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# 1 Background

#### **PAST BELIEFS**

- (1) a. I believed that Aramis was in France.b. ... and he was in {France, Italy}.
- The discourse marker, *meğer*, in Turkish, simultaneously marks the past and current belief state of the speaker. In (2), I provide an example of its use.
- (2) Ben Aramis Fransa-da san-mış-tı-m.

  1.SG Aramis France-LOC think-ANT-PST-1SG

  Meğer İtalya-da-y-mış.

  meğer Italy-LOC-COP-EVID

  'I thought that Aramis was In France. Meğer
  he was/is in Italy.'

#### **DEFINEDNESS CONDITIONS**

- the speaker believed that possibly Aramis was not in Italy.
- the speaker currently believes that Aramis is in Italy.

#### ASSERTION

- Aramis is/was in Italy.

# 2 Meğer with declaratives

### FELICITY CONDITIONS

- The speaker believed that the prejacent of meğer was false.
- (3) Ben Aramis Fransa-da san-mış-tı-m.

  1.SG Aramis France-LOC think-EVID-PST-1SG

  (\*Meğer) Fransa-da-y-mış.

  Meğer France-LOC-COP-EVID

  'I thought that Aramis was In France.

  Meğer he was/is in France.'
- (4) Context: Since he first went to Italy, Athos has known that Aramis has been in Italy.

Athos: Dün Aramis-le konuş-tu-m.

yesterday Aramis-COM talk-PST-1.SG

#**Meğer** İtalya-da-y-mış. meğer İtaly-LOC-COP-EVID

- 'I talked with Aramis yesterday. Meğer he is/was in Italy.'
- The speaker believed that the prejacent of meğer was possibly **false**.
- Aramis-in İtalya-da ol-ma-ma-sı
  Aramis-GEN Italy-LOC be-NMZ-NEG-POSS
  muhtemel diye düşün-müş-tü-m. Meğer
  possible C think-ANT-PST-1.SG meğer
  İtalya-da-y-mış.
  Italy-LOC-COP-EVID
  'I had thought it possible that Aramis would not be in Italy. Meğer he is/was.'

### References

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- Heim, I. 1991. Artikel und definitheit. *Temantik: ein internationales Handbuch der zeitgenössischen Forschung* 5(6): 487–535
- Zanuttini, R. & Portner, P. (2003). Exclamative Clauses: At the Syntax-Semantics Interface. *Language*

# 3 Meğer with questions

#### FELICITY CONDITIONS

- The speaker believes a particular answer to be true.
- They are on a par with exclamatives (Zanuttini & Portner 2003).
- a. Ben Aramis burada san-ıyor-du-m.
   1. SG Aramis here think-IMPERF-PST-1.SG
   Meğer nereye git-miş?
   meğer where go- EVID
  - 'I believed that Aramis was here. Meğer where did he go?' (v in (9b), in × (9c))
  - b. Context:{When Athos went to the apartment of Aramis, he did not find him there} and called him. Aramis told him that he was in Italy.
  - c. Context: {...} and called a friend of his to ask his whereabouts.
- a. Ben Aramis Fransa-da san-ıyor-du-m.

  1.SG Aramis France-LOC think-IMPERF-PST-1SG

  Meğer İtalya-da mı-y-mış?

  meğer Italy-LOC. Q-COP-EVID

  'I thought that Aramis was In France. Meğer

  was/is he in Italy?' (☑ in (10b), in ✗ (10c))
  - b. Context: As they checked the live broadcast of Aramis online, Athos and Porthos saw that Aramis was in Italy.
  - c. Context: Athos heard that Aramis went abroad, but he is not sure. He asked someone whether he went abroad.

## 4 Proposal

### FORMAL ASSUMPTIONS

- *Meğer* introduces the definedness condition that speaker believed that the prejacent was possibly false, and she currently believes that it is true.
- (8) For any quadruple  $\langle w_c, t_c, s_c, g_c \rangle$ ,  $[me\breve{g}er]^{\langle w_c, t_c, s_c, g_c \rangle} = \lambda P_{\langle st, t \rangle} : \exists t' \ [t' < t_c \land C(t') = 1] \land \\ \exists !q[P(q) = 1 \land DOX_{wc,t',sc}(q) = 0 \land DOX_{wc,tc,sc}(q) = 1].$   $iq[P(q) = 1 \land DOX_{wc,t',sc}(q) = 0 \land DOX_{wc,tc,sc}(q) = 1]$
- (9) Let DOX be a function from  $D_{\langle s,t\rangle} \to \{1,0\}$ , for any world w, interval t, individual x and proposition p,  $DOX_{w,t,x}(p) = 1$  iff  $\forall w'$  [w' is compatible with what x believes at t in w, p(w') = 1]

Declarative sentences as Hamblin sets (Hamblin 1973)

- (10) [Aramis was abroad] =  $\lambda p_{\langle s,t \rangle}$ .  $p = \lambda w$ . Aramis was abroad in w
- (11) [meğer + Aramis was abroad]  $\langle w_c, t_c, s_c, g_c \rangle$  is defined **only if**  $\exists t'$  [ $t' < t_c \land C(t') = 1$ ]  $\land \exists ! q [q = \lambda w. Aramis was abroad in w] <math>\land DOX_{w^c,t',s^c}(q) = 0 \land DOX_{w^c,t^c,s^c}(q) = 1$

if defined [meğer + Aramis was abroad]  $\langle w_c, t_c, s_c, g_c \rangle = 1q$  [q =  $\lambda w$ . Aramis was abroad in  $w \wedge DOX_{wc,t',sc}$  (q) =  $0 \wedge DOX_{wc,tc,sc}$  [q] = 1]

- **Presupposition:** There is a contextually salient time prior to the speech time and a unique proposition that Aramis was abroad which the speaker believed to be possibly false at that past time and which she currently believes to be true.
- Assertion: that proposition that Aramis was abroad.

# 5 Proposal Extended

### **QUESTIONS**

(12) For any quadruple  $\langle w_c, t_c, s_c, g_c \rangle$ , [meğer where did Aramis go]] $\langle w_c, t_c, s_c, g_c \rangle$  is defined **only if**  $\exists t'[t' < t_c \land C(t') = 1] \land \exists ! q [\exists x : place(x) \land q = \lambda w$ . Aramis went to x in w]  $\land \exists w'[w']$  is compatible with what  $s_c$  believed at t' in w  $\land$  Aramis did not go to x in w']  $\land \forall w''[w'']$  is compatible with what  $s_c$  believes at t in w, Aramis went to x in w'']

if defined [meğer where did Aramis go]]  $\langle w_c, t_c, s_c, g_c \rangle$ =  $iq[\exists x : place(x) \land q = \lambda w. Aramis went to x in w \land \exists w'[w' is compatible with what <math>s_c$  believed at t' in w'  $\land$  Aramis did not go to x in w']  $\land \forall w''[w''$  is compatible with what  $s_c$  believes at t in w, Aramis went to x in w'']]

- **Presupposition:** There is a contextually salient past time before t<sub>c</sub> when the speaker believed that Aramis might not have gone to a place x, and currently, she believes that Aramis did.
- **Assertion:** that proposition that Aramis went to that place x.

### 6 Conclusion

- The formalism accounts for: **i.** The requirement that the prejacent was believed to be possibly false. **ii.** the non-information seeking nature of *meğer* with interrogative prejacents.
- It predicts the infelicity of NPIs in the question prejacents of meger.
- (13) a. #Kimse gel-miş.
  anyone come-EVID
  Int: 'Someone came.'
  b. (#Meğer) kimse gel-miş mi?
  meğer anyone come-EVID Q
  '(#Meğer) did anyone came?'

### A NOTE ON EVIDENTIAL MARKING:

- -mIş is obligatory in meğer constructions (Erguvanlı-Taylan 2000).
- (14) Aramis-in İtalya-da ol-duğ-un-u
  Aramis-Q Italy-LOC be-NOM-POSS-ACC
  bil-iyor-du-m. **Aslında** tüm yaz
  know-IMPERF-PST-1.SG indeed all summer
  orada-y-dı.
  there-COP-PST
  'I knew that Aramis was in Italy. Indeed, he
  - there all summer.'

    5) Aramis İtalya-da diye bil-iyor-du-m.
    Aramis Italy-LOC COMP know-IMPERF-PST-1.SG

    Aslında tüm yaz Fransa-da-y\*(-mış)/\*-dı.
    in.fact all summer France-LOC-COP-EVID/PST
  - in.fact all summer France-LOC-COP-EVID/PST 'I thought that Aramis was in Italy. (Apparently) he was in France.'
- Heim's Maximize Presupposition! (Heim 1991)

