Microparameters of DP-Licensing and Case Discrimination

I. Introduction. A recent hypothesis denies the existence of NOM/ABS Case in narrow syntax (Konrnfilt & Preminger 2015; Levin 2015) and rather interprets 'morphological' NOM/ABS-forms as defaults, inserted for a *u*CASE-feature that did not receive a value. Following Preminger (2014), the lack of valuation does not induce crashing, contra the standard Case Filter. This leaves examples like **[Mary to win] would be surprising* (*ibid.*: 234) without an account, since Case-valuation no longer derives DP-licensing. In response, Kalin (2018) suggests that ϕ-agreement alone licenses DPs.

The present paper, however, proposes that the correlation between Case-valuation and ϕ-agreement must nevertheless be formally expressed. I propose a definition of AGREE that 'checks' whether a DP bears any unvalued features (*u*Fs) before it initiates ϕ-matching. In addition, I propose that a *u*F on a DP needs to be either (i) valued, (ii) or licensed by entering into an AGREE relation with a ϕ-probe. This will derive DP-licensing and also tie it to Case-valuation. Such a system is able to derive different micro-parameters of DP-licensing and also Case Discrimination/'Activity Condition' effects (Chomsky 2001; Bobaljik 2008) in agreement patterns. I consider data from Slovenian, Icelandic and Basque to illustrate the interaction of the proposed micro-parameters.

2. DP-Licensing, Case and Unvaluedness. Data from languages such as Slovenian (also Hindi, etc.) suggest that DP-licensing is not entirely regulated by ϕ-agreement, but is still intimately tied to to the [CASE]-feature specified on the DP in question. In Slovenian, overt NOM-DPs are systematically banned from position that are not agreed with, but this is not true of non-NOM-DPs:

(1) [(*Janez) jest pico] je fino.
John$_{\text{NOM}}$ eat-INF pizza$_{\text{ACC}}$ is nice
'To eat pizza is nice.'

(2) [Janezu bit všeč (*Marija)] je fino.
John$_{\text{DAT}}$ be-INF like Mary$_{\text{NOM}}$ is nice
'To be liked by John is nice.'

NOM-subjects cannot be overt in INF-(in)transitive clauses (1), while NOM-objects cannot be overt in INF-Quirky Clauses (2). Since DAT-DPs are not agreed with in any way in Slovenian (details in sect. 2.2), it means that they do not need to be licensed by ϕ-agreement, but NOM-DPs do. To capture this distinction, I propose that DPs only need to be licensed if they bear a *u*F. In this instance, [*u*CASE] needs to be licensed, by entering into an AGREE relation with a ϕ-probe.

2.1 Unvaluedness. I propose that 'unvaluedness' be defined as a *function* or *predicate* over feature values, which is notationally similar to Preminger's (2014) FIND(F). This means that $u\phi$ will be formally represented as $u[\phi]$. However, this formalization also allows the possibility of recursive embedding, i.e. it is possible to embed a u[F] within a $u[\ ]$, yielding $u[u$[F]]. This allows us to state probes such as T^0: $u[u$[CASE], $\phi]$ – such a probe searches for two things: a u[CASE]-feature and a ϕ-feature. This allows us to restrict probes to only DPs that carry a *u*F.

2.2 Ordered Probing and Locality. I will also assume that the probes within a X^0 are subject to *ordering*. While the assumption on unvaluedness above is new, the ordering of features internal to a X^0 has been proposed independently (Müller 2010; Georgi 2017) and is needed to capture several syntactic micro-parameters, including A′-movement, etc. The possibility of ordering features then implies that u[CASE] can be ordered to precede or follow the probing of ϕ, i.e. a language can either specify $u[u$[CASE] $\succ \phi]$ or $u[\phi \succ u$[CASE]]. Furthermore, I will assume that $u\phi$ is decomposed into $u\pi$ and $u\#$ (Béjar 2003; Rezac 2003), where their ordering is universally fixed ($u\pi \succ u\#$) s.t. $u\pi$ probes before $u\#$ (Preminger 2011; Coon & Keine 2018). These combined assumptions (all of which are independently needed, except for 2.1) lead to three possibilities:

(3) (a) T^0: $u[\ u$[CASE] $\succ \pi \succ \#\ ]$ ⟶ Slovenian
(b) T^0: $u[\ \pi \succ u$[CASE] $\succ \#\ ]$ ⟶ Icelandic
(c) T^0: $u[\ \pi \succ \# \succ u$[CASE] $]$ ⟶ Basque

The three micro-parameters encode three language-types, which will be discussed shortly. One last theoretical point is necessary before we examine the data. I assume the AGREE-LINK/AGREE-COPY system (Arregi & Nevins 2012; Bhatt & Walkow 2013, etc.), where AGREE-LINK forms *links* between probes and their goals in syntax, while AGREE-COPY copies features to probes at PF via these links. I propose that AGREE-LINK is subject to the following condition:

(4) *Relativized Probing Locality* ('REPL')
A probe β, s.t. $u[...\alpha \succ \beta...]$, must attempt to LINK with the domain that was LINKED by α.

REPL requires that already established Links are effectively 'recycled' for further probing. As such, it makes for a plausible constraint, grounded in very basic considerations of derivational economy.

Let us now consider an illustration of the proposed system for Slovenian, which has a standard ACC-alignment agreement system. Consider the representation of a typical transitive sentence:

(5) T^0: u[u[CASE] ≻ π ≻ #] . . . $DP_{u[CASE]}$ . . . DP_{ACC}

The probe on T^0 is only able to interact with the higher uCASE/NOM-bearing DP. After this first step, the ϕ-probes must also probe the subject, according to REPL. Now consider a Quirky Clause:

(6) Janezu smo/ste/so všeč mi/vi/oni.
John$_{DAT}$ be-1/2/3PL like we/you/they$_{NOM}$
'John likes us/you/them.'

In Quirky Clauses, T^0 agrees with the uCASE/NOM-object exclusively, regardless of its π-specification, meaning that there are no 'Person restrictions' at play that we usually find in different languages.

(7) T^0: u[u[CASE] ≻ π ≻ #] . . . DP_{DAT} . . . $DP_{u[CASE]}$

Here, the first 'argument' of the probe is unable to interact with the DAT-subject, must skip it and probe the object. The ϕ-probes can then only interact with the object, as demanded by REPL.

Notice that this system derives two things in Slovenian. It derives the Case Discriminating nature of ϕ-agreement (Bobaljik 2008), but also DP-licensing: because there is no probe on T^0_{INF} in (1)–(2), the uCASE-features are not probed and hence remain unlicensed.

3. Licensing in Icelandic. Icelandic DP-licensing is largely the same as in Slovenian, but with an important difference in the domain of Quirky Clauses. In this abstract, I concentrate on a single variety of the language, viz. Icelandic A (Sigurðsson & Holmberg 2008; Ussery 2017):

(8) Það líkuðu einum málfæðingi þessar hugmyndir.
there liked$_{PL}$ one linguist$_{DAT.SG}$ these ideas$_{NOM.PL}$ (Sigurðsson & Holmberg 2008)

In Icelandic, too, T^0 agrees with the object in Quirky Clauses, but only if the object is 3P. To derive this Person Restriction, I adopt the system proposed by Coon & Keine (2018), in which the Icelandic π-probe is 'articulated' as [π – PTC]: it seeks a π(erson) feature, but also a PARTICIPANT feature. This view also encodes the widely observed fact that DAT-DPs tend to be PP/KPs, where the P^0/K^0 hosts merely a 3P-feature. This forces the π-probe to search both DPs under this view:

(9) EXPL . . .T^0: u[[π – PTC] ≻ #]. . . $DP_{DAT:3P}$ . . . $DP_{u[CASE]:3P\ /\ *\{1,2P\}}$

The object is probed in the hope of satisfying [PTC]. However, if T^0 does agree with [PTC] (1/2P) on the object, two conflicting values are returned to the probe (3P vs. 1/2P), which causes a 'clash' at PF, and the derivation crashes. This is why only a 3P object (without a [PTC]) yields convergence.

I build on this approach and propose that Icelandic T^0 is specified as in (3b) and (10), with uCase 'sandwiched' between the two ϕ-probes, which correctly derives #-agreement:

(10) EXPL . . .T^0: u[[π – PTC] ≻ u[CASE] ≻ #]. . . $DP_{DAT:3P}$ . . . $DP_{u[CASE]}$

[π – PTC] agrees with both DPs, as in (9). REPL then requires uCASE to attempt agreement with DAT, but since this is not possible, it searches the object, which also complies with REPL. Due to this step, REPL then requires # to agree **only** with the object. If we now turn back to **licensing**, we observe that DAT-DPs require licensing in Icelandic, as they cannot be overt in INF-Quirky Clauses:

(11) [___$_{DAT}$ að vera lengi kalt] veldur lungnabólgu.
to be-INF long-time cold$_{SG.N}$ causes pneumonia (Thráinsson 2007: 417)

In this, Icelandic differs from Slovenian. I propose that DPs in Icelandic require π-licensing: any π-feature on a DP needs to enter into an AGREE-relation with a ϕ-probe to be licensed. Because $u\pi$ will always probe DAT in finite clauses (10), the DP will be licensed there, but not in INF-clauses.

4. No Case Discrimination. In addition to Icelandic, this paper will explore the patterns of licensing and Case Discrimination in Basque: certain dialects of Basque allow ϕ-agreement with DAT-DPs (Rezac 2008). Such dialects opt for the most 'permissive' micro-parameter' (3c), u[π ≻ # ≻ u[CASE]], where the probing for uCASE does **not** precondition ϕ-probing.

6. Conclusion. The system developed here then accounts for a range of variation in DP-licensing and Case Discriminative agreement without referring to the traditional version of the Case Filter, making it directly compatible with recent work on agreement (Preminger 2014; Levin 2015).