

Intro: In addition to a regular P(ersonal)-pro(noun) like *she* in English, the German pronominal system offers an alternative D(emonstrative) form to refer to animate entities in a discourse. In this talk, we provide an analysis to derive the distribution of D-pros in attitude contexts, elaborating on findings by Hinterwimmer & Bosch (2018). **1. Anti-De Se:** While co-reference with an attitude holder (AH) in (1) is prohibited in a *de se*-context (2), some speakers allow co-reference in a *de re*-context (3). **2. Feature Matching:** Once the AH is instantiated via a D-pro as in (4), co-reference becomes possible independently of the attitude ascription. **Preview:** We propose that the anti-*de seness* results from the incompatibility of the semantics for *de se*, adopted from Percus & Sauerland (2003), and the negative attitude conveyed by D-pros when they are not used to disambiguate between referents (Sichel & Wiltschko 2018). We analyze this *N-effect* as expressive content by analogy with epithets (Potts 2005), which have been observed to also disallow *de se* (Patel-Grosz 2012) and can thus be captured similarly. The incompatibility is then due to the D-pro requiring evaluation in the actual world while the *de se*-semantics relies on identification of the AH with a counterpart, represented as a bound variable, in her belief worlds. For (4), we assume that the D-pro is an uninterpreted minimal pronoun that receives its features from the AH and thus does not lead to a blocking effect (Kratzer 2009).

- (1) *Donald_d* glaubt, dass **der_d** ein Genie ist. (*X* in (2), *✓* in (3))
D. believes that he.D a genius is
‘Donald_d thinks that **he**(DPro_d) is a genius.’
(2) **De Se:** Donald finds an old manuscript of his, which he is amazed by, and says “I’m a genius!”.
(3) **De Re:** As in (2) but D. doesn’t recognize that he’s the author and says “Whoever wrote this is a genius!”.
(4) *Der_x* glaubt, **der_x** kann das alles – dem_x zeige ich’s jetzt. (Patel-Grosz & Grosz 2017: ft. 24)
he.D believes he.D can that all he.D show I-it now
‘He(DPro_x) believes that **he**(DPro_x) can do all of that – I’ll show him(DPro_x).’

Attitude Semantics: We adopt the attitude semantics of Percus & Sauerland (2003) illustrated in (5) according to which *de se*-construal comes about by the embedded pronoun being bound, thus corresponding to the doxastic center, while the concept generator binds vacuously, leading to the truth-conditions in (6).

- (5) $\llbracket \text{think} \rrbracket^w = [\lambda \Phi : \lambda x : \text{There is an acquaintance based concept generator } G \text{ for } x \text{ in } w \text{ such that: } \forall \langle w', y \rangle \in \text{Dox-Alt}(x, w) . \Phi(G)(w')(y) = T]$
(6) ***de se*-truth conditions for (1) with a regular personal pronoun:**
 $[\lambda x : \text{There is an acquaintance based concept generator } G \text{ for } x \text{ in } w \text{ such that: } \forall \langle w', y \rangle \in \text{Dox-Alt}(x, w) . y \text{ is a genius in } w']$

Analogy with epithets: D-pros share the anti-*de seness* with epithets, which are analyzed by Patel-Grosz (2012, 2014) as null pronouns modified by a nominal appositive (7). Patel-Grosz assumes that epithets cannot be read *de se* because the nominal appositive cannot modify a *de se pro* (= *pro** in (8)). We argue that this property can be derived by taking into account that expressive content is always predicated of the utterance situation (=nondisplaceable) (Potts 2007), as illustrated in (9), where the negative attitude expressed by the epithet projects outside the quantifier. In light of the binding data in (10), which is problematic for an account in terms of multi-dimensionality à la Potts (2005) (see also Anderbois et al. 2015), we propose to implement nondisplaceability via a constant ‘@’ carried by the nominal appositive which indicates evaluation in the actual world, as sketched in (11), thus preserving the projection behavior of epithets.

- (7) $[pro \text{ [the idiot]}] \Rightarrow \text{equivalent to } [he, \text{ [the idiot]}]$ (Patel-Grosz 2014: (20))
(8) *John thinks that *pro** the idiot is smart. (Patel-Grosz 2014: (43))
(Intended reading: John thinks: “I am smart” and the speaker does not like John.)
(9) Whenever I wave at Donald_d, [**the idiot**]_d pretends he didn’t see me.
 \neq In all speaker-waving-at-Donald situations, the speaker has a negative attitude towards Donald.
(10) [Every artist]_a brought a woman who loves [**the idiot**]_a.
(11) $\llbracket \text{the idiot} \rrbracket^{g,w} \approx \llbracket [pro_i \text{ [the idiot @]}] \rrbracket^{g,w} \approx \text{the speaker has a negative attitude towards } g(i) \text{ in @}$

D-pros & the N-effect: D-pros have been observed to be able to convey an evaluative, standardly negative attitude - usually of the speaker (but see Harris & Potts 2009 on epithets) - towards the respective referent (Bosch et al. 2007). Sichel & Wiltschko (2018) argue for German and Hebrew that this N-effect arises (i) only for animate referents, (ii) whenever the D-pro could be replaced with a P-pro, and (iii) in the absence of discrimination between referents, as in (12). While Sichel & Wiltschko do not discuss intensional contexts, those speakers that the data in (1) is based on also report the N-effect there, independently of (i)-(iii) representing the correct characterization of its distribution. We propose to analyze the N-effect analogously to what the nominal appositive in (11) contributes and to implement it in the additional morphology that distinguishes D-pros from P-pros, namely the *d-* prefix, resulting in the compositional structure in (13).

(12) {Der_{jl} / Er_{jl}} wird jetzt alle überraschen. (*uttered as [Jogi Löw]_{jl} appears to announce his squad*
he.D / he.P will now all surprise

‘He(DPro_{jl}/PPro_{jl}) will surprise everyone.’ (*adopted from Sichel & Wiltschko 2018: (17)*)

(13) $[[D\text{-}pro]^{g,w} \approx [[[d- @] P\text{-}pro_i]]^{g,w} \approx$ the speaker has a negative attitude towards g(i) in @

Deriving Anti-De Se: We propose that the unavailability of a *de se*-construal for D-pros arises due to a metaphysical impossibility: while the negative attitude conveyed by the D-pro is anchored to the speaker in the actual world @, it is predicated of the doxastic center of the AH, which only exists in her belief worlds w’. The corresponding LF in (14) would thus result in the truth conditions in (15) (we use the ‘•’ to separate asserted and expressive content), which are ruled out since the counterpart y that the negative attitude is predicated of does not exist in the actual world @. In contrast, no such issue arises for the *de re*-LF in (16). Since the pronoun receives a referential interpretation that serves as the argument for the concept generator that is evaluated with respect to the world of the AH - rather than getting bound and being identified with the AH’s doxastic center across her belief worlds - the corresponding truth conditions in (17) are licit.

(14) *de se*-LF: [thinks [λG_3 [λw_2 [4 [[@ d-] er₄] [is a genius]]]]]

(15) *de se*-truth conditions: [λx : There is an acquaintance based concept generator G for x in w such that:

$\forall < w', y > \in \text{Dox-Alt}(x, w) . y$ is a genius in w’ • SPKR has a negative attitude towards y in @]

(16) *de re*-LF: [thinks [λG_3 [λw_2 [[[@ d-] er₄] G₃] [is a genius]]]]]

(17) *de re*-truth conditions: [λx : There is an acquaintance based concept generator G for x in w such that:

$\forall < w', y > \in \text{Dox-Alt}(x, w) . G(\text{Donald})(w')$ is a genius in w’ • SPKR has a negative attitude towards Donald in @]

Deriving Feature Matching: To account for (4), we assume that the lower D-pro is generated as a minimal pronoun ‘ \emptyset ’ and allows for *de se*-construal by virtue of remaining uninterpreted (Kratzer 2009). We assume that D-pros carry a [D]-feature, originating on the AH in (18-a), which first gets transmitted via AGREE to the matrix verb (18-b). Via multiple instances of PREDICATION, the [D]-feature gets passed on to the adjacent binders (18-c) and lastly ends up on \emptyset through BINDING (18-d). The fact that epithets are also able to license embedded D-pronouns (19), further supports the analogy drawn above and allows a similar treatment.

(18) a. [DPro_[D] [thinks [λG_3 [λw_2 [4 [\emptyset_4 [is smart]]]]]]] *Baseline*

b. [DPro_[D] [thinks_[D] [λG_3 [λw_2 [4 [\emptyset_4 [is smart]]]]]]] *Agree*

c. [DPro_[D] [thinks_[D] [$\lambda G_{3[D]}$ [$\lambda w_{2[D]}$ [4_[D] [\emptyset_4 [is smart]]]]]]] *(Multiple) Predication*

d. [DPro_[D] [thinks_[D] [$\lambda G_{3[D]}$ [$\lambda w_{2[D]}$ [4_[D] [$\emptyset_{4[D]}$ [is smart]]]]]]] *FT under Binding*

(19) [Dieser Idiot]_x glaubt, **der**_o kann mich öffentlich beleidigen und sich dann Geld von mir leihen.

this idiot believes he.D can me publicly insult and self then money from me borrow

‘[That idiot]_x believes that **he**(DPro_x) can insult me in public and then borrow money from me.’

Conclusions: We consider the account proposed here preferable over that by Hinterwimmer & Bosch (H&B) (2018) who appeal to a prominence ranking of perspective holders, with D-pros being prohibited from co-referring with the highest ranked one. However, H&B report that D-pros cannot co-refer with the AH in a case like (1) independently of the attitude ascription, contrary to the judgments presented above, which are based on 6 native speakers of German. We will discuss two possibilities for this divergence, one based on dialectal differences and one rooted in the prescriptive rules for the use of D-pros.