Morphological OCP

The obligatory contour principle (OCP), a ban on sequences of identical elements, was originally proposed to account for restrictions on tone sequences (Goldsmith 1976). Later work (McCarthy 1986) pointed out further phonological domains where OCP was relevant. In this paper I will present evidence for OCP in the morphology. In Kĩsêdjê's (Jê, Brazil), there are contexts in which two adjacent clitics would be expected, but where only one ends up being pronounced. I will assume that in such contexts both clitics are present underlyingly and that the surface form is derived via OCP-triggered deletion.

The above-mentioned unattested sequence of clitics is a clausal coordinating conjunction followed by an overt nominative pronoun. Note that the Kĩsêdjê clausal coordinating conjunction relevantly differs from that of most well studied languages in having distinct forms to mark whether the subjects of its conjuncts are the same (1) or different (2). When a coordinating conjunction is underlyingly followed by a nominative pronoun, only one of them surfaces. In same-subject contexts only the coordinating conjunction surfaces (3) and in different-subject contexts only the nominative pronoun surfaces (4).

(1) hẽn [∅ pâj] [**=ne** ∅ khu-ku] 'He_i arrived and (then) he_i ate it'
    INFL [he_nom arrive] [=AND.SS he_nom it_acc-eat]

(2) hẽn [∅ pâj] [**=nhy** ∅ khu-ku] 'He_i arrived and (then) he_{*i} ate it'
    INFL [he_nom arrive] [=AND.DS he_nom it_acc-eat]

(3) hẽn [=wa pâj] [**=ne** =w̶a̶ khu-ku] 'I arrived and (then) I ate it'
    INFL [=I_nom arrive] [=AND.SS =I̶_̶n̶o̶m̶ it_acc-eat]

(4) hẽn [=wa pâj] [**=̶n̶h̶y̶** =ka khu-ku] 'I arrived and (then) you ate it.'
    INFL [=I_nom arrive] [=̶A̶N̶D̶.̶D̶S̶ =you_nom it_acc-eat]

It would seem like the phonology, faced with a disallowed sequence of clitics, is forced to pick one to delete, and decides to keep the "more important" element: in same-subject contexts, since the reference of the subject of the second sentence can already be determined based on the information supplied by the same-subject conjunction, pronouncing the subject pronoun of the second clause is redundant, and the phonology can safely delete it (3). If the phonology proceeded the same way in different-subject contexts, the hearer would have to infer the subject of the second clause based only on the information that it is different from the subject of the first clause. In this situation, it makes more sense recoverability-wise to keep the subject pronoun of the second clause and delete the different-subject conjunction (4).

I'm assuming that deletion is forced by a morphological OCP militating against sequences of clitics. Such a theory makes the prediction that if the subject of the second clause were not a clitic, deletion wouldn't occur. That prediction is borne out. Deletion doesn't occur when the coordinating conjunction is followed by an ergative pronoun (which is a free form) (5)/(6) or, an absolutive pronoun (which is a prefix onto the verb) (7)/(8). These examples might seem to suggest the alternative proposal whereby deletion is triggered by *nominative* pronouns. That theory is easy to disprove. The third person nominative pronoun, being phonetically empty, doesn't trigger deletion of a preceding different-subject conjunction, as does an overt clitic nominative pronouns —compare (4) with (9).

(5) [[i-pôt] [**=nhy** **kare** ∅-khuru]] mã 'I will arrive and (then) you will eat (it)'
    [[I_abs-arrive] [=AND.DS you_erg it_abs-eat]] FUT

(6) [[i-pôt] [**=ne** **ire** ∅-khuru]] mã 'I will arrive and (then) I will eat (it)'
    [[I_abs-arrive] [=AND.SS I_erg it_abs-eat]] FUT

(7) [[ire ∅-khuru] [**=ne** i-pôt]] mã 'I will eat and (then) I will arrive
    [[I_erg it_abs-eat] [=AND.SS I_abs-arrive]] FUT

(8) [[ire ∅-khuru] [**=nhy** a-pôt]] mã 'I will eat and (then) you will arrive'
    [[I_erg it_abs-eat] [=AND.DS you_abs-arrive]] FUT

(9) hẽn [=wa pâj] [**=nhy** ∅ khu-ku] 'I arrived and (then) he ate it'
    INFL [=I_nom arrive] [=AND.DS he_nom it_acc-eat]

My assumption that deletion is triggered by a ban on sequences of clitics makes the further prediction that if we managed to "smuggle" some material between the clitics, deletion wouldn't occur. That prediction is borne out in same-subject contexts (10). In different-subject contexts, though, adding intervening material give us a different pattern. What we get in different-subject contexts with intervening material is the apparent substitution of the different-subject conjunction by a copy of the nominative subject

following the intervening material —note that, based on the previous examples, we would expect the conjunction to appear in the first boldfaced position in (11).

(10) [Canarana mã=n=ka   pâj] [**=ne**   wâtâ kapẽrẽ=n=**ka**   s-arẽ?   ]
      [Canarana to=INFL=you$_{nom}$ arrive] [=AND.SS what language=INFL=you$_{nom}$ it$_{acc}$-say]
      'You went to Canarana and what language you spoke there?'

(11) [atha=n=ka   khu-py] [**=wa** nhũm=na=**wa**   tho   Ø-kande   mã?]
      [that=INFL=you$_{nom}$ it$_{acc}$-get] [=I$_{nom}$ who=INFL=I$_{nom}$ it.with him$_{acc}$-treat FUT]
      'You got that and who will I treat with it for you?'

There is an account for this unexpected behavior that has the further advantage of allowing the simplification of our original deletion rule. Instead of a deletion rule that has different elements being deleted based on whether the coordinating conjunction is a different- or same-subject conjunction, the new deletion rule will always blindly delete the second clitic of a sequence. And such account is: the pronoun-looking clitic we see following the verb of the first clause in (11) only *looks* like a copy of the subject of the second clause. In actuality, it is a different-subject conjunction agreeing with the subject of the following clause. That kind of agreement is not at all far-fetched. Kanite (Trans-New-Guinea) is a language that marks anticipatory agreement in conjunction (c.f. McCarthy, 1965).

With this new idea in place, let's re-gloss (11). That's done in (12) below, where the pronoun-looking clitic is appopriately glossed as a different-subject conjunction agreeing with 1st person singular.

(12) Different-subject with intervening material
      [atha=n=ka   khu-py] [**=wa**   nhũm=na=**wa**   tho   Ø-kande   mã?]
      [that=INFL=you$_{nom}$ it$_{acc}$-get] [=AND.DS.1S who=INFL=I$_{nom}$ it.with him$_{acc}$-treat FUT]
      'You got that and who will I treat with it for you?'

As mentioned, this account will allows us to simplify the deletion rule applied to sequences of clitics in the language. Whereas we initially proposed that deletion would apply to the second clitic (the nominative pronoun) in same-subject contexts and to the first clitic (the conjunction) in different-subject contexts, now both cases can be treated as deletion of the second clitic.

There is nothing new to be said about deletion in same-subject contexts, since that case was already being treated as deletion of the second clitic. In different-subject contexts, the phenomenon we initially treated as deletion of the first clitic (the different-subject coordinating conjunction) can now be treated as the deletion of the second clitic (the nominative pronoun), leaving behind a conjuction that misleadingly looks like the deleted material —(13) below rather than (4) above.

(13) In Different-subject contexts the pronoun rather than the conjunction deletes
      hẽn   [=wa pâj   ] [**=ka**   =~~ka~~   khu-ku]
      INFL [=I$_{nom}$ arrive] [=AND.DS.2S =~~you$_{\overline{nom}}$~~ it$_{acc}$-eat]
      'I arrived and (then) you ate it.'

We are left with the question of why there is no agreement between the different-subject conjunction and a following ergative (5) or absolutive (8) subject. Though there actually *is* evidence that these subjects are lower than nominative ones, I can't just argue that that they are "too far" to be agreed with, given the fact that there also doesn't seem to be any agreement with null 3rd person nominative subjects (9).

The distinction between same- and different-subject conjunctions seems to a be a recent development in Kĩsêdjê. The closely related language Mebengokre doesn't have anything like it (Andrés Salanova, p.c.). That would explain why the agreeing conjunction looks exactly like the pronoun it agrees with. The number of phonological indexes Kĩsêdjê has available to "plug" into a conjunction slot marked for agreement is limited, though. The consideration that a suitable index to "plug" into that position has to be a clitic would explain why the default form *nhy* has to used when agreeing with ergative, absolutive and null forms, obviating the question of whether there is underlying agreement or not.

References

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