Consider this ordinary real-world utterance ...

(1) Father: So she sold me *this*. But she didn’t sell me this (0.2) or that.

- Natural occurrence
- Highly frequent
- Fully grammatical
- Vocalized via clear speech
  - Meaning?
  - Communication?

Evolution of LANGUAGE?
"Ok, we got vocalization, now let's talk about something!"
“Ok, we got a grammar, now let’s talk about something!”

“Ok, we got gesture, now let’s talk about something!”

Case study: A “living fossil”
Obligatoriness

in Grammar
- number marking
- gender marking
- evidentiality marking
- etc.

only in Grammar?
- **demonstratives?**

Demonstratives

- **Proximal**
  - *this; esto(a)*
- **Medial**
  - *–; eso(a)*
- **Distal**
  - *that, aquel(la)*

- **Demonstrative determiners**
  - *I like those pictures*
- **Demonstrative pronouns**
  - *I like those*
- **Demonstrative adverbs**
  - *there* (spatial: “at that place”)
  - *then* (temporal: “at that time”)

“Demonstratives are generally so old that their roots are not etymologically analyzable. In contrast to other closed-class expressions they cannot be traced back to content words” (Diessel, 2006, pg. 481)

- Demonstratives have served as a source for fundamental grammatical categories (e.g., definiteness):
  - e.g. definite articles in most Romance languages developed from a set of Latin demonstratives (*ille, illa, illud; “that”*)
    - *el, la, los, las* (Spanish)
    - *le, la, les* (French)
  - And this goes one way

Demonstratives

- **Ancient**
- **Etymologically not analyzable**
- **Have played a genetic role**
- **Universal (even today)**

- **Environmentally coupled**
- **Obligatoriness: SOBA**

**Candidate for “living fossil”**

Synchronized Obligatory Bodily Action in the environment
**Demonstratives and SOBAs**

*Speech*

1. Father: So she sold me *this*. But she didn’t sell me this (0.2) or that.

*Speech+Gesture*

*Speech+Gesture+Environment*

> “I repeat, there is no phonetic deictic sign that could do without the gesture or a sensory guide equivalent to the gesture or finally an orientation convention that takes their place.” (Karl Bühler 1934, p. 108)

At no point in the evolution of language could demonstratives stand (fully) alone.

*Demonstratives and SOBAs*

*“Pointing” (and its complexities)*

> “Pointing” (and its complexities)

*Primate Phylogeny*

Skelton & Young, 2006

*Mat. Phyl. & Evolution*

(Slide by Pascal Gagneux)
Demonstratives and SOBAs

“Pointing” (and its complexities)

1. Distinctively human
2. Emerges early in ontogeny
3. No fixed morphology, multiple articulators
4. Culturally shaped (not genetically determined)
5. Abstract, imaginary, complex