Hypothetical Comparison in Turkish

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Introducing the problem: In Turkish, an internally complex formative -MIŞ+CASINA expresses *hypothetical comparison*, which we gloss as HCM for Hypothetical Comparison Marker, putting aside its internal complexity for the present purposes. An illustrative example is below.

(1)   Can arka-sın-dan   biri   koval[a]-ıyor-**muşcasına** hızlı yür-üyor-du.
      Can behind-POSS3SG-ABL somebody chase-IMPF-HCM   fast walk-IMPF-PST
      'Can was walking fast as if somebody was chasing him.'

We are aware of the semantic analyses for the hypothetical comparison constructions in English (Bledin & Srinivas 2019) and German (Bücking 2017). Yet, we argue that these analyses do not provide a suitable meaning for HCM in Turkish. This is because HCM in Turkish has distinct properties from parallel constructions in English and German. We focus on one of them here.

In Turkish, it is possible for an HCM-clause (≈ what -MIŞCASINA attaches to) to co-occur with non-verbal predicates as in (2) and (3). Hence, analyses that makes use of event semantics and analyze HCM-clauses as manner modifiers (e.g. Bledin & Srinivas 2019) will undergenerate, failing to predict examples like (2) and (3).

(2)   Berke, padişah-**mışcasına** <u>kibirli bir adam</u>.
      Berke sultan-HCM   arrogant a man.
      Lit: 'Berke is an arrogant man as if he is a sultan.'
      Our paraphrase = 'Berke is as arrogant a man as he would be if he were a sultan.'

(3)   Hiç   deprem   ol-ma-yacak-**mışcasına** <u>depreme hazırlıksız-ız</u>.
      (n)ever earthquake happen-NEG-FUT-HCM earthquake-DAT unprepared-1PL
      Lit: 'We are unprepared for an earthquake as if there is never gonna be an earthquake.'
      Our paraphrase = 'We are as unprepared for an earthquake as we would be if there were never gonna be an earthquake.'

Since these analyses of hypothetical comparison do not readily extend to HCM in Turkish, we propose a new semantic analysis, making use of a theory of degree semantics and equatives, which have been motivated and formulated independently (see e.g. von Stechow 1984, Rett 2010).

Proposal, briefly. The paraphrase we provide for (2) reflects our intuition that HCM makes a comparison between two degrees, an actual-world degree and a hypothetical one. The HCM-clause provides the crucial bit of information on where the hypothetical degree is located. Roughly, the truth conditions we would like to derive for (2) are as in (4a). With verbal predicates, too, we maintain the same truth conditions, as illustrated for (1) in (4b).

(4)   a.   (2) roughly says: the degree of arrogance Berke has *in the actual world* is greater than or equal to the degree of arrogance Berke has in *hypothetical* worlds where he is a sultan.
      b.   (1) roughly says: the degree of speed at which Can is walking *in the actual world* is greater than or equal to the degree of speed at which Can would be walking in *hypothetical* worlds where somebody is chasing him.

Compositional analysis. The simplified LF in (5) for (2) formalizes our intuition that HCM makes a comparison between degrees. HCM combines with two arguments: its prejacent proposition and then a function from degrees to propositions (derived by λ-abstracting over a degree variable). The latter argument is used 'twice', so to speak, to retrieve the degree in the actual world and also to retrieve the degree in hypothetical worlds (which HCM takes us to by accessing its first argument,

i.e. the proposition.) Importantly, there are many possible worlds where Berke is a sultan; and the comparison will only sound strong enough if it involves universal quantification over all those relevant hypothetical worlds. Accordingly, the meaning we give to -MIŞCASINA will be as in (6). See in (7) the truth conditions we derive for (2).

(5)

$$\text{function from degrees to propositions}$$

proposition   -MIŞCASINA $\lambda d. \lambda w.$ Berke is d-arrogant in w

$\lambda w.$ Berke is a sultan in w
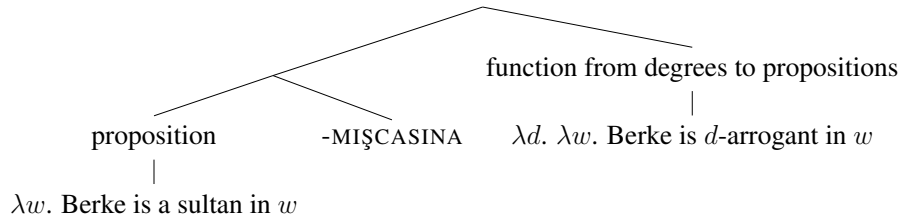
(6) $[\![\text{-MIŞCASINA}]\!]^w = \lambda p_{< s, t >}: p(w) = 0. \lambda D_{< d, st >}.$ for all w' most similar to w: $p(w') \rightarrow$ the max d' such that $D(d')(w) = 1 \geqslant$ the max d'' such that $D(d'')(w')=1$

(7) $[\![(2)]\!]^w = 1$ iff for all possible worlds w' most similar to w such that Berke is a sultan in w', the maximal degree d' such that Berke is d'-arrogant in $w \geqslant$ the maximal degree d'' such that Berke is d''-arrogant in w'

A few comments: We take the prejacent of -MIŞCASINA to denote a proposition, as is obvious in examples like (3). Furthermore, we take it to be presupposed to be false, given that the continuation in (8) sounds odd. (Ideally, this should be derived from the evidential (i.e. MIŞ) part of HCM.)

(8)   Ali sınav-ı   yok-**muşcasına** rahat.   #Çünkü sınav-ı   yok.
      Ali exam-POS3SG exist.NEG-HCM relaxed.   Because exam-POS3SG exist.NEG
      'Ali is as relaxed as he would be if he didn't have an exam. #Because he doesn't have an exam.'

We also restrict the set of worlds quantified over by something along the lines of 'most similar to w' to ensure that we don't go to worlds where the comparison won't go through (e.g., we need to exclude worlds where all sultans are benevolent or there are no sultans at all.)

Predictions. Our semantics for HCM makes an important prediction. Since it requires comparison between two degrees, when the matrix absolutive adjectival predicate cannot be coerced into a scalar/gradable expression, HCM is predicted to be odd. This prediction is borne out, (9).

(9) #Kolye   düğün-de   tak-ıl-**mışcasına** altın(dan)-dı.
     necklace wedding-LOC gift-PASS-HCM   gold(en)-PST
     #'The necklace was as golden as it would be if it was gifted at a wedding.'

That said, our proposal is also flexible enough to accommodate cases where there is no adverb in the matrix clause but a comparative interpretation is nevertheless available. Consider (10). We propose that here speakers posit a covert adverb (appropriate with respect to context/world knowledge). This is motivated by the denotation of HCM which wants a function from degrees. Importantly, when the context/world knowledge doesn't readily allow us to retrieve a suitable adverb, the sentence sounds odd, forcing us to wonder what that [???] could be, as in (11).

(10)   Yarın   sınavın   yok-**muşcasına** otur-uyor-sun!
       tomorrow exam-POS.2SG exist.NEG-HCM   sit-IMPF-2SG
       'You are sitting as [RELAXED/UNWORRIED] as you would be if you didn't have an exam tomorrow.'

(11)   Yarın   meteor yağ-acak-**mışcasına** dans ed-iyor-sun
       tomorrow meteor rain-FUT-HCM   dance-IMPF-2SG
       'You are dancing as [???] as you would be if there were gonna be a meteor shower tomorrow.'