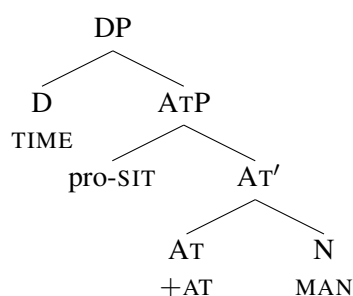# PERSON as a non-atomic deictic category

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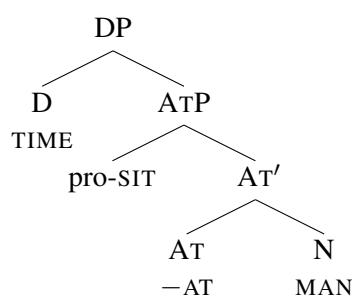
1 Proposal – Traditionally, the deictic space is taken to minimally consist of the atoms LOCATION, TIME, PERSON, all on par with each other. I claim that PERSON is actually a non-atomic entity dependent on TIME and LOCATION. It is shown that this composition is reflected in the morphosyntax of the linguistic expressions representing PERSON: indexical pronouns, i.e., 1st and 2nd person pronouns.

2 Analysis – Following numerous scholars in assuming that pronouns are syntactically complex (cf., e.g., Postal 1966; Cardinaletti and Starke 1999; Déchaine and Wiltschko 2002), I propose a maximal structure of indexical pronouns that contains both a temporal and a spatial component. I argue that the temporal component is responsible for interpretations linked to certain moments in time of the individual denoted by the structure (cf. Bliss and Gruber 2015). Further, I hypothesize that the spatial component is responsible for identifying the speaker or the hearer. The proposed structures are given in (1).

(1)   a. First Person Pronoun

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              DP
             /  \
            D    AtP
          TIME   / \
           pro-SIT  AT'
                   /   \
                  AT    N
                 +AT   MAN
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b. Second Person Pronoun

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              DP
             /  \
            D    AtP
          TIME   / \
           pro-SIT  AT'
                   /   \
                  AT    N
                 −AT   MAN
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3 Empirical Support I – Assuming an ontology that contains both individuals as well as stages of individuals (cf. Carlson 1980), I follow Bliss and Gruber (2015) in proposing that under certain circumstances the interpretation of indexical pronouns is restricted to a particular stage of the individual denoted by the pronoun. Specifically, D functions as a domain restrictor (cf. Musan 1995; Gillon 2006) and the associated TIME feature determines the specific temporal stage that gets picked out. As proposed in Déchaine and Wiltschko (2002), I assume that pronouns can either appear with or without the DP-layer. From this perspective, pronouns lacking D denote the individual in its entire temporal extendedness. Conversely, the interpretation of pronouns containing a D-layer is restricted to a specific stage. Furthermore, the DP-layer is argued to be the locus of cross-linguistic variation. Specifically, I claim that the temporal stage that gets picked out is determined syntactically: under Reverse Agree (cf. Wurmbrand 2012), the interpretable but unvalued TIME feature in D seeks to agree with a syntactically represented Time. Following among others Stowell (1995), I assume this to be the case for both Utterance Time and Eventuality Time. Whereas the first is encoded in Spec-TP, the second is associated with the VP. Which Time gets picked is subject to cross-linguistic variation: English and Dutch are proposed to agree with Utterance Time whereas Blackfoot (Algonquian) is proposed to agree with Eventuality Time.

As for the first option, consider the following data involving second person pronouns in generic sentences (cf. e.g. Cinque 1988; Cardinaletti and Starke 1999):

(2)   In Holland, you learn to ride a bike before you even learn to walk.

Dutch, however, having strong and weak 2nd person pronouns, shows a dichotomy: only the weak pronoun *je* can be used generically, whereas the strong pronoun *jij* must be indexical. I argue that *jij* maps onto a complete DP, while the weak pronoun *je* only maps onto an AtP. This implies that *jij* contains a domain restrictor over temporal stages whereas *je* does not. I propose that when the D-layer is present its TIME feature gets valued by Utterance Time in TP. This naturally leads to an obligatorily indexical reading for the pro-DP *jij*. The AtP *je* can either be interpreted generically or refer to the addressee. Its generic interpretation derives from a sentence-level generic operator GEN (Krifka et al. 1995) which binds the pronominal variable. In the absence of GEN, the variable resorts to a default interpretation which is utterance context-bound and hence deictic. The analysis finds further support in the fact that only *jij* can appear in equations, which independently have been shown to only allow for two DPs (Williams 1983). As for English, I propose that *you* can map onto either a full DP or an AtP.

As for the second option, I argue that Blackfoot is a language whose pronouns receive their temporal specification from Eventuality Time encoded in the VP. Indexical person proclitics in Blackfoot appear in two guises (Frantz 2009) which can be identified as long and short forms:

(3) your rabbit: a. kitááattsistaama b. * kááattsistaama
            kit-*aaattsistaama*   **k**-*aaattsistaama*
            2-rabbit   2-rabbit

(4) my mother: a. * nitsiksíssta b. niksíssta
            nit-*iksíssta*   **n**-*iksíssta*
            1-mother   1-mother

As shown by Bliss and Gruber (2015), the long forms are morphologically complex: they consist of a person marker in the lower part of the structure and the morpheme -*it* that maps onto D. As such, -*it* is the overt expression of the TIME feature which functions as a domain restrictor over stages of individuals. For ease of exposition, I present one case in which this connection is evident: As in (3), the long forms appear in the context of alienable possession, whereas the short forms surface in inalienable possession as in (4). Inalienable possession is permanently attributed to the possessor. As such, it involves a property that it is not temporally restricted and thus combines with the short form proclitic. Conversely, the long forms appear in the context of alienable possession, which is naturally restricted to the time of possession.

3 Empirical Support II – Pro-SIT, in Spec-ATP is a pronominal situation variable in the sense of Ritter and Wiltschko (2009), whose default interpretation is the Utterance Location. The head-feature ±AT is a relational feature in the sense of Ritter and Wiltschko (2009), putting the content of its complement (MAN) in relation to the content of its specifier (pro-SIT); in the case at hand, this relational head is represented as an abstract preposition reflecting the fact that the relation is essentially spatial. MAN stands for an entity that is specified for [+sentient]. In other words, the lower part of the structure gives us the interpretation of a sentient being either located AT the utterance location or *not* located AT the utterance location. This lower part of the structure is claimed to be universally identical in indexical pronouns. There are a few languages in which the connection between spatial expressions and indexical pronouns is reflected in the morphosyntax: For instance, in Armenian the morphemes *s* and *d* appear throughout the personal and spatial paradigms. They are standardly taken to be associated with first and second person, respectively (Klein 1996). Italian (Romance) presents another interesting case: the first person plural clitic in the oblique case is identical to the locative/expletive adverb denoting *here, there* (e.g. Jespersen 1924; Cinque 2005), both of which are *ci*. *Vi* is also both a locative/expletive adverbial and a person clitic, in this case for second person plural for oblique cases (Ferrazzano 2003).

References Bliss, H., and B. Gruber. 2015. Temporal restrictions on personal pronouns: The composition of Black-foot proclitics. Lingua 156:175–199. Cardinaletti, A., and M. Starke. 1999. The typology of structural deficiency. In Clitics in the languages of Europe, ed. H. van Riemsdijk, 145–233. Berlin: Mouton de Gruyter. Carlson, G. N. 1980. Reference to kinds in English. NY: Garland Publishing. Cinque, G. 1988. On si constructions and the theory of arb. LI 19:521–582. Cinque, G. 2005. Italian syntax and universal grammar. Cambridge: CUP. Déchaine, R.-M.,and M. Wiltschko.2002. Decomposing pronouns. LI 33:409–442. Ferrazzano, L. R. 2003. The morphology of ci and its "distal" relative, vi. Manuscript, City University of NY. Frantz, D. G. 2009. Blackfoot grammar. Toronto: University of Toronto Press. Gillon, C. 2006. The semantics of determiners: Domain restriction in Skwxwu?7mesh. Doctoral Diss., UBC, Vancouver. Jespersen, O. 1924. The philosophy of grammar. London: George Allen & Un-win Ltd. Klein, J. S. 1996. On personal deixis in Classical Armenian. Dettelbach: Verlag Dr. Josef Röll. Krifka, M., F. J. Pelletier, G. N. Carlson, A. ter Meulen, G. Link, and G. Chierchia. 1995. Genericity: an introduction. In The generic book, ed. G. N. Carlson and F. J. Pelletier, 1–124. Chicago: The University of Chicago Press. Musan, R. 1995. On the temporal interpretation of noun phrases. Doctoral Diss., MIT, Cambridge, MA. Postal, P. 1966. On so-called pronouns in English. In Report of the 17th Annual Round Table Meeting, ed. F. Dinneen, 177–206. Washington, D.C.: Georgetown University Press. Ritter, E., and M. Wiltschko. 2009. Varieties of INFL: TENSE, LOCATION, and PERSON. In Alternatives to cartography, ed. H. Broekhuis, J. van Craenenbroeck, and H. van Riemsdijk, 153–202. Berlin: Mouton de Gruyter. Stowell, T. 1995. The phrase structure of tense. In Phrase struc-ture and the lexicon, ed. L. Zaring and J. Rooryck, 277–291. Dordrecht: Kluwer Academic Publishers. Williams, E. 1983. Semantic vs. syntactic categories. Linguistics and Philosophy 6:423–446. Wurmbrand, S. 2012. The syntax of valuation in auxiliary-participle constructions. In Coyote Working Papers: Proceedings of the 29th WCCFL, ed. J. Choi, E. A. Hogue, J. Punske, D. Tat, J. Schertz, and A. Trueman, 154– 162. Tucson: University of Arizona.