Towards a uniform super-linguistic theory of projection

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Summary

Question: how should we approach secondary modality content like gestures, facial expressions, intonational morphemes?
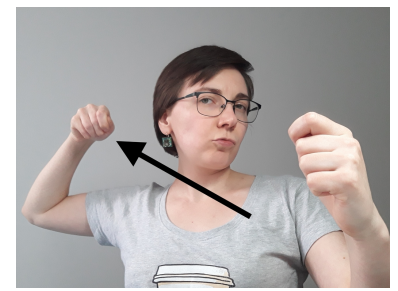**Answer:** as bona fide linguistic objects across the board
Case studies: conventionalized gestures and misc degree modifiers

Background

Recent literature focused on projection of non-conventionalized gestures (Ebert & Ebert 2014; Hunter 2018; Schlenker 2018a, a.o.):

(1) a. Lea might bring her dog$_{LARGE}$.
  → Lea's dog is large.

  b. Zoe might shoot at the target$_{LONGBOW}$.
  → If Zoe shoots, she'll shoot a longbow.

Common assumption: modality-specific rules for projection

Schlenker 2018b: predict if/how "iconic enrichments" project from:
- whether they are "internal" or "external" ("eliminable" or not)
- whether they co-occur w/something in a more primary modality

So, gestures in (1) are "external" and co-speech → "cosuppositions"

A super-**linguistic** approach

Esipova 2019: the same principles guide projection in all modalities
- Architectural assumptions: λ model, late vocabulary insertion
- Projection pattern determined by how X composes, not how it's exponed; modality effects only in phonology and pragmatics
- E.g., gestures in (1) can be construed as:
  - **(subsective) modifiers** ($LARGE \approx large$): $\langle \tau, \tau \rangle$; pragmatically project if non-restricting (truth-conditionally vacuous—Leffel 2014, adjusted) + prefer to be non-restricting if co-speech; cf. (2)
  - **supplements** ($LARGE \approx a\ large\ object$): pass input unchanged + conventionally projecting proposition (e.g., Potts 2005); cf. (3)

(2) a. If Lea brings her lovely dog, I'll stay.
  → If Lea brings her dog, I'll stay.   TC vacuity
  → Lea's dog is lovely.   NRM inference ("cosupposition")

  b. If Lea brings her **lovely** dog, not her **nasty** one, I'll stay.

(3) a. If Lea brings her dog, (who's) a lovely creature, I'll stay.
  → Lea's dog is a lovely creature

  b.#($_{PrP}$ If Lea brings her dog), ($_{PrP}$ who's) a **lovely** creature), ($_{PrP}$ not her dog), ($_{PrP}$ who's) a **nasty** creature), ($_{PrP}$ I'll stay).
  $\neq$ (2b); $\neq$ If [Lea brings her dog and it's a lovely creature]...

Non-conventionalized gestures rely on iconicity to convey meaning → constrained, usually subsective modifiers → confirmation bias

Need to look at a **wider range** of meaning types!

Conventionalized gestures

Conventionalized gestures can be:
- **subsective modifiers**; project pragmatically if non-restricting:

(4) a. If you bring a semanticist$_{CRAZY}$, I'll fight with them.
  → If you bring a semanticist, I'll fight with them.
  → All semanticists are crazy.

  b. If we wanna celebrate$_{DRINK}$, let's go to a store now.
  → If we wanna celebrate, let's go to a store now.
 → If we celebrate, we'll do so by drinking alcohol.

(5) a. ?If Kim brings her **brother**$_{CRAZY}$, I'll fight with him, but if she brings her **normal** brother, that's OK.
  ≈ If Kim brings her **crazy** brother...

  b. ?If we wanna **celebrate**$_{DRINK}$, let's go to a store now, but, of course, we can also celebrate **without** alcohol.
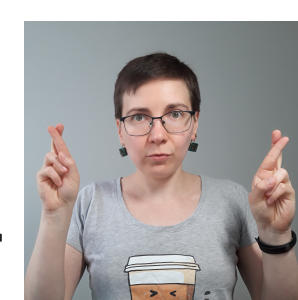 ≈ If we wanna celebrate by drinking **alcohol**...

- **non-subsective modifiers**; not TC vacuous:

(6) Kim is bringing her friend$_{AIR-QUOTES}$.
  ≈ Kim is bringing her {so-called, quote-unquote} friend.
  $\not\rightarrow$ Kim is bringing her friend.

- **supplements**; project conventionally:
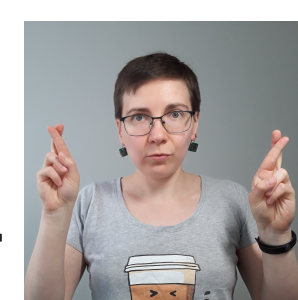
(7) If a friend of mine wins$_{FINGERS-CROSSED}$, I'll be happy.
  ≈ If a friend of mine, {hopefully, fingers crossed}, wins...
  → I want a friend of mine to win.
  $\neq$ If [a friend of mine wins and I wanted them to]...

Schlenker's (2018b) typology can't capture this diverse behavior of co-speech gestures. Exclude all conventionalized gestures?
- A principled way to identify them? Is it a binary distinction even?
- Would miss the parallels across modifier gestures

Can't avoid making **linguistic** distinctions!

Conclusion

- No need for a modality-specific typology of projection patterns
- Make other typologies of meaning-bearing expressions cross-modal, e.g.: attitudinal/expressive content; "parasitic" expressions that don't integrate compositionally with their hosts, etc.

Selected references

Ebert & Ebert. 2014. *SPE 7.* **Leffel.** 2014. PhD thesis. **Esipova.** 2019. PhD thesis. **Hunter.** 2018. *L&P.* **Ghomeshi et al.** 2004. *NLLT.* **Kennedy & Mcnally.** 2005. *Language.* **Potts.** 2005. OUP. **Schlenker.** 2018a. *L&P*; 2018b. *NLLT.*

Degree modifiers cross-modally

Open-scale degree modifiers are persistently restricting by default:
- **primary modality degree modifiers**
  - adverbs and re-lexicalized expressives:

(8) If the movie's {very, extremely, truly, surprisingly, fucking, bloody, damn} good, I'll stay till the end of the credits.
  $\not\rightarrow$ If the movie's good, I'll stay till the end of the credits.

  - modifier repetition with a gradient iconic effect:

(9) a. You are a sick, sick man.   (Ghomeshi et al. 2004, fn. 3)
  b. The movie's very, very, very good.

  - "contrastive reduplication":

(10) a. I'm up, I'm just not **up**-up.   (Ghomeshi et al. 2004, (1d))
  b. Lea doesn't have a chihuahua, she has a **dog**-dog.

- **suprasegmental degree modification**
 - *DEG-INT* morpheme (preliminarily: L*+H, syllable lengthening, higher intensity, creaky phonation):

(11) a. The movie's good$_{DEG-INT}$.   ≈ *very good*
  b. Lea has a dog$_{DEG-INT}$.   ≈ *big dog*, or *proper dog*
  c. I ran$_{DEG-INT}$.   ≈ *ran fast*, or *ran properly*
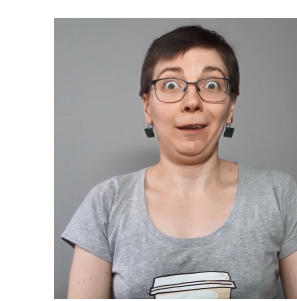
  - extra lengthening:

(12) a. The lecture was {looong, #shooort}.   (Schlenker 2018b)
  b. It's {slow$_{DEG-INT}$, slooow$_{DEG-INT}$, fast$_{DEG-INT}$, #faaast$_{DEG-INT}$}.

- **degree modification via facial expressions**
  - *OO* can be a supplement or a degree modifier (cf. *surprisingly*):
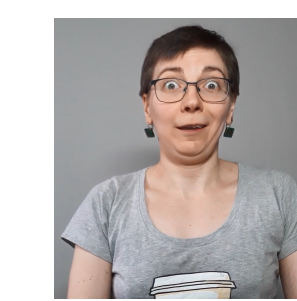
(13) a. $\overline{[[Mia\ got\ \overline{DRUNK}]^{OO}]}$.
  ≈ It's surprising that Mia got drunk.

  b. Mia got $[[\overline{DRUNK}]^{OO}]$.
  ≈ Mia got drunk to a {surprising, high} extent.

  c. If a friend of mine gets DRUNK, I won't say anything, but if $[[a\ friend\ of\ mine\ gets\ \overline{DRUNK}]^{OO}]$, I will.
  $\neq$ If [a friend of mine gets drunk and I'm surprised by it]...

Schlenker's (2018b) typology:
- can't predict the variable behavior of *OO*
- says lengthening in (12) is "internal" and w/o own time slot → can be at-issue; misses the cross-modal generalization above

Uniform degree modifier semantics
- Kennedy & McNally 2005, but with the ∃-closure separated out
- Degree modifiers cross-modally expone the head of a DegP
- Non-scalar predicates type-shift when combining with DegPs
- Extra iconic effects (as in (9), (12)) uncaptured so far

(14) a. $[\![DEG]\!]([\![\alpha_{\langle d, \langle \tau_1 \ldots \tau_n, st \rangle \rangle}]\!]) =$
  $\lambda d \lambda X^1_{\tau_1} \ldots X^n_{\tau_n} \lambda w.[\![\alpha]\!](d)(X^1) \ldots (X^n)(w) \wedge \mathsf{deg}(d)(w)$

  b. $[\![dog_{DEG-INT}]\!] = [\![\exists_d]\!]([\![DEG-INT]\!]([\![SCALAR]\!]([\![dog]\!]))) =$
  $\lambda x \lambda w. \exists d[\mathsf{scale}_{dog}(x)(w) = d \wedge \mathsf{high}(d)(w)]$