Modal superlatives as degree descriptions

In a nutshell: In this paper, I present a novel compositional analysis of modal predicative superlatives, that is, predicative superlatives accompanied by modal adjectives such as possible, as that in (1).

(1) Mary wanted to be the prettiest possible.

I argue that they are elliptical bona fide degree-relative clauses denoting maximal degrees and whose semantic contribution is similar to that of Measure Phrases. This account will require a novel composition of the superlative which involves the formation of an ordered set and the selection of a maximal element. I argue that not only is this account able to derive their peculiar semantics (dispensing us from the ad hoc components that previous accounts posited), but it can also capture the morphosyntax of these constructions (especially in Romance languages, which turn out more informative than English in this respect).

The interpretation of modal superlatives Semantically, modal superlatives are unique in that they have what Schwarz 2005 calls “equative force”. That is, they can be paraphrased using an equative construction as shown in (2).

(2) She wanted to be the prettiest possible. \( \approx \) She wanted to be as pretty as possible

Non-modal superlatives have instead stronger truth conditions that result in incompatibility with ties.

(3) a. Yesterday, Mary was the kindest she has ever been
\( \approx \) Mary was kinder yesterday than she was at any other relevant time
\( \not\approx \) Yesterday Mary was as kind as she has ever been
b. Mary was the kindest YESTERDAY
\( \approx \) Yesterday Mary was kinder than any other relevant day
\( \not\approx \) Yesterday Mary was as kind as on a day when she was the kindest

Previous accounts In the literature, there are two main semantic accounts for modal superlatives: Schwarz 2005 and Romero 2013. Both analyses are able to derive the desired “equative” interpretation of modal superlatives, but they do so at the expense of having some ad hoc components in their analysis. In the case of Schwarz 2005, -est possible is considered a non-decomposable degree operator (see (4)), whose meaning is unrelated to the meaning of bare -est (5). This does not seem a desirable component of the analysis.

(4) \([\text{est}] = \lambda P_{<d,dt>}. \exists d [P(d) \& \forall Q \in Q [Q \not= P \rightarrow \neg (Q(d))]]\]
(5) \([\text{est possible}]^w = \lambda P_{<s,dt>}. [\forall w' [\exists w [wRw' \& P(w')(d) = 1] \rightarrow P(w)(d) = 1]]\]

Romero 2013 provides a compositional analysis where the more familiar Heimian meaning for -est in (6) is assumed. However, in order to derive the “equative force” of modal superlatives, she has to assume a particular type of quantification (over degree sets as opposed to degree properties) that could not be extended to other non-modal superlatives such as (3).

(6) \([-\text{est}] = \lambda Q_{<dt,t>}. \lambda P_{<d,dt>}. \exists d [P(d) \& \forall Q \in Q [Q \not= P \rightarrow \neg (Q(d))]]\]
The shape of modal superlatives in Romance Moreover both Schwarz 2005 and Romero 2013 inherit a well-known problem shared by any Heimian scopal theory of superlatives, which is that the definite determiner is not interpreted in the usual way. In the semantic compositions above, it has merely existential force. This is particularly surprising in the case of modal superlatives in Spanish and Italian, which turn out to be the only case of predicative superlatives that allows the presence of an overt definite determiner.

(7) a. Maria è stata il più carina che poteva (con i clienti)
    ‘Mary was the nicest she could be (with the costumers)’

b. María quería estar lo más guapa (que fuera) posible
    ‘Maria wanted to be it.m.s. more pretty,7s.f. that was possible’

More generally, Romance languages show that in addition to having unique semantic properties, modal superlatives are unique morpho-syntactically. First, whereas the Italian (and Spanish) counterparts of (1) are fully acceptable, non-modal predicative superlatives such as (3) are ungrammatical (see (10) and (11)). Second, Romance modal superlative predicates show a level of syntactic independence that their non-modal counterparts do not have. Unlike other predicative superlatives in Romance, they form a syntactic constituent that is headed by a definite determiner and that can appear as the sentential predicate (compare (7a) to (11)). Also they are compatible with an indefinite determiner at the higher DP level (see (12a) vs. (12b)). Third, modal superlatives look suspiciously similar to other (free) amount relatives in these languages. Compare Spanish (7b) with the free relative in (13) and Italian (14a) with (14b). Both the relative in (13) and the one in (14b) are normally assumed to denote single degrees.

Proposed analysis I argue that the degree phrase in modal superlatives is an elliptical relative clause. Once ellipsis is resolved, the relative clause refers to a single maximal degree (and not a set of degrees) as in Romero 2013 which plays the role of a Measure Phrase. That is, it provides a degree that saturates the degree slot of the adjective directly. This is shown in (9b) for (7b), whose LF is given in (8).

(8) Maria [ 1 quería [ [ lo sup más 3 (que fuera) posible <para PRO₁ estar guapa t₃ >] [ 2 PRO₁ estar guapa t₂ ] ]

(9) a. [ 2 PRO₁ estar guapa t₂ ] = λd. [ guapa(g(1),d) ]
b. [ lo sup más 3 possible < para PRO₁ estar guapa t₃ > ] = λd[ ◊ [ guapa (g(1), d)] & ∀d’ [ ◊[ guapa (g(1), d’) & d≠d’] → d’ < d] ]

Internally, the degree phrase is analyzed as a partitive over degrees (parallel to partitive constructions over individuals such as the tallest of the boys). It is composed in three steps. First, the más creates a total ordering of degrees. Second, SUP turns the ordered set into a singleton containing the maximal degree. Lastly, the definite determiner performs a “uniqueness test” and return the unique maximal degree. The maximal degree in turn measures the degree of the property denoted by guapa. The whole sentence then asserts that Maria wanted to be that pretty, where that is equal to the maximal degree such that she cannot possibly be prettier than that.
Appendix: additional data

(10)* Ieri, Maria è stata il/la/∅ più carina che fosse mai stata.
Yesterday, Mary was the.NT the.F more nice she has.SUBJ never been

(11)* Ieri Maria era il/la/∅ più carina
Yesterday Maria was the.NT the.F more nice
(grammatical under the intended meaning ≈ (3b))

(12)a. Ho bisogno di una torta il più grande possibile.
I have need of a cake the more big possible
‘I need the biggest possible cake’
b.*Ho bisogno di una torta il più grande
I have need of a cake the more big
int. ‘I need the biggest cake’

(13) Susana es más guapa de [FreeRC lo que lo es María ]
Susana is more pretty of the that it is Mary
‘Susana is prettier than Mary is’

(14)a. Gianni è più alto di quanto non (lo) sia Piero
Gianni is more tall di how(much) EXPL.NEG it be.SUBJ Piero
‘Gianni is taller than Piero (is)’
b. Dovevo essere quanto più carina possibile
had.to be how.much more pretty possible
‘I had to be the prettiest possible’

References

Heim, Irene (1999). Notes on Superlatives. Ms. MIT.