Colin Brown, Henry Davis. NELS 54, 2023
A second-last position clitic in Sm'algyax (Coast Tsimshian)

Introduction: This paper has two main goals. The first is to argue that the interrogative clitic =*du* in Sm'algyax (Maritime Tsimshianic, ISO 639-3: tsi; VSO) is a genuine case of a penultimate ("second-last position") clitic, which is so rare typologically that its very existence has been disputed (Klavans 1985; Marantz 1988; Billings 2002; Cysouw 2005). The second is to show that a two-step model of clitic linearization at spell-out can account for its distribution and allomorphy: the first stage involves a morphological clitic placement operation read off a suitably impoverished syntactic representation, the second a phonological operation sensitive to local allomorphy.

The empirical challenge: In Sm'algyax, content questions are characterized by a clause-initial *wh*-expression together with the clitic =*du*, which appears in three distinct positions: following an argument DP (1); following the predicate (2); or following the initial *wh*-expression (3).

(1)   *Nde=ł   wil-t   gap-t=a   ts'u'uts=**du**=a laalt*
      where=IRR.CN COMP-3.I eat-3.II=CN bird**=Q**=CN   worm

      'Where did the bird eat the worm?'   *Argument placement*

(2)   *Go=ł   gan   dawł=**du**=t Dzon*
      what=IRR.CN REAS leave**=Q**=PN John

      'Why did John leave?'   *Predicate placement*

(3)   *Naa=**du** gu   in=t   yoyks=a nooł*
      who**=Q**   REL AX=3.I wash=CN dish

      'Who washed the dishes?'   *Wh-placement*

Analysis: We tackle the problem of =*du*-placement in three steps. First, we show that in terms of its syntax, =*du* is restricted to root-level content questions such as (1)–(3); it may not occur in embedded questions, nor in any non-interrogative *wh*-constructions such as exclamatives, free relative clauses or as a *wh*-indefinite pronoun. Based on this distribution and the fact that interrogative clitics in every other Tsimshianic language categorically appear in the final-position of a root clause (Rigsby 1986; Tarpent 1986, 1994), we suggest that =*du* is base generated in the clausal right periphery (heading a ForceP projection), and takes a CP complement (4).

(4)   [$_{\text{ForceP}}$ [$_{\text{CP}}$ WH . . .] =*du*]

Any attempt to derive the various positions of =*du* from its base position via syntactic movement is not viable: such movement would involve, e.g., phrasal movement out of, or lowering into syntactic islands.

Next, we show that in terms of its phonology, =*du* is straightforwardly enclitic: it never appears in initial position, it exhibits contextual allomorphy effects conditioned by a host to its left (resulting in surface forms of [du] or [ju]), and it can be followed by other uncontroversially enclitic elements such as the proper noun determiner =*t* in (2).

We conclude that the linear positions of =*du* can neither be derived syntactically nor prosodically. Instead, we propose an additional operation of purely morphological linearization: more specifically, we claim that *morphologically, =du is a proclitic*. This allows us to provide a unified account for all three positions illustrated in (1)–(3), as follows.

Starting with argument placement (as in (1)), we assume the underlying syntactic structure schematized in (5). (DP$_S$ = intransitive subject, DP$_A$ = transitive subject, DP$_O$ = object). As a morphological proclitic, =*du* must precede a constituent to its right; but as a phonological enclitic, it must find a host to its left. Assuming that it will choose the most local possible morphological host, it will therefore linearize inside the (O) DP immediately to its left, as in (6).

(5)   [[WH V DP$_A$ DP$_O$] **=du**]   (6)   [WH V DP$_A$**=du** DP$_O$]

This analysis straightforwardly extends to predicate placement (as in (2)). The base structure is schematized in (7). The structure in (7) is identical to (5) except that there is one postverbal DP rather than two. Once again, as a morphological proclitic, =*du* will linearize inside the DP to its immediate left, this time phonologically encliticizing to the verb, and deriving the correct surface form in (8).

(7)   [[WH V DP$_{S/A/O}$] **=du**]   (8)   [WH V**=du** DP$_{S/A/O}$]

It is less easy to see how *wh-placement* (as in (3)) instantiates a penultimate position for =*du*. However, there is independent evidence that in this case, the entire string following the *wh*-phrase counts as a single DP constituent for the purposes of clitic placement. Prior analyses of Tsimshianic Ā-constructions (Davis and Brown 2011; Davis and Nederveen 2021) establish that content questions can either be derived by conventional *wh*-movement, or may alternatively involve a cleft-like structure with a base-generated *wh*-expression in predicate position and a DP (headless relative clause) argument. In Sm'algyax, this distinction may be overtly marked: relative clauses (including headless relative clauses) are optionally introduced by the relative pronoun *gu*, which never appears in questions involving conventional *wh*-movement.

Crucially, while in content questions without *gu*, =*du* can either encliticize to the initial *wh*-phrase (as in (3)) or in clause internal positions (as in (1) and (2)), in content questions with *gu*, =*du* must appear following the *wh*-expression: clause-internal =*du* is strictly prohibited. This follows if (i) =*du* may only (morphologically) procliticize to a DP, and (ii) the internal structure of the DP following the *wh*-phrase is opaque to clitic linearization. In that case, =*du* must morphologically procliticize to the DP argument, and phonologically encliticize to the preceding *wh*-predicate, as in (3). The underlying structure and surface-position of =*du* in these cases are given in (9) and (10), respectively.

(9)   [[WH [$_{DP}$ (gu) ...]] **=du**]   (10)   [WH**=du** [$_{DP}$ (gu) ...]]

Theoretical implications: Our analysis depends on a model of clitic linearization that takes place in two steps. The first takes the syntax as input, and outputs a partially linearized structure; this structure is the input to the phonology at the second step, where local linearization (equivalent to Local Dislocation in Distributed Morphology: see Embick and Noyer 2001) and allomorph selection take place. It is the first stage of linearization which is innovative in the model assumed here, since it allows the crucial dissociation between morphological and phonological cliticization which drives our account of "second-last" position.

We take this first stage to have the following essential properties. First, it takes a partial syntactic representation as input. This is motivated by the fact that in Sm'algyax, clitic linearization is insensitive to the presence of many syntactic elements, including post-predicative PPs and pre-predicative functional heads: in fact, it only "sees" DPs. In order to model this partial sensitivity to the syntactic structure, we employ an expanded notion of *span*. On its original conception, a span was a sequence of heads missing phrasal projections (specifiers and adjuncts): see e.g. Svenonius (2016). However, we suggest that it can serve as a general model for the impoverishment of syntactic structure necessary to account for clitic placement, if we broaden the notion to include sequences of phrases as well as heads. In the case of =*du*, the relevant span will only contain DPs.

Second, clitic linearization cannot "see into" any DP or CP projection except the root CP, as evidenced by the fact that =*du* cannot attach inside the DP argument to a predicative *wh*-phrase (3), nor attach inside a subordinate CP. Here we appeal to the well-motivated notion of *phase*: DPs and subordinate CPs are opaque to linearization of =*du* because as phases they have already been spelled out at the point where clitic linearization takes place. We must assume, on the other hand, that =*du* is in the same phase as the matrix CP, in order to allow it to linearize in the matrix clause.

Selected references: BILLINGS, L. A. (2002) Phrasal clitics; CYSOUW, M. (2005) Morphology in the wrong place. A survey of preposed enclitics; DAVIS, H. & J. BROWN. (2011) On A'-dependencies in Gitksan; DAVIS, H. & S. NEDERVEEN. (2021) *Hli*, focus and relativization in Gitksan; KLAVANS, J. L. (1985) The independence of syntax and phonology in cliticization; MARANTZ, A. (1988) Clitics, morphological merger, and the mapping to phonological structure; RIGSBY, B. (1986) Gitxsan grammar; SVENONIUS, P (2016) Spans and words; TARPENT, M.-L. (1987) A Grammar of the Nisgha Language; TARPENT, M.-L. (1994) Between realis and irrealis, Tsimshianic negation and the status of the morpheme =*ł*.