## Different Consonant Epentheses of Albanian: A Case Study of Imperatives

(Casali, 2011), discussing the typology of hiatus resolution, implies that one language would choose a single consonant for its epenthetic processes. In contrast, in this talk we will show that Albanian employs three types of epenthetic consonants by comparing different theoretical analyses and demonstrating that an analysis with epenthesis is most reasonable. For ease of presentation, we concentrate on the data that come from the imperatives, but we will also provide examples that depict the occurrence of these phenomena among other verbal subsystems, as well as within nominal system.
J-epenthesis. 1. Qëndro-j-u fëmijëve afër. 'Stay close to the children.' stay.IMP.2SG-?-(them).CT child.DAT.3PL.DEF close.ADV
In this example, if the postposed clitic $u$ 'them.DAT' would be simply attached to the stem qëndro-, a vowel hiatus ' $o-u$ ' would result. Instead, we see the $/ \mathrm{j}$ / emerging between two vowels resolving the would-be hiatus. No alternative analysis to epenthesis is viable. One such alternative analysis would be to postulate that $/ \mathrm{j} /$ is part of the stem, and that the object doubling clitic $u$ is simply added to the postulated stem qëndroj. But, if this were the case, this analysis needs to explain why $/ \mathrm{j} /$ is lost in cases like: Qëndro! 'stay.IMP.2SG', because in Albanian there are word forms that end in [Vj], so it's not like word final $[\mathrm{j}]$ or $[\mathrm{Vj}]$ is prohibited. Another rational analysis would be that $/ \mathrm{j} /$ is part of the suffix, and that the supposed clitic $j u$ is attached to the stem qëndro. In a such case, then, we would expect to see this object clitic to also appear with stems that end in consonants like: e.g., ndreq, but this would give us the ungrammatical form: *ndreqju. 'Fix it (for them)'. Such [j] insertion is not restricted to only verbal forms as in (1). It is also seen in the nominal system when the stem final vowel [a], [e] or [o] precedes the Fem. definite marker $/-\mathrm{a} /: / \mathrm{kala} / \mathrm{c}$ 'castle' $+/-\mathrm{a} /$ ' $\mathrm{def}^{\prime}=>[$ kalaja] 'the castle'. See also Table 1 below for the enumeration of V1-V2 pairs where j-epenthesis occurs.

H-epenthesis. 2. Përqendro-h-u te fëmijët. 'Focus on the children.'
focus.IMP.2SG-?-PSV.PT on.PREP child.NOM.3PL.DEF
Now compare the verbs in examples (1) and (2). In both cases, V1 and V2 appear the same, as a morpheme $u$ is attached to verbs ending in [o]; but in (1) epenthetic $/ \mathrm{j} /$, and in (2), epenthetic $/ \mathrm{h} /$ appear. As the verb in (1) is active and in (2), non-active, one possible explanation of the consonant choice is that $/ \mathrm{h} / \mathrm{insertion}$ is restricted to non-active verbs because, as opposed to the epenthetic /j/ which is more widely spread, h-epenthesis only occurs with non-active verb forms. Specifically, in addition to passive imperatives as in (2) this $h$ appears throughout the forms in the present indicative non-active and imperfective indicative non-active.

There are two viable ways to distinguish what conditions the choice of /h/ instead of the epenthetic /j/. One would be to say that it may be morphologically conditioned, restricted to forms with [+non-active]. The other viable explanation is that it may be phonologically conditioned (see figures 1 and 2). If we look at the phonetic data, we see that the last vowel of the stem is longer in non-active forms than in the corresponding active forms. So, whatever the reason for this lengthening is, it might be responsible for the choice of $/ \mathrm{h} /$.
Consider now the obvious alternative to our analysis postulating epenthesis. This alternative would regard the relevant non-active endings as having two allomorphs, a V-initial and an hinitial one, selected based on the phonological context, with the V-initial allomorph after consonants i.e., ndalem 'stop.PRS 1SG', and the h-initial one after vowels i.e., përqendrohem 'focus.PRS.1SG. Based on this analysis we would expect to see the h-initial allomorph appearing after each stem final vowel to which it attaches. But for some speakers of Standard Albanian the passivizing suffix does not feature an initial h- unless the stem final vowel and
the suffix vowel are both [+mid] or both [+high] (i.e., [largohesha], *[largoesha]; [ngrihu], *[ngriu]), while in other contexts, the suffix featuring an h-is optional (e.g., [largou] [largohu]). Both the two-allomorphs analysis and the epenthesis analysis can predict the observed forms, but because of its restrictiveness we argue that epenthesis analysis is to be preferred. First, [h] appears only after a long V1 and second, it is obligatory only when V1 and V2 are both high or both mid-vowels.

| 2-epenthesis 3. Mos | i | $\mathrm{ik} . \quad$ 'Do not run away from her/him.' |
| :---: | :--- | :--- |
| $[$ mos | i | Pik $]$ |
| NEG. PT | (her/him).CT.DAT | ?run away.IMP.2SG |

The glottal stop / $/$ / is not represented orthographically in Albanian but we argue that in the spoken language, this consonantal sound appears in contexts where two separate identical vowels occur (fig. 3). Similarly to j - and h -epenthesis the glottal stop appears not only with Imperatives but also when the vowel initial stem of the adjective or of the pronoun happens to be the same as the clitic they follow, e.g., le Perrët / 'dark'; /i Pimi/ 'mine'. In contrast, in cases when the preposed clitic or the passivizing morpheme is different from the initial stem vowel, different phonological processes apply, such as glide formation, diphthongization, etc.

Conclusion. Albanian features three different epenthetic consonants depending on the environment. We have elaborated consonant epenthesis inserted by phonological rules in two morphosyntactic contexts, the emergence of $/ \mathrm{j} /$ and $/ \mathrm{h} /$ at stem-clitic boundary and that of the $/ R /$, where the clitic is preposed and is identical with the initial stem vowel that it precedes. These findings provide novel data for the theoretical phonology, namely, indicating that this language chooses more than one consonant epenthesis for hiatus-breaking purposes.

## Tables and Figures

| $\mathrm{V}_{1}$ | $\mathrm{V}_{2}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | a | e | ë | i | o | u | y |
|  | a | aja | aje |  | aji |  |  |  |
|  | e | eja | eje' ehe, e Pe |  |  |  |  |  |
|  | ë |  |  |  |  |  |  |  |
|  | i |  | ihe |  | i ?i |  | iju ihu, |  |
|  | 0 | oja | ohe |  | oji |  | oju, ohu |  |
|  | u |  |  |  |  |  | u Pu |  |
|  | y |  | yhe |  |  |  | yhu |  |

Table 1. Vowel combinations where consonant epentheses appear. Empty cells represent the contexts where no consonant is inserted; one element cells show the contexts when one of the epentheses occurs; two element cells show the contexts when two different epentheses appear (the choice of j or h depends on the length of V1); three element cell shows where $\mathrm{j}, \mathrm{h}$ and P appear.


Fig.1. O before $j$.
In (1) o lasts approximately 50 ms .


Fig.2. $O$ before $h$. In (2) o lasts approximately 140 ms .

Fig.3. Mos $i$ Pik. This figure shows the presence of the glottal stop when the initial stem vowel is identical with the clitic it follows.

## References

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