THE GRAMMAR OF THE ESSENTIAL INDEXICAL

Txuss Martín & Wolfram Hinzen, Department of Philosophy, Durham University, UK

Pronouns are said to uniquely exhibit 'essentially indexical' forms of referential use (KAPLAN 1989, PERRY 1993, LEWIS 1983): for example, 'I' does not mean 'the speaker' or 'Bob', even if I utter 'I' and am Bob. Commonly, the phenomenon is modeled formal-semantically through a character-content distinction and evaluation relative to both worlds and contexts. Here we ask why the phenomenon exists in the first place, and argue that inspection of the non-linguistic context does not in fact bring out what makes 1st person reference to an individual different from 3rd person reference to it. Pronoun use in mental illness (e.g. WATSON et al., 2012) also suggests that a speaker can know the speaker/agent of the context without knowing whether it is 'I'. We argue that essential indexicality involves the Person system essentially and is uniquely grammatical rather than lexical or semantic. Indeed, qua *lexical items*, pronouns can lack such uses.

LONGOBARDI 2005 proposes the 'Topological Mapping Hypothesis', according to which the forms of nominal reference are not regulated lexically or semantically but by the 'topology' of the nominal phase (object-reference iff N-to-D movement or expletive-associate CHAINS). SHEEHAN & HINZEN 2011, interpreting the phase as the smallest unit of referential-deictic significance in grammar (ARSENIJEVIĆ & HINZEN 2012), capture the relevant topological principle as 'movement to the edge', extending it further to the *clausal* phase (fact/truth reference iff T-to-C movement, based on evidence from V2, root phenomena, and expletive-associate CHAINS). Irrespective of lexical category, then, the phase exhibits a *phase interior* providing descriptive content, and a *phase edge*, which needs to be strongly filled for referential uses:
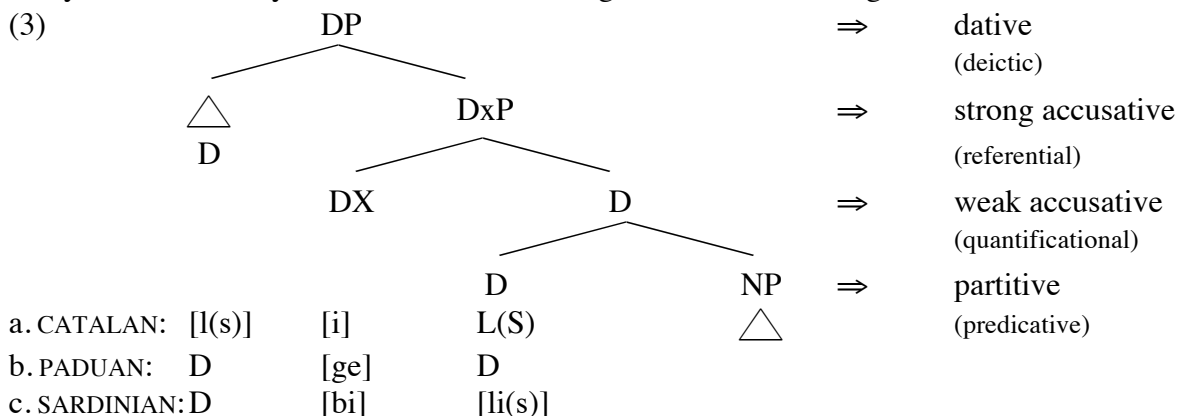
(1)   a.   (saw) [$_{EDGE}$ *(*the*) [$_{INTERIOR}$ *mayor of Paris*]]

        b.   (resents) [$_{EDGE}$ *(*that*) [$_{INTERIOR}$ *the mayor of Paris is dead*]]

Interpretations of this template range from purely predicative (maximally intensional) to quantificational (scope-bearing), to 3rd person object-referential. Here we extend the relevant mapping principles further, to deictic to personal forms of reference, as follows:

(2)   **TOPOLOGICAL MAPPING PRINCIPLES**:

        a.   *Predicative*   →   phase interior only   →   [$_{EDGE}$ ∅ [$_{INT}$ *man*]]

        b.   *Quantificational*   →   edge + interior   →   [$_{EDGE}$ a [$_{INT}$ *man*]]

        c.   *Referential* (3P)   →   edge + <interior>   →   [$_{EDGE}$ *John* [$_{INT}$ <*John*>]]

        d.   *Deictic reference*   →   edge + (interior)   →   [$_{EDGE}$ *this* / ☞ [$_{INT}$ (*man*)]]

        e.   *Personal* (1st/2nd) →   phase edge only   →   [$_{EDGE}$ *I* [$_{INT}$ ∅]]

We demonstrate (2e) through a systematic morpho-syntactic decomposition of Romance object clitics, which exhibit a stepwise *increase* in grammatical complexity with each layer in the hierarchy of referentiality above. MARTIN 2012 argues for the following structure:

(3)

```
                    DP                          ⇒   dative
              /          \                            (deictic)
           △              DxP                  ⇒   strong accusative
           D          /        \                      (referential)
                    DX           D             ⇒   weak accusative
                              /     \                 (quantificational)
                            D         NP       ⇒   partitive
                                      △              (predicative)
```

a. CATALAN:	[l(s)]	[i]	L(S)	△
b. PADUAN:	D	[ge]	D	
c. SARDINIAN:	D	[bi]	[li(s)]	

d. FRENCH: [l]   [ui]   D
e. SPANISH: [l]-e   DX   D

      This tree depicts four hierarchically ordered layers. Following KAYNE 2008 and CAHA 2009, MARTIN 2012 suggests that grammatically complex clitics may contain as subparts grammatically simpler ones, and shows this for dative clitics, which amount to the structure [D + DEIX], as transparently shown by Catalan (3a). The hierarchy is mirrored in the morphological structure and syntactic behavior of clitics, and maps onto the four interpretive classes of (pro-) nominals. Thus, partitive clitics are entirely devoid of extended structure. They are pro-forms for empty noun phrases, and can only be interpreted predicatively, occupying the interior of the nominal phase. Climbing up the phase, we find weak accusative clitics next, which project a D layer that endows them with gender and number features, corresponding to a 'lower' region of D that allows φ-features. These correlate with weak referentiality properties (cardinal interpretations) and feature scope and bound readings. Strong accusative clitics involve an additional deictic layer (JAYASEELAN & HARIPRASAD 2001). D stays in place, and this allows gender features, but D is bound by the deictic head, which imposes a referential (3rd person) strong interpretation with referential import. The difference between the two kinds of accusative clitics is not morphological in Romance, but it is in languages like Kannada (LIDZ 2006) or Hebrew (DANON 2006). Dative clitics in turn pattern with personal clitics, as they are dependent for interpretation on the system of participants in the discourse, involving an additional D layer on top of the deictic head. That additional head, overtly visible in Catalan (3a), gives them their deictic interpretation, which is exactly the same that we see in personal clitics (1st&2nd person). Because the dative can be lexicalized by any part of the complex dative phrase, the others remaining silent, it is quite expected that the dative can have the overt form of an accusative (standard Catalan 3rd person plural dative: *els*), the form of a locative (Paduan *ghe*), the form of a locative plus an accusative (Sardinian [bi+lis]), or the form of a dative plus a locative (colloquial Catalan [els+hi]). That extra D layer – an extension of the phase edge leading to a D-field and triggering D-to-D movement – provides these clitics with a number of morphological and syntactic properties: (i) Dative (and personal) clitics don't get gender features (in virtually all of Romance), as they are blocked by person features (gender and person features are in complementary distribution); (ii) The [D + DEIX] configuration accounts for the intriguing morphological form of dative clitics in some Romance languages, like for instance Catalan [els hi], with [hi] a locative/deictic clitic. It also accounts for the formal syncretism of dative and locative clitics in Northern Italian languages such as Paduan (3b); (iii) The fact that dative clitics include accusatives also gives a principled explanation to many syntactic puzzles of these clitics, including opacity in clitic clusters, or the Person Case Constraint (BOECKX & MARTIN, *in press*).

      CONCLUSION: Indexicality is essential because forms of reference systematically exhibiting greater grammatical complexity cannot be replaced by forms involving lesser complexity.

REFERENCES: **Arsenijević, B. & W. Hinzen** 2012 On the absence of X-within-X recursion in human grammar. *LI* **43**: 423-440; **Boeckx, C. & T. Martin**, in press, *El clitic datiu és més que un clitic*. Lleida: Pagès; **Caha, P.** 2009 The nanosyntax of Case. PhD Diss, Universitetet Tromsø; **Danon, G**. 2006 Caseless nominals and the projection of DP. *NLLT* **24**: 977-1008; **Jayaseelan & Hariprasad** 2001 Deixis in pronouns and nouns phrases. *Linguistic Analysis* **31**: 132-147; **Kaplan, D**. 1989 Demonstratives. In J.Almog et al., *Themes from Kaplan*. OUP, 481-563; **Kayne, R**. 2008 Expletives, datives, and the tension between morphology and syntax. In T.Biberauer, ed. *The Limits of Syntactic Variation*. Benjamins, 175-217; **Lewis, D**. 1983; **Longobardi, G**. 2005 Toward a unified grammar of reference. *Z.f. Sprachwissenschaft* 24: 5-44; **Martin, T**. 2012 Deconstructing Catalan Object Clitics. PhD Diss, NYU; **Perry, J**. 1993; *The Problem of the Essential Indexical and Other Essays*. OUP. M. **Sheehan & W. Hinzen** 2011 Moving towards the edge. *Linguistic Analysis* 37: 405-458. **Watson** et al. 2012. Use of second person pronouns and schizophrenia. *BJP* 200: 342-343.