

## Rime-elision and liaison in Francoprovençal: How syntax conditions phonology

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Francoprovençal exhibits some phonological phenomena familiar from French, but in a more restricted manner. For example, in the variety of Valdostan Francoprovençal spoken in Fénis (Aosta Valley, North-Western Italy, henceforth FFP), there is an interesting parallel between clitics and articles, as they are the only elements that undergo elision and liaison.

Unlike French, elision involves the rime of the clitic and not only its vowel (1), and clitic rime elision and liaison only apply with *have*. All clitic pronouns (subject (SCL), object (OCL) and partitive) undergo obligatory elision of their rime with *have* as in the (a) examples of (1)-(3), whereas this elision is optional or ungrammatical with lexical verbs (the (b) examples).

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|----------------|---------|--------------|----------|-------------|---------|----------------------------|
| (1) a. iʉ      | n/*nɛn  | a'viʝɛ       | 'tʁɛʝ    | b. *n/nɛn   | a'tsœtɛ | 'do                        |
|                | he/she  | PART.CL      | had.3SG  | three       | PART.CL | buy.3sg                    |
|                |         |              |          |             |         | two.M                      |
|                |         |              |          |             |         | 'He/she buys two of them.' |
| (2) a. dz/*dzɣ | a'viʝɔ  | 'tʁɛʝ        | 'tsat    | b. ??dz/dzɣ | a'kuktɔ |                            |
|                | SCL.1SG | had.1SG      | three    | cats        | SCL.1SG | listen.1SG                 |
|                |         |              |          |             |         | 'I listen/I am listening.' |
| (3) a. ty      | l/*lɔ   | 'o           | 'tø      | b. ty       | l/lɔ    | a'tsœtɛ                    |
|                | you.SG  | CL.ACC.3SG.M | have.2SG | you         | you.SG  | CL.ACC.3SG.M               |
|                |         |              |          |             |         | buy.2SG                    |
|                |         |              |          |             |         | 'You buy it.'              |

Similarly, plural OCLs undergo obligatory liaison with *have* (4a) (and, therefore, liaison consonant *h* (LC in the gloss) appears), while there is no possible liaison with a lexical verb, even when it is vowel initial as in (4b).

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|------------|------------|--------|---------|----------|------------|---------------|
| (4) a. lɛ- | -h-        | a'viʝɔ | 'mɛ     | b. lɛ    | -*h-       | a'tsœtɔ       |
|            | CL.ACC.3PL | LC     | had.1SG | STR.PR.1 | CL.ACC.3PL | LC            |
|            |            |        |         |          |            | buy.1SG       |
|            |            |        |         |          |            | 'I buy them.' |

(1)-(4) show that rime elision and liaison are not conditioned only by phonology (e.g.,  $V \rightarrow \emptyset / \_ \# V$ ) and cannot be metrically determined, since they only occur in front of *have*, and *a'viʝɛ* and *a'tsœtɛ* in (1) have the same metrical structure. I build on the observation that *have*, both the auxiliary and the possessive verb, is a functional verb, which has been documented to behave differently from lexical verbs by many authors (Chomsky 1993, Pollock 1989, Roberts 1998, a.o.).

Adopting Roberts' (2010) proposal that clitics are bundles of  $\phi$ -features, and that they incorporate to their probe as they are defective goals, my claim is that only *have*, and not lexical verbs, is a  $\phi$ -probe and enters into a direct Agree relation with the clitic. In the case of lexical verbs like *atsœ'te* (to buy), the  $\phi$ -probe is not the lexical verb but some functional head, e.g. T. The clitic incorporates to *have*, yielding the requisite structural proximity for the phonological rule to apply. I argue that it implies that the clitic and the verb must be in a local relation and be part of the same constituent.

When one clitic is on *have*, a second clitic does not incorporate. Rather, it attaches to an independent functional head, and consequently rime elision does not apply (6), just as it does not apply to clitics with lexical verbs (5).

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|--------------|---------|--------------|------------|---------|------------------------------------|
| (5) a. (dzɣ) | lɔ      | a'kuktɔ      | d. (nɔ)    | lɔ      | akuk'tɛn                           |
|              | SCL.1SG | CL.ACC.3SG.M | listen.1SG | SCL.1PL | CL.ACC.3SG.M                       |
|              |         |              |            |         | listen.1PL                         |
|              |         |              |            |         | 'I listen/am listening to him/it.' |
| b. *(ty)     | lɔ      | a'kuktɛ      | e. (vɔ)    | lɔ      | akuk'todɛ                          |
|              | SCL.2SG | CL.ACC.3SG.M | listen.SG  | SCL.2PL | CL.ACC.3SG.M                       |
|              |         |              |            |         | listen.2PL                         |
| c. (iʉ)      | lɔ      | a'kuktɛ      | f. (iʉ)    | lɔ      | a'kuktɔŋ                           |
|              | SCL.3   | CL.ACC.3SG.M | listen.SG  | SCL.3   | CL.ACC.3SG.M                       |
|              |         |              |            |         | listen.3PL                         |

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| (6) a. (dzy) 1 'e<br>SCL.1SG CL.ACC.3SG.M have.1SG<br>'I have it.' | d. (nə) 1 'en<br>SCL.1PL CL.ACC.3SG.M have.1PL |
| b. *(ty) 1 'o<br>SCL.2SG CL.ACC.3SG.M have.2SG                     | e. (və) 1 'ej<br>SCL.2PL CL.ACC.3SG.M have.2PL |
| c. (iu) 1 'a(t)<br>SCL.3 CL.ACC.3SG.M have.3SG                     | f. (iu) 1 'ã<br>SCL.3 CL.ACC.3SG.M have.3PL    |

My analysis is significantly reinforced by the patterns of elision and liaison between articles (definite articles, numerals and the plural indefinite article) and the following noun (7) or adjective (8). The final vowel of the article is elided with the singular definite article and a liaison consonant appears with the plural article, when the following noun or adjective begins with a vowel.

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|---|---|
| (7) a. l/*la e'kula<br>DEF.ART.F.SG school.F.SG<br>'the school'         | b. lɛ -h- e'kule<br>DEF.ART.PL LC school.PL<br>'the schools'          |
| (8) a. l/*lə 'ətɛ 'əm:ɔ<br>DEF.ART.M.SG other.SG man<br>'the other man' | b. lɛ -h- 'ətɛ 'əm:ɔ<br>DEF.ART.PL LC other.PL man<br>'the other men' |

Phonology is again not sufficient to account for this pattern, because elision (8) and liaison (9) can only occur between the article and the following noun or adjective, and not between the adjective and the noun (9a) or between the noun and the adjective (9b), while French (10) does not make this distinction.

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| (9) a. lɛ -h- ətɛ -*h- ɛtsə'li<br>DEF.ART.PL LC other LC stairs<br>'the other stairs'        | b. lɛ -h- əm:ɔ -*h- a'vuɫɔ<br>DEF.ART.PL LC man LC blind<br>'the blind men'      |
| (10) a. lɛ -s- autre -s- escaliers<br>DEF.ART.PL LC other LC stairs.PL<br>'the other stairs' | b. lɛ -s- homme -s- aveugles<br>DEF.ART.PL LC men LC blind.PL<br>'the blind men' |

I propose that rime elision and the liaison must satisfy two requirements. First, the probe and the goal must share  $\varphi$ -features. Second, the  $\varphi$ -probe and its  $\varphi$ -goal must appear in the same constituent and be in a local c-command relation.

For clitics, the right configuration is obtained by incorporation of the clitic to *have*, but incorporation is not necessary and is only due to the fact that the clitic is a defective goal. In contrast, the clitic shares no features with the lexical verb, which is not a  $\varphi$ -probe, and therefore rime elision and liaison cannot apply. Since the  $\varphi$ -probe is a silent head, it cannot induce or participate in a phonological operation.

As the noun and the adjective are not defective goals in relation to the article, they do not incorporate with it. However, they are in the right configuration, as the  $\varphi$ -probe is the article and it shares  $\varphi$ -features with its goal. This means that there is no direct Agree relation in FFP between the adjective and the noun.

The conclusion that we can draw is that the phonological phenomena under investigation rely on the relation between a  $\varphi$ -probe (i.e., *have* in the verbal system, and the article in the nominal system) and a  $\varphi$ -goal, as well as on structural proximity, which is established through incorporation for clitics and through local c-command for the article. I suggest that this has to do with the theory of phases. DP is considered to be a phase so that the agreement relations are computed, internally to a phase. As *have* is a functional verb, it appears higher than the predicative domain, and there is no vP, thus no phase. Therefore, the first phase is T, and Agree between the clitic and *have* occurs inside of the phase. Since lexical verbs are not  $\varphi$ -probes, agreement is not computed Phase-internally, and therefore the phonological rules in question fail to apply.

## References:

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