# Syntax Drives Morphological Impoverishment of Clitics 

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Background. A number of Catalan dialects show restrictions on the expression of third person ('3') and plural in combinations of 3 direct and indirect object (DO and IO) clitics: (i) 3-3-Effects: when both DO and IO are 3, only one clitic has 3 marking and (ii) Unique Plural Exponence (UPE): when both DO and IO are 3.plural, only one clitic has plural marking. It is always the righthand clitic that surfaces without person/number marking. This fact is constant across dialects with different DO-IO orders, alternations in clitic order within one dialect and historical changes in clitic order. Two questions arise: why is person/number marking absent and why on the righthand clitic. Templatic accounts of clitic order [5, i.a.] treat order as a lexical fact and similarities between dialects as historical accidents. The absence of person/number marking has been attributed to the shape of the template [5] or morphological impoverishment. Templatic accounts again offer no explanation of similarities across dialects. Morphological impoverishment accounts based on rules [5, i.a.] offer no explanation of why they apply, or why they apply to a certain clitic. Accounts of impoverishment via morphological filters [8] control the place of deletion by universal markedness hierarchies. The markedness hierarchies refer to features, not positions and are claimed to be universal, hence cannot derive the order generalization or the fact that different arguments are the target of deletion in different dialects. Overview of the Proposal. Instead, I propose to relate these restrictions to the Person Case Constraint (PCC), a restriction on local person DOs in the presence of IOs. The PCC has been treated as a competition of DO and IO for the features of $v$ [1]. Ungrammaticality arises from failure to license the person features of the syntactically lower argument. Competition of DO and IO for the person and number features of $v$ derives 3-3-Effects and UPE in the same way. $v$ has only one set of person/number features, and it checks them against the syntactically closest argument, leaving the lower one without licensed features. The absence of syntactic licensing of $3 /$ plural-features on the lower argument leads to their absence in the morphology, rather than ungrammaticality. The lower position of the clitic accounts for its rightward position. I present an account of 3-3-Effects and UPE in two dialects that differ in clitic order. These phenomena provide an argument for syntax because core syntactic notions derive a pattern that other modules of grammar don't handle well. From PCC to 3-3-Effects. Syntactic accounts of PCC use the structure [ $v$ [IO DO]] where $v$ is the person/number probe. To allow $v$ to probe past IO, the accounts rely on two asymmetries in the representation of person and number on DO and IO: (i) 3-IOs have syntactically active null-person features, but 3-DOs don't have any person features. (ii) Number is syntactically accessible on DO, but not IO. This allows IO to check person on $v$, and number to probe past IO to DO licensing DO's case. I adopt the syntactic structure [ $v$ [IO DO]], but drop (i) and (ii). I follow [3]'s proposals that 3 is represented by a feature [ $\pi$ ] and [2]'s proposal that only local person features lead to a crash when left unchecked. Both DO and IO have [ $\pi$ ]. In addition, I

| IO: | SG: | PL: |
| :--- | :---: | :---: |
| DO $\downarrow$ | IO-DO | IO-DO |
| SG: | a. [li-w] | c. $[$ liz-o $]$ |
| PL: | b. $[$ li-wz $]$ | d. [liz-o] |

Table 1: Combinations of 3-clitics in $A$.
adopt [10]'s proposal that failure to check $[\pi]$ leads to it not being spelled out. Similarly, I assume that number is syntactically accessible on both DO and IO. Dropping (i) and (ii), however, makes necessary an encoding of number where only plural is syntactically represented. Featureless DOs. Marina Baixa Catalan ('A') [9] shows 3-3-Effects and UPE as in Table 1. In isolation, IOs take the form /li(z)/, where /l/ marks 3, /i/ dative, and /z/ plural. DOs either take the form $/ l(z) /$ (abstracting away from gender marking), where $/ \mathrm{l} /$ and $/ \mathrm{z} /$ have the same function, or the so called neuter form $/ \mathrm{o} /$. I take the DO forms $[\mathrm{w}(\mathrm{z})] /[\mathrm{o}]$ in Table 1 to be a reanalysis of $/ \mathrm{o} /$ as an exponent of accusative case. Support for a reanalysis comes from the fact that neuter /o/ cannot be plural marked. [wz] then is the realization of $/ \mathrm{lz} /$ without person, but with an exponent for case. Table 1d. illustrates both 3-3-Effects and UPE: IO has both person and number marking, while DO surfaces
without either. The structure $[v[\pi, \#][\mathrm{IO}[\pi, \mathrm{PL}] \mathrm{DO}[\pi, \mathrm{PL}]]]$ derives this. The structurally higher IO checks $v$ 's $[\pi]$ - and [PL]-features, while those on DO remain unchecked and morphologically unexpressed. This derives both 3-3-Effects and UPE by the same formal mechanism. A privative representation of number is crucial for the explanation. Since IO's singular isn't syntactically represented, it does not intervene between $v$ and DO in Table 1 b . [li-wz]. This representation of number entails that the DOs in Table 1a., c. and d. have neither person nor number features checked, yet are syntactically licensed. I take this to be an instance of dissociation between case licensing and $\phi$-agreement in the $v$-domain, similar to what has been observed in subject agreement [4, e.g.]. I assume that there is a separate head, H , between $v$ and IO that checks case on DO [7, for similar architecture]. The checked case feature is spelled out as $/ \mathrm{o} /$. Featureless IOs. 3-3-Effects and UPE in Barceloní Catalan (' $B$ ') [5], Table 2, differ from $A$ in two respects: (i) The order of the clitics is

| IO: | SG: | PL: |
| :--- | :---: | :---: |
| DO $\downarrow$ | DO-IO | DO-IO |
| SG: | a. | $[1-\mathrm{i}]$ |
| PL: | c. | $[1-\mathrm{zi}]$ |
| PL. | [lz-i] | d. |

Table 2: Clitic combinations in $B$. reversed, DO precedes IO. (ii) The repair pattern is reversed, DO surfaces with features, IO without them as a bare dative case marker /i/ [10]. Once case assignment and $\phi$-agreement are dissociated, (i) and (ii) can be derived from a single difference: whether or not the case assigning head H triggers movement. When it doesn't, $A$ arises, when it does, $B$ arises. Case driven movement of this kind is proposed in [6] for Spanish to derive the DO-IO order outside the clitic domain, which $B$ shares, from underlying [IO DO]. Locating the difference between $A$ and $B$ in movement is supported by the historical emergence of $A$ from $B$ when clitic order flipped


Table 3: Derivation for Table 2.c. from DO-IO to IO-DO. The form the $/ 1-\mathrm{zi} /$, Table 2 c . is derived as in Table 3. H assigns case to DO moving it across IO (Step 1). IO does not intervene with this relation as it has inherent dative. $v$ first accesses DO's $[\pi]$ and then IO's [PL]-feature. UPE follows as in A: when DO has both [ $\pi$ ]- and [PL]-features, no features are left to be licensed on IO, which surfaces as a bare dative marker /i/. Discussion. This proposal derives the morphological deficiency of clitics from failure of syntactic feature checking, the order generalization follows from the c-command relations between DO and IO, and the assumption that lower position maps to rightward order. To fully derive the order generalization, however, later movement processes must not change the order of DO and IO. This appears to hold true. Catalan clitic clusters appear in a number of positions, presumably the result of movement, but their internal order remains the same.
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