1 Anatomy of a relative reading

(1) John$_F$ climbed the highest mountain. [relative]

- Contrast set: John and his focus-alternatives
- Association relation: x climbed (mountain) y
- Measured entities: mountain 1, mountain 2, etc.
- Measure: y is d-high
- Domain of measured entities: mountain

(2) John climbed the highest mountain on Tuesday$_F$ [relative]

- Contrast set: Tuesday and its focus alternatives (days)
- Association relation: John climbed (mountain) y on x
- Measured entities: mountain 1, mountain 2, etc.
- Measure: y is d-high
- Domain of measured entities: mountain

(3) John climbed the highest mountain. [absolute]

- Contrast set: mountain 1, mountain 2, etc.
- Association relation: $x = y$
- Measured entities: mountain 1, mountain 2, etc.
- Measure: y is d-high
- Domain of measured entities: mountain

In general, elements of the contrast set are related to elements of the measured entities via the association relation, and the measured entities are members of the domain.

Suppose you are a computer asked to identify the pieces of a sentence containing a superlative. Then you can follow the following procedure. If there is no focus, then you have an absolute reading:

- The association relation is identity.
- The contrast set is given by the head noun.

In the presence of focus, you can have a relative or an absolute reading. For the relative reading:

- The association relation can be derived by abstracting over the focus and the noun phrase (more generally: smallest maximal projection) containing the superlative phrase.
- The contrast set is (a contextually restricted subset of) the focus alternatives.
- The measured entities are the members of the range of the association relation (the set of ys such that xRy).

For the absolute reading: follow the procedure for the case where there is no focus.

2 Adverbial superlatives

Question: Do adverbial superlatives have both absolute and relative readings?

Answer: They certainly seem have relative readings.

(4) John$_F$ drove (the) fastest.

This looks like a relative reading either like this (**degree hypothesis**):

- Contrast set: John and his focus-alternatives.
- Association relation: x ran y-fast
- Measured entities: running speed 1, running speed 2, etc.
- Measure: y is d(-great)
- Domain of measured entities: speeds

or like this (**event hypothesis**):

- Contrast set: John and his focus-alternatives
- Association relation: x is the agent of y
- Measured entities: running event 1, running event 2, etc.
- Measure: y is d-fast
- Domain of measured entities: running events

What would an absolute reading look like? The association relation would be identity, so the contrast set is identical to the set of measured entities.

- **Absolute reading (degree hypothesis)**
  John drove y-fast, and y is greater in magnitude than all other speeds in the context.

- **Absolute reading (event hypothesis)**
  John was the agent of driving event y, and y is faster than all other driving events in the context.

Prediction of degree hypothesis: (5b) should be possible, and mean the same thing as (5a).

(5) John has a private driving tutor. The tutor says that John can choose to drive 40mph, 50mph, or 60mph. John was unsure which to choose, but in the end...

  a. ...he drove the fastest speed.

  b. *...he drove fastest.

  c. ?...he drove the fastest.

  d. ...of the given speeds, he drove the fastest.

Another prediction of the degree hypothesis, assuming an absolute reading cannot independently be ruled out, is that (6a) should have a non-contradictory reading, where John and Susie both drove the fastest of the contextually available speed.

(6) a. *John drove fastest. Susie did too.

  b. ?John drove the fastest. Susie did too.

  c. Of all the speeds, John drove *(the) fastest. Susie did too.

The event hypothesis does not predict (5b) to be felicitous on an absolute reading, because there is only one driving events in the context.

Compositional derivation:

(7) $\textit{fast} \rightsquigarrow \lambda e \lambda d\,.\,\textsc{fast}(e, d)$

(8) $\textit{-est}_\theta \rightsquigarrow \lambda C_{\langle e,t\rangle} \lambda G_{\langle d,\langle e,t\rangle\rangle} \lambda x_\tau$
$\exists d[G(x,d) \wedge \forall x'[[C(x') \wedge x' \neq x] \rightarrow \neg G(x',d)]]$
'there is a degree to which x is G and no distinct x' in C is G'

(9) $\textit{fastest}_C \rightsquigarrow \lambda x\,.\,\exists d[\textsc{fast}(x,d) \wedge \forall x'[[C(x') \wedge x' \neq x] \rightarrow \neg\textsc{fast}(x',d)]]$

(10) $\textit{drove} \rightsquigarrow \lambda e\,.\,\textsc{driving}(e)$

(11) $\textit{drove fastest} \rightsquigarrow \lambda x\,.\,\textsc{driving}(x) \wedge \exists d[\textsc{fast}(x,d) \wedge \forall x'[[C(x') \wedge x' \neq x] \rightarrow \neg\textsc{fast}(x',d)]]$

(12) $\exists$ *[*ag John] drove fastest*
$\rightsquigarrow \exists x\,.\,\textsc{ag}(x, \textsc{j}) \wedge \textsc{driving}(x) \wedge \exists d[\textsc{fast}(x,d) \wedge \forall x'[[C(x') \wedge x' \neq x] \rightarrow \neg\textsc{fast}(x',d)]]$

Getting a relative reading for John_F drove (the) fastest with the recipe:

John is focused. Abstract over ‘‘drive fastest’’ to get other slot.
Association relation = x is agent of (driving event) e.
Therefore c.s. = [[John]]^F
m.e.s = driving event 1, 2, 3... (where agent is among c.s.)
measure (type <d,vt>) = e is d-fast

==...==> There is a driving event e that John is the agent of
and for all distinct elements of the contrast set,
the driving events that they are the agent of are not as fast as e.

Getting a relative reading for John_F climbed (the) highest mountain with the recipe:

John is focused. Abstract over ‘‘the highest mountain’’ to get other slot.
Association relation = x climbed y.
Therefore c.s. = [[John]]^F
m.e.s = climbed mountains 1, 2, 3... (where climber is among c.s.)
measure (type <d,et>) = x is d-tall

==...==> There is a mountain x that John climbed
and for all distinct elements of the contrast set,
the mountains that they climbed are not as tall as x.

TODO: Show that the recipe doesn’t work for absolute readings of adverbials.