A mismatch between semantic scope and morpheme order in Turkish

Turkish, as many agglutinative languages, is known to require a match between semantic scope and verbal morpheme order (Wilson & Saygin 2001, a.o.). I point out and analyze a novel exception to this generalization: the Turkish negated necessity modal -mali must involve an underlying morpheme order that mismatches surface order.

The data. • At first glance, the order of negation and modal morphemes matches scope:

(1) Ali hastalan -a -maz.  
Ali get.sick -◊ -neg.aor.3s  
Ali can’t get sick.  

(2) Ali hastalan -ma -yabil -ir.  
Ali get.sick -neg -◊ -aor.3sg  
Ali can not get sick.  

(3) Ali hastalan -ma -malı.  
Ali get.sick -neg -□.3sg  
Ali must not get sick.  

Note: the morpheme order of negation following -mali is unattested.

• At second glance, there is evidence to suggest that negation is merged above the modal at some level of the derivation.

Klima Test. The first piece of evidence comes from the a difference in the "negative status" of negation in sentences with wide scope possibility and necessity (e.g. (2) and (3)):

(4) Hastalan -a -maz, ne Ali ne Ayse.  
get.sick -◊ -neg.3sg, nor Ali nor Ayse  
Neither Ali nor Ayse can get sick.  

(5) Hastalan -ma -malı, ne Ali ne Ayse.  
get.sick -neg -□.3sg, nor Ali nor Ayse  
Neither Ali nor Ayse must get sick.  

(6) *Hastalan -ma -yabil -ir, ne Ali ne Ayse.  
get.sick -neg -◊ -aor.3sg, nor Ali nor Ayse  
-int. Both Ali and Ayse can not get sick.  

A right dislocated ne...ne phrase can only apply to negative sentences, and can thus be used as a Klima test for sentential negation (Klima 1974). While we don’t what the Klima test actually tests, but we observe a definite contrast in status between narrow scope negation with -ma-yabil and -ma-mali. I suggest this has to do with the order negation has merged in the syntax.

Narrow scope in certain environments. The second piece of evidence comes from the availability of narrow scope in environments in which PPIs are known to have narrow scope, namely Downward Entailing environments, or in presence of a universal quantifier (Szabolcsi 2004, a.m.o.).
(7) Sadece Ali hastalan -ma -mali
Only Ali get.sick -neg □.3sg
Only Ali must not get sick. / Only Ali doesn’t need to get sick.

(8) Ali hastalan -ma -mali -ysa, ...
Ali get.sick -neg □.3sg cond
[If Ali must not get sick/If Ali does not have to get sick, ...]

(9) Az insan hastalan -ma -mali
Few people get.sick -neg □.3sg
Few people don’t need to get sick. / Few people must not get sick.

(10) Herkes hastalan -ma -mali
Everyone get.sick -neg □.3sg
Everyone doesn’t have to get sick.

**Analysis.** I assume two modal positions in narrow syntax, one above NegP (HighMod) and one below (LowMod), and modal morphemes have restrictions on where they can appear. Among existential modals, -a is in LowMod, -abil is in HighMod. I argue that -mali is in LowModP, despite its surface order. The fact that -mali can scope below negation in some environments and has a PPI distribution suggests it starts off low in the syntax. In the environments in which it scopes low, the morpheme order stays the same, i.e. is inverse to semantic scope. There are additional restrictions to -mali: it cannot be followed by other verbal morphemes, nor a independent copula (positive or negative):

Ali get.sick - □ {-cop-past, *-neg, -*aor, -*prog, -*fut, *-cop.neg, *-cop}
Ali must get sick.

Crucially, this is true for negative morpheme -ma. We assume this restriction is not imposed in narrow syntax, but at PF. The derivation for V-ma-mali looks like the following:

Furthermore, I assume that -mali may reconstruct. Since it is a PPI, it may only do so when it is rescued or shielded, as in the environments listed in (7)-(10), but not in simple environments like in (3). In addition, we can explain (4)-(6) by assuming that the negative status of the sentence given by Klima tests is determined by narrow syntax. Finally, this mismatch of order and scope is an exception in Turkish, because of the specific syntactic restrictions associated with the -mali morpheme (that seems to be one of a kind in Turkish). Since -mali prevents any negation to be pronounced after it, it must either raise above Neg or merge with the NegP. A rule general to Turkish would be: "If a morpheme can match narrow syntax and surface scope, it does; but it doesn’t if it can’t."