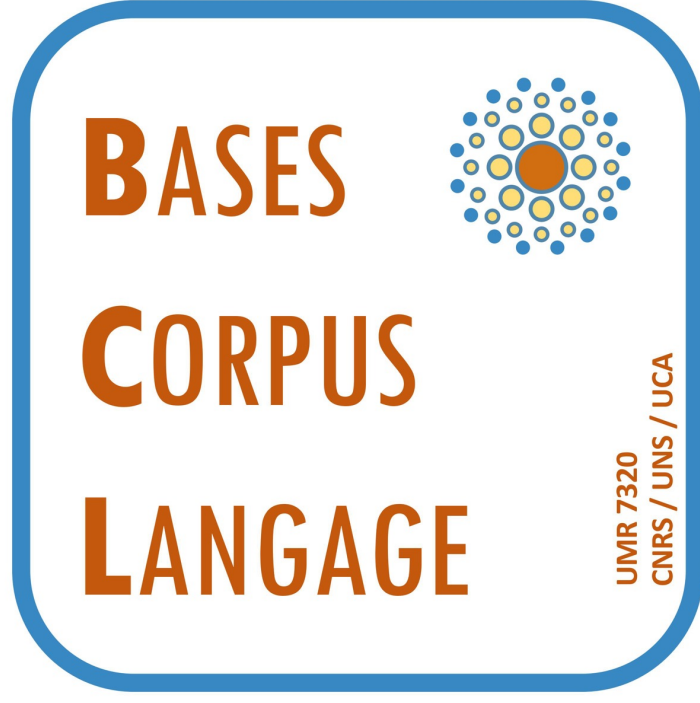# Believing p, discovering ¬p: *meğer* and epistemic shifts

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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-EVID-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   Italy-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**.*

(5) 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 unlikely that Aramis would 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
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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).

(6) 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?' (✅ 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.

(7) 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 abroad.
     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 $\langle w_c, t_c, s_c, g_c \rangle$,
     $[\![meğer]\!]^{\langle w_c, t_c, s_c, g_c \rangle} = \lambda P_{\langle s,t \rangle}. \exists t' [t' < t_c \wedge C(t') = 1] \wedge$
     $\exists ! q [P(q) = 1 \wedge DOX_{w_c, t', s^c}(q) = 0 \wedge DOX_{w_c, t_c, s^c}(q) = 1].$
     $\iota q [P(q) = 1 \wedge DOX_{w_c, t', s^c}(q) = 0 \wedge DOX_{w_c, t_c, s^c}(q) = 1]$

(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 believe 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** $\exists t' [t' < t_c \wedge C(t') = 1] \wedge \exists ! q [q = \lambda w.$ Aramis was abroad in w] $\wedge DOX_{w_c, t', s^c}(q) = 0 \wedge DOX_{w_c, t_c, s^c}(q) = 1$

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

- **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** $\exists t' [t' < t_c \wedge C(t') = 1] \wedge \exists ! q [\exists x : place(x) \wedge q = \lambda w.$ Aramis went to x in w] $\wedge \exists w' [w'$ is compatible with what s_c believed at t' in w $\wedge$ Aramis did not   go to x in w'] $\wedge \forall w'' [w''$ is compatible with what s_c believes at t in w, Aramis went to x in w'']

      if defined $[\![meğer\ where\ did\ Aramis\ go]\!]^{\langle w_c, t_c, s_c, g_c \rangle}$
      $= \iota q [\exists x : place(x) \wedge q = \lambda w.$ Aramis went to x in w] $\wedge \exists w' [w'$ is compatible with what s_c believed at t' in w' $\wedge$ Aramis did not go to x in w'] $\wedge \forall w'' [w''$ 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_c 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 *meğer*.

(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
(15) 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
      'I thought that Aramis was in Italy. (Apparently) he was in France.'

- **Heim's Maximize Presupposition! (Heim 1991)**