Gesture vs. Salience: Two Types of Demonstratives in ʔayʔaǰuθəm

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Introduction: In languages like English or German, the same demonstratives are used for exophoric entities, which can be identified through co-speech gesture, and for non-exophoric entities, which cannot be gestured to (cf. Lücking 2018; Grosz 2019). In contrast, we argue in this paper that other languages may mark this distinction explicitly with separate sets of demonstratives. We use the term *exophoric* to describe entities that can be located in the external world (e.g. *Give me **this cup**!*), and the term *non-exophoric* for entities that defy such a localization, as is the case with abstract entities (e.g. *He arrived **this morning**.*). Drawing on original fieldwork with three speakers, we propose that the demonstratives in ʔayʔaǰuθəm (ISO 639-3: coo) — an endangered Salish language spoken in Canada — can be divided into two sets: **Gesture Demonstratives** (GDEMs) require co-speech gestures to identify an exophoric entity, and are incompatible with non-exophoric referents, while **Salience Demonstratives** (SDEMs) rely on contextual salience to single out the referent, and can consequently be used with both exophoric and non-exophoric referents. The existence of these two distinct sets of demonstratives reinforces the claim that gesture has semantic import (e.g. Lascarides & Stone 2009; Ebert et al. 2020) and demonstrates that certain morphemes in fact require co-speech gestures.

Data: The GDEMs (*tiʔi, tita*) require indexical co-speech gestures — usually realized as hand gestures, but sometimes also as head movements or gazes; cf. König & Umbach (2018) — to identify exophoric entities, as in (1). However, for non-exophoric referents, the SDEMs (*tiṅ, taṅ*) have to be used instead. This is shown in (2), where only the SDEMs, but crucially not the GDEMs, can be used to point at abstract referents or pick up propositional antecedents.

(1) *Context: At a gathering, you notice the man who helped you when your car broke down. You point him out to me in the crowd:*
 hiɬ **tita**   tumiš ʔə=čig-aθ-uɬ.
 COP DIST.GDEM man   CLF=help-LV-1SG.OBJ-PST
 'It's that man that helped me.'   [EXOPHORIC: GDEM + GESTURE]

(2) a. *Context: Late at night, I come in from outside and say to you:*
   hihiw čəmčəm-mut   {**tiṅ** / #tiʔi}   nanat.
   really cold-INT   {PROX.SDEM / PROX.GDEM} night
   'It's really cold tonight.' (lit.: 'This night is really cold.')   [NON-EXOPHORIC: SDEM]
  b. *Context: Someone is remarking about my brother that he gets really excited to talk about history. I agree:*
   ʔiʔ hiɬ {**taṅ** / #tita}   ʔə=xʷ=nəṁ-s.
   yes COP {DIST.SDEM / DIST.GDEM} CLF=NMLZ=be.like-3POSS
   'Yes, that's how he is.'   [NON-EXOPHORIC: SDEM]

Crucially, when a gesture is required to single out an entity from a group, as in (3), only the GDEMs are felicitous, whereas the SDEMs cannot be used in these contexts.

(3) *Context: Pointing to one man in a picture of a men's soccer team.*
 gat=ga   {**tiʔi** / #tiṅ}=tumiš?
 who=DPRT {PROX.GDEM / PROX.SDEM}=man
 'Who is this?'

However, once the referent has been identified and is salient in the context, the use of the SDEMs becomes felicitous. This is illustrated in (4), where first a GDEM is used to establish the referent by pointing, and then an SDEM is used to refer back to the same referent.

(4) *Context: I ask while <u>pointing at a picture</u> of a young boy that I'm holding:*
gat=ča=ga   **ti?i?**   hił=a=ča   Freddie **tin̓?**
who=INFER=DPRT PROX.GDEM   COP=Q=INFER Freddie PROX.SDEM
'Who might this be? Could this be Freddie?'

Analysis: We propose an analysis where gesture is a crucial semantic component of GDEMs, while SDEMs require there to be a unique salient referent in the context. Both provide not-at-issue content about the deictic distance of the referent. The denotation for the DP *ti?i tumiš* 'this man' containing a GDEM is given in (5), following Ebert et al. (2020). The gesture referent I_m is a rigid designator equated with the referent of the demonstrative. New discourse referents are introduced as variables in random assignment formulas [] (following Anderbois et al. 2013). At-issue content (indicated with a subscript p) is modelled as a proposal to update the context set, while not-at-issue content (indicated with a subscript $p*$) is an imposition on the context set.

(5) GDEM:
     presupposition: there is a unique man in the context identical to the gesture referent
     a. [ti?i tumiš]   ('this man')
         POINTING TO **m**
     b. $[x] \wedge man_p(x) \wedge [z] \wedge z = I_m \wedge x =_p z \wedge man_{p*}(z) \wedge PROX_{p*}(z)$

The contributions of the SDEMs do not depend on gesture, but presuppose a unique, contextually salient referent. Thus, (6) is defined only if there is already a unique contextually salient man, in which case the referent of the demonstrative will be equated with this unique individual in the domain D (e.g. Westerståhl 1985); the demonstrative also contributes not-at-issue content such that this individual is perceived as proximal by the speaker.

(6) SDEM:
     presupposition: there is a unique contextually salient man
     a. [tin̓ tumiš]   ('this man')
     b. $[x] = \iota z.[man_{p*}(z) \wedge D_{p*}(z)] \wedge PROX_{p*}(x)$

Conclusion: This paper adds to the growing body of super-semantic literature which argues for the inclusion of gesture in the semantics of demonstratives (e.g. Ebert et al. 2020), and provides evidence from an understudied language that demonstratives relying on gesture to identify their referents may in fact be encoded by distinct forms from those that rely on the contextual salience/uniqueness.

Selected References:
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