Albanian presents in *-oj* and *-uaj*

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1 Introduction

One of the more prominent present classes in modern Albanian is that of the nasal present in *-oj*, which goes back to Old Albanian /-oń/. This conjugational type must have been productive early, as it is the regular class into which Romance verbs are borrowed, e.g. *pëshkoj* 'to fish' ← Lat. *pescāre*.[2] As is described by Genesin [2005b], the most probable origin of this conjugation is from a combination of a causative or factitive nasal suffix and the factitive or denominative suffix *$-eh_2-$*, so that we may reconstruct pseudo-PIE[3] *$-eh_2-n-ie/o-$*. This would then develop into Proto-Albanian[4] *$-ånje/a-$*, where *å* denotes the product of late PIE *$\bar{a}$* and *$\bar{e}$* that developed into Albanian *o*.

There is a sound law stating that before a resonant stressed Proto-Albanian *å* in a final syllable gets lenghtened and subsequently diphtongised to OAlb. *uo*, Geg *ue*, Tosk *ua*. A good example for this is *duaj* 'sheaf', cognate to Skt. *dhānyā́* 'grain', *dhānyá* 'grain' and Lith. *dúona* 'bread', for which we may reconstruct PIE *$dheh_2n-ió-$*. This diphthongisation did not take place in the verbs in *-oj*, where one would have expected *-uaj*. Genesin [2005b] writes that the absence of this sound law in this conjugational class does not need to be explained, because the ending does not reflect an archaic situation, but is the result of restructuring in the course of the history of the language. This argument is methodologically unsound: the conjugational class must have come to being somewhere in the history of Albanian, and from that moment on it will undergo all sound laws for which the phonological requirements are satisfied. Since this conjugational class predates the earliest period of borrowing from Romance, and the sound law must have occured after the loss of word-final unstressed syllables that also took place in Romance loans, an explanation must be given as to why this lengthening did not take place in verbs in *-oj*.

Although there is a productive class of verbs in *-oj*, there is also set of about fifteen verbs ending in *-uaj*, such as *shkruaj* 'to write'. There are now two problems to be solved: we need to explain why the productive class of verbs show the ending *-oj* instead of **-uaj*, and we need to find an etymology for the verbs in *-uaj* that explains the occurence of a diphthong

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[2] In this article the symbol ← will be used to denote loanwords.

[3] The term 'pseudo-PIE' is used here because it is not clear whether this concatenation of suffixes was used as a present formation in PIE already. For a possible cognate in Vedic verbs in *-anyá-* and Hittite verbs in *-annie̯-*, see [Oettinger, 1992].

[4] Because the exact point of divergence of the different Albanian dialects is difficult to establish, the language stage in the prehistory of Albanian that is used as Proto-Albanian in this article is the stage of which the reconstruction sheds the most light on the prehistory of the verbs ending in *-uaj* and *-yej*. In concrete terms I have chosen the stage directly after the development of the inherited difference in vowel quantity (*a* vs *ā*) to a difference in quality (*a* vs *å*, which develops into the opposition of *a* vs *o*). Since some Latin loanwords share this development, e.g. *mollë* 'apple' ← Lat. *mālum* 'id.', while others do not, e.g. *shtratë* 'bed' ← *strātus* 'spread', my Proto-Albanian would be dated around the Roman era. It would then be placed slightly after Early Proto-Albanian as reconstructed by Orel [2000], and around Late Proto-Albanian as reconstructed by Schumacher and Matzinger [2013].

in these verbs.

There are two more conjugational classes that are relevant for this discussion. First, there is a class of verbs ending in *-ej*, which goes back to pseudo-PIE suffix concatenation **-i-eh₂-n-ie/o-*. In these verbs one would expect a diphthongisation **e > **ye*; furthermore, there is a limited class of verbs ending in *-yej*. The relation between the classes ending in *-ej* and *-yej* is then exactly parallel to the relation between the classes ending in *-oj* and *-uaj*.

2   Verbs in *-oj* and *-ej*

In this section I aim to explain the absence of the lengthening in the verbs terminating in *-oj* and *-ej* . A possible explanation is given in [Genesin, 2005b, pp. 179], namely that the ending in the 2/3sg., that would reflect quasi-PIE **-eh₂-n-i-s/t* , would not have a syllable-final nasal, because the final syllable would not have been completely lost; hence no lengthening would have taken place. This, however, seems improbable, as the development PAlb. **dånja > duaj* 'sheaf' shows that the lengthening of stressed vowels before resonants took place after the loss of word-final vowels. Although it is possible that the loss of final unstressed vowel was a process that happened in multiple stages, so that there might be a stage at which the final vowel **a* was lost whereas the final **i* was retained, there is a priori no reason to suppose such a staged development. It is preferable to give an explanation which only relies on the Proto-Albanian reconstruction of the present paradigm. Such a reconstruction is given by Orel [2000] for the consonant stems as follows:

*-a	**-ame*
*-e(s)	**-es ny/jy*
*-et	**-anti*

We can reconstruct approximately the same endings for verbs showing the present suffix *-nj- > -j-*. The 2/3sg. in *-on*, however, shows that the PIE **i* in *-eh2-n-ie/o-* cannot have been consonantal, for we then would have expected a palatal rather than a dental nasal. One way to solve this is to assume a development **-åni(s) < *-ānįe(s).* If we assume such a development we can reconstruct the following:

-oj	<	**-ånja*	-ojmë	<	**-ånjame*
-on	<	**-åni(s)*	-oni	<	**-ånis ny/jy*
-on	<	**-åni(t)*	-onjë	<	**-ånjanti*

After the reduction of final syllables, but before the lengthening of stressed **å, *ö* to **ẫ, *ö̃* (which develop into *ua, ye*) before resonants, this would yield the following paradigm:

*-åń	**-åńëmë*
*-ån	**-åni< *-ån ni*
*-ån	**-åńënë*

Since the nasal is syllable-final in the singular, and not in the plural, we expect lengthening in the singular but not in the plural, so that an opposition *-ẳń vs *- åńëmë come into being. This opposition created asymmetry in the sys-tem of present conjugations: the nasal presents in vowels other than * å or *ŏ did not have any difference in suffix vowel length between singular and plural. It then seems probable that Albanian generalised one of the two vowel lengths in order to maintain symmetry in the system.

The question that now remains is why the short vowel from the plural is generalised instead of the long vowel from the singular. The reason is that the short vowel *å was also present in other parts of the verbal paradigm that lack the present suffix *-nj-, such as the impt. 2sg. -o, aor. sg. -ova[5]. This caused the short vowel to be considered more characteristic of the verbal paradigm, so that it re-placed the long vowel of the singular rather than the other way around. Similarly, the verbal conjugation with 1sg -ej, 1pl -ejmë goes back to an earlier opposition *-ŏń vs *-ŏńëmë. Here too the short vowel was more prominent in the verbal con-jugation and replaced the long vowel in the singular.

Two problems with the 2/3sg. ending -on remain to be discussed. The first is the absence of the shift of intervocalic *n to r characteristic of Tosk. This also took place in loans, such as kërp 'hemp' Lat. cannabis (Gh. kanp), so it must have happened before the reduction of final syllables; hence would expect the 2/3sg. of the verbs in -oj to be **-or < *-åri(s)/t < *-åni(s)/t in Tosk. The actual forms can, however, be explained by a simple analogy. Apart from the verbs in *-n-j-, Proto-Albanian had various j-presents, like mas 'to measure' < *matja. At this stage, the intervocalic *n in the verbs in *-n-j- was restored to keep its structure as a j-present, of which an example is given in the following table.

*matja	*-ånja
*mati(s)	*-åni(s) ≪[6] *-åri(s) < *-åni(s)
*matit	*-ånit ≪ *-årit < *-ånit

This analogy has taken place in all nasal presents, such as bëj 'to make', 2/3sg. bën (Gh. bâj, ban) < PAlb. *banj-.

It still needs to be explained why there is a nasal consonant in the ending -on, as we expect final n to drop after a stressed vowel, as in the word To. gjë, Gh. gjâ 'thing', which reflects the PIE participle *h₁s-ont-s > PAlb. *sants. Another example is the Latin loan latīnus 'Latin', borrowed as PAlb. *latina, which is reflected as To. lëti, Gh. lëtî 'Italian, Latin, Catholic'. Based on these examples we would expect an ending **-o rather than -on. Again this can be explained by analogy. The class of verbs ending in unstressed -ënj, discussed in more detail in the next section, originally had an unstressed vowel in the ending -ën. Here the nasal was retained, as it was only lossed after stressed vowels. From here this nasal was restored in the 2/3sg. ending of the other nasal verbs, probably because these would otherwise stand out in the Pre-Old Albanian paradigm for being the only endings without any nasal consonant.

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[5] We find ua in the aorist plural, for example aor. 1pl. -uam, but this seems to go back to *-åw-m, probably via an intermediate stage *-åm.

[6] I will use the symbol ≪ to denote analogical restoration.

I conclude this section by giving a complete overview of the developments of the verbs in -*oj* and -*ej* from pseudo-PIE to modern Albanian. To keep it all on one page I only give the new, restored form for all analogical developments, and not the old form that was removed from the system by analogy.

Alb.						PAlb.		Pseudo-PIE
-*oj*			«	*-åń	<	*-ånja	<	*-eh$_2$-n-io-m
-*on*			«	*-ån	<	*-åni(s)	«	*-eh$_2$-n-ie-s
-*on*			«	*-ån	<	*-ånit	«	*-eh$_2$-n-ie-t
-*ojmë*	<	*-ońëmë	<	*-åńëmë	<	*-ånjame	<	*-eh$_2$-n-io-me
-*oni*			<	*-åni	<	*-ånis ny	«	*-eh$_2$-n-i(e)-te
-*onjë*	<	*-ońënë	<	*-åńënë	<	*-ånjanti	<	*-eh$_2$-n-io-nti
-*ej*			«	*-öń	<	*-jånja	<	*-i-eh$_2$-n-io-m
-*en*			«	*-ön	<	*-jåni(s)	«	*-i-eh$_2$-n-ie-s
-*en*			«	*-ön	<	*-jånit	«	*-i-eh$_2$-n-ie-t
-*ejmë*	<	*-eńëmë	<	*-öńëmë	<	*-jånjame	<	*-i-eh$_2$-n-io-me
-*eni*			<	*-öni	<	*-jåni(s) ny	«	*-i-eh$_2$-n-i(e)-te
-*ejnë*	<	*-eńënë	<	*-öńënë	<	*-jånjanti	<	*-i-eh$_2$-n-io-nti

3   Verbs in -*uaj* and -*yej*

In this section the origin of the verbs in -*uaj* and -*yej* will be discussed. It is important to note that the diphthongs in these verbs cannot be the result of the lengthening of the vowels *å* and *ö* in front of word-final resonants, because the results of this lengthening were again removed by analogy, as was seen in the preceding section. The rise of these diphthongs then requires a different explanation. Let us first look at all verbs that need to be taken into consideration. In Albanian the following verbs ending in -*uaj* and -*yej* exist:

bluaj 'to grind'
druaj 'to dread'
gatuaj 'to prepare'
gjuaj 'to hunt'
kruaj 'to scratch'
luaj 'to play'
paguaj 'to pay'
pruaj 'to bring'
quaj 'to call'
ruaj 'to guard'
ruaj 'to plunder'
rruaj 'to shave'
shkruaj 'to write'
shuaj 'to extinguish'
truaj 'to dedicate'
vuaj 'to suffer'

fyej 'to offend'
gërryej 'to scratch'
kryej 'to reach'
lyej 'to smear'
ngjyej 'to paint'
ryej 'to suffer'
rrëfej, Buz. *rëfyenj* 'to tell'
shqyej 'to break'
thyej 'to break'
vyej 'to be worth'
yej 'to wake'
zhyej 'to smear'

This list is rather limited, and all words will be discussed. Let us start with one of the words with the clearest etymologies, namely shkruaj 'to write', which is a loan from Latin *scrībere* 'id.' [Meyer, 1891]. This would yield Proto-Albanian **skriwånj-*, as Romance loans were incorporated in the Proto-Albanian conjugation in **-ånj-* [Genesin, 2005b]. Here I reconstruct an approximant **w* rather than a stop **b* as the reflex of Latin *b*, since Demiraj [2001] has shown that inherited (possibly aspirated) voiced stops are not lost intervocalically whereas borrowed Latin *b*, *d*, but not *g*, are lost in this position. Therefore it is best to assume that shkruaj was actually borrowed from a variety of Romance in which the intervocalic stop was already lenited into a fricative **β*, which we may represent in Proto-Albanian with **w*.

Given the form **skriwånj-* we can now explain the diphthong in *shkruaj* as a contraction **iwå > * å̄ > ua*. More explicitly, we would have a development **skriwånj- > *skrëåń- > *skrå̄ń- > shkruaj*. Now we need to know what the chrono-logical relation is between the development **ëå,*åë >*å̄* and the analogical restoration of **-åń* in the verbs in *-oj*. There are two possibilities:

1. The contraction **ëå,*åë >*å̄* took place before the analogical restoration. In this case we must assume that the analogy did not take place in verbs in *-uaj*, because they had a long vowel **å̄* in the entire present paradigm, so there was no basis for the analogical restoration.

2. The contraction took place after the analogical restoration. In this case the contraction takes place in all forms of the present, which explains the presence of *ua* in the entire paradigm.

I strongly favour the second explanation. In the first scenario there would have been a class of nasal presents having the vowel **å̄* in all forms in the present paradigm. If that were the case, there would be little reason why the restructuring of verbs with an alternation between **-å̄ń* and **-åń* would result in a short vowel, since this required the creation of a new type of present, as opposed to generalising the long vowel. Taking the first explanation would then undermine our explanation for the origin of the verbs in *-oj*, whereas the second explanation poses no such problems, so it is the most straightforward to just assume this one. Based upon these developments we can posit the following relative chronology of sound laws:

1. Replacement of quantity opposition by quality opposition in vowels: 'PIE' **ē,*ā> PAlb. **å, 'PIE' **ō > PAlb. **ö*.
2. Reduction (and loss) of final syllables.
3. Lengthening of stressed **å,*ö* before syllable final resonants.
4. Analogical restoration of the short vowels **å* and **ö* in nasal presents.
5. Contraction of **ëå* and **åë* to **å̄*, and of **ëö* and **öë* to **ȫ*.
6. Diphthongisation of **å̄* to *ua* and **ȫ* to *ye*; shifts **å > o* and **ö > e*.

3.1   Verbs in *-uaj*

What we now have found is that the diphthongs *ua* and *ye* can be the result of a contraction caused by the loss of intervocalic consonants. As noted before, Latin *b* and *d* are

lost intervocalically. The Proto-Albanian approximant *w (< PIE *u̯) is also lost in this position [Orel, 2000, p. 18], as is *j (< PIE *i̯) after front vowels Kortlandt [1996]. It is also possible that PIE *s is lost intervocalically, but this is uncertain: [Orel, 2000, pp. 61-62] gives a number of examples that point to a development to h/Ø normally, with a RUKI variant sh. The number of examples, however, is rather limited, and counterexamples to this development exist as well [Demiraj, 1990]. Using these contractions we can now discuss the etymologies of the various verbs in -uaj; the verbs in -yej will be discussed later, along with possible origins for the palatalisation in these verbs.

3.1.1 Latin loans

Except for *shkruaj* there are several more latin loans which end up as verbs in -uaj in modern Albanian. The following etymologies are given by Orel [1998]:

Alb.		PAlb.		Lat.
shkruaj 'to write'	< *skrëåń	< *skriwånj-	←	scrībere 'id.'
vuaj 'to suffer'	< *wëåń	< *wiwånj-	←	vīvere 'to write'
truaj 'to dedicate'	< *trëåń	< *tradånj-	←	tradere 'to hand over'
rruaj 'to shave'	< *rrëåń	< *rradånj-	←	rādere 'id.'

Some comments need to be made about this table. First of all, the verbs *shkruaj* and *vuaj* show that a pretonic vowel *i must have been reduced to *ë before the contraction, because we would otherwise expect an *i*-mutated result like *škrȫń > **shkryej*. There must also have been some kind of semantical development in vuaj, probably from 'experiencing [pain/disease]' to 'suffering [pain/disease]'. Finally we must add that Orel rejects the etymology as a Latin loan, due to Meyer [1891], and prefers to reconstruct Proto-Albanian *wråg-nj- for *rruaj*, giving Greek ῥήγνυμι 'to tear' as a cognate, and positing a development *rrågëń- > *rråëń. Since in Albanian PIE *-g- is not lost intervocalically, this etymology is to be rejected. Furthermore, there is no reason to regard the etymology as a Latin loan.

There are two more words for which we can find a Latin etymology. The first of these is *shuaj* 'to extinguish'. Orel considers this to be a loan from Lat. *subjugāre* 'to subjugate'. However, this is impossible, as we do not expect the intervocalic Latin *g* to be lost in Albanian. Other suggested etymologies are borrowings from Greek σβέννυμι 'to quench' [Camarda, 1864], Latin *exungere* 'to anoint' [Meyer, 1891] and Greek ψάω 'to rub' [Mann, 1950], but all of these have phonological problems. I propose as an alternative a borrowing from Latin *sēdāre* 'to calm', which could be used in a construction *flammam sēdāre* 'to extinguish fire'. Furthermore, when borrowed into Albanian it would yield precisely *shuaj*. Another possibility is that the Albanian word is onomatopoeic. This, however, does not exclude a Latin borrowing; it is possible that there were multiple ways to express 'I extinguish the flame' in an earlier stage of Albanian, and that *shuaj sēdāre* became the most prominent one because the sound matches the action.

The word *pruaj* has two meanings: 'to guard' and 'to plunder'. These contradictory meanings are difficult to explain from a single meaning, so it is best to assume we are dealing with two homophones with unrelated etymologies. The verb *pruaj* 'to plunder'

admits a straightforward derivation from Latin deponent verb *praedārī* 'to plunder', possibly via an intermediate Romance form **praedāre*. This would be borrowed into Proto-Albanian **predånj-* which would yield *pruaj*. The word *pruaj* 'to defend' is more problematic. Meyer [1891] is unsure whether it is a derivation of *ruaj* 'to guard' or a loan from Lat. *prohibēre* 'to prevent'. Neither solution is very attractive: we would either be left with an unexplained suffix *p-* or a semantic development from 'to prevent' to 'to defend'. A better solution is given by Orel [1998], who cites this word as *proj* and considers this to be a loan from Latin *parāre* 'to make ready, to defend'. We then have to explain how the word *pruaj* 'to plunder' came into being. The answer to this lies in the aorist form *prova* of *proj*. To this aorist a present form *pruaj* 'to defend' was created on the basis of verbs as *rruaj* 'to shave', aor. *rrova*. The creation of this form was a contamination of the already existing *pruaj* 'to plunder' and the aorist *proj*. The new verb *pruaj* 'to defend' subsequently took over the aorist formation *pruajta* from *pruaj* 'to plunder'.

3.1.2 *gatuaj* 'to prepare'

According to Orel [1998] this word is to be connected with Slavic **gotovati*, which has the same meaning.[7] [Orel, 2000, p. 38] states that an unstressed Slavic **o* is regularly reflected as *a* in Albanian, as in *matukë* 'hoe' ← Slav. **motyka* and *karrup* 'fish trap' ← Slav. **korupъ*. After the loss of the intervocalic **-v-* the vowels would contract to give the expected diphthong; the same development can be seen in *patkua* 'horseshoe' ← Slav. **podъkovъ*.

An explanation needs to be given, though, as to why this verb has become a nasal present in Albanian. Slavic verbs are mostly borrowed as verbs in **-tj-*, like *buças* 'to thunder' ← Slav. **bučati* and *grabis* 'to steal' ← Slav. **grabiti*; we would then expect ***gatuas*, 2/3sg. ***gatuat*. According to Orel this is because the borrowing is old; another example of this is *pëgëj* 'to smear' Slav. **poganiti*. However, this is not a direct parallel, as this word had a nasal in Slavic already. It is possible that **gatuas* entered the class of verbs in *-uaj* after the contraction because of the diphthong in the final syllable. Another possibility, given by Jokl [1931], is that the verb is a denominative from Slavic **gotovъ* 'ready'. The Proto-Albanian verb would then be **gatowånj-* from PAlb. **gatowa-*. However, this word is not attested as such in Albanian. There is *gat* 'ready', which Orel sees as a secondary form derived from *gatuaj*. At any rate, a Proto-Albanian reconstruction **gatowånj-* seems probable, which indeed develops regularly into *gatuaj*.

3.1.3 *paguaj* 'to pay'

For this word a borrowing from Italian *pagare* seems probable, but this regularly yields *pagoj*, which in fact occurs as an alternative form. It is unclear where the diphthong comes from in this word. One possibility is that the form *paguaj* is derived from the Old Italian 3sg. preterite in *-áo* (Sicilian *-au*), so that the Proto-Albanian form would be **pagawånj-*. However, it is unclear why this present would be derived from the Old Italian preterite.

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[7] Camarda [1864] connects this word to Greek αγαθός 'good'. However, a Proto-Albanian form **agatånj-* would yiel ****gatoj*.

Another explanation is to assume that *pagoj* was the original form, and that *paguaj* was created analogically from the aorist *pagova*. The reason why this form was created, however, is still unclear.

3.1.4 *gjuaj* 'to hunt'

Within Albanian this word is connected to the noun *gjah* 'hunt'. The etymology of both words is uncertain. It seems attractive to connect the word to OHG *jagōn* 'to hunt', whose etymology outside Germanic is unknown as well. Here the problem is that an intervocalic *g^h* is not lost in Albanian, so we cannot simply reconstruct PIE *ieg^h-* on the basis of these words. Demiraj [1997] sees a connection with Lat. *sāgīre* 'to perceive keenly' and Goth. *sōkjan* 'to seek' and reconstructs *seh_2g-*, but the this etymology has the same problem. A reconstruction based on Slav. *$\check{z}en\varrho$*, *$g\check{z}nati$* 'to drive away' as done by Meyer [1891] would probably yield **$gj\ddot{e}j$* < PIE *$gien-i$-*, so this has to be rejected as well.

The best solution is to regard gjah as coming from PIE *sh_2g-so-*, a thematisation of a heterodynamic *s*-stem, and to regard *gjuaj* as a denominalisation of this, from earlier *$gjahoj$*. The regular outcome of PIE *ks* in Albanian is *h*, as can be seen from, for example, *hirrë* 'whey', connected to Skt. *$k\d{s}īrá$* 'milk'-. One would then expect an earlier *gs* to give the same outcome. Alternatively, one may re-construct *iog^h-so-* if one prefers a connection to *jagōn*.

Yet another reconstruction is possible if we follow Camarda [1864] in connecting the word to Gr. δίζημαι 'to seek', for which Beekes [2010] reconstructs PIE *ieh_2-* 'to pursue'; we could then reconstruct the PIE predecessor of *gjah* as *ih_2-so-* or *ih_2-io-*. The vocalisation might seem awkward, but the consonantal reflex of the *i* might have spread from other forms in the paradigm with a full grade in the root.

3.1.5 *kruaj* 'to scratch'

Mann [1950] connects this to Gr. κνάω 'to scrape', but this would be the only example for a sound law *kn- > kr-*, so it is preferable to look for alternatives. According to Orel [1998] this word reflects PIE *$greb^h$-* 'to scratch', with an irregular devoicing in anlaut; again the loss of intervocalic *bh* is unexpected. By contrast, Genesin [2005b] sees it as a fientive from PIE *$(s)ker$-* 'to scratch', so *$kr-eh_1$- > *$kr\mathring{a}$*, which would then have gotten the suffix *-ënj*. This seems improbable, as the function of the fientive was taken over by the Proto-Albanian suffix *-ånj-*, so we would expect this fientive to be restructured as *$kr\mathring{a}nj$- > **$kroj$*. Alternatively, one could see it as a borrowing from Germanic, connected with OHG *krouwōn* 'to scratch'. This would be borrowed as PAlb. *$krow\mathring{a}nj$-*, which develops into *kruaj*. However, it is very well possible that the cluster *kr-* arose through onomatopoesis, so that this verb would not be etymologisable. This would also explain the variation between *kruaj* and the forms *gërruaj* and *kruj* mentioned by Jokl [1916].

3.1.6 *luaj* 'to play'

This word is more complicated. Next to this word there is also the word *loz* with the same meaning. According to Orel [1998] these words originate in, respectively, PAlb. *$l\mathring{a}d\ddot{e}nj$-*

and *lådj-, and he as cognate Slav. *ladъ 'order, peace', so we would have to reconstruct PIE *leh$_2$d$^{(h)}$-. However, we again cannot account for the loss of intervocalic *d$^{(h)}$. For these words we would also have to assume that they are two different denominatives based upon a word *låda- that has no reflexes within the attested Albanian (there is a word lodёr 'toy'). According to Meyer [1891] we must regard luaj as a loan from Latin lūdere 'to play', which is phonologically and semantically perfect. We then still have to account for loz. For this we can cite Demiraj [2001], who connects loz to lodhem 'to become tired' < *leh$_1$d-, cf. Goth. letan 'to let', Gr. ληδεῖν 'to become tired', so we can reconstruct loz < *leh$_1$d-ie/o-, and we must assume that the meaning 'to play' is secondary. These two verbs thus have ultimately unrelated etymologies.

3.1.7 quaj 'to call'

This word is attested in Buzuku in 3pl. cluognene /kluońënë/[8], which implies a connection with PIE *ḱleu- 'to listen', cf. Skt. śṛṇóti 'to hear', Gr. κλέομαι 'to become famous', Lat. cluēre 'to be famous'. We would then do best to reconstruct *klewånj-, which we can regard as a denominative from the noun *klewa- < *ḱléuos 'fame', cf. Gr. κλέος, Skt. śrávas-, OIr. clú. Note that both the depalatalisation in the cluster *ḱl and the adaptation of a PIE s-stem into a Proto-Albanian a-stem are regular. Demiraj [1997] reconstruct PAlb. *kluwånj- < PIE *ḱluH-eh$_1$-, but this presumes a laryngeal in the root, for which no other language shows any sign; therefore I prefer the reconstruction as a denominative. Note that this PIE root is also reflected in quhem 'to be called' < PIE *klu-ske/o-.

3.1.8 bluaj 'to grind', druaj 'to dread'

According to Meyer [1891], bluaj is a loan from Latin molere 'to grind'. However, we would expect this to be borrowed as *molånj-, which would yield **bloj. Klingenschmitt [1982] points to OGh. blo, which he derives from *mlh$_2$-ie-t from the root *melh$_2$- 'to grind', cf. ON melja, Lith. málti, OIr. meilid. The 1sg is bluo < *mlh$_2$ioH, on the basis of which the form bluonj was created, which Klingenschmitt compares to perdâj 'to spread', Buz. perdaa 1sg. /përdā/< *dh$_2$ioH , 3sg. perdah /pёrda/ < *dh$_2$iet. There are two possible ways how this may have come into being: either the verb was incorporated into the by then already existing class of verbs in -uonj in order to lose the otherwise unknown vowel alternation uo/o, or the new conjugation came into being as the result of a contraction bluon < *blo-ёn, where -ёn is a present suffix that in standard Albanian and Tosk is only found in the three verbs eci 'to come', hipi 'to mount' and iki 'to go away'. In Old Albanian and in Gheg, however, the suffix is more prevalent; see [Genesin, 2005a] or [Lopuhaä, 2014] for a more detailed discription of the use and history of this suffix. The addition of this suffix to vowel stems can be seen in the Arbëresh dialect of San Costatino Albanese, where the verb mba 'to have' has a suffixed counterpart mbanj 'to carry' [Breu, 2008]. Here, we can be sure that the latter verb is the result of suffixation rather than incorporation into a different verbal paradigm, since its semantics show the imperfective meaning that is one of the meanings of the suffix -ёn in this partic-ular dialect. It

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[8] This phonological interpretation is due to Fiedler [2004].

is difficult to establish what happened between Old Albanian *bluo* and modern *bluaj*. Either way, a diphthong was present in the Old Albanian 1sg already, where it is the result of a contraction *bluo* < *mlh_2ioH after the loss of intervocalic PIE *i*. In the other forms of the paradigm, the diphthong either was the result of a contraction of the form *bluan* < *$blo-ën$, or it was introduced from the 1sg.

The word *druaj* probably underwent a similar development. In Buzuku we find 1sg. *druo* /druo/, 3sg. *dro* /dro/, 2pl. *droni* /droni/, 3pl. *druone(h)* /druonë/. Orel [1998] connects this word to Latv. *druvas* 'fear' and Lith. *draũsti* 'to scare off', so that we can reconstruct this word as PAlb. *drawånj-* < PIE *$dreu$-. Probably also connected to this root is *drojë* 'fear', for which we then would have to reconstruct PAlb. *dråwjå* < pseudo-PIE *$dr\bar{e}uieh_2$.

3.1.9 *ruaj* 'to guard; to wait'

The final word in this category is *ruaj*. Various etymologies have been given for this word. According to Meyer [1891] it is a loan from Slav. *xorniti* 'to keep', but then we would probably find no diphthongisation. Jokl [1911] connects the word to Gr. ὁράω 'to see', so that we would have to reconstruct PAlb. *wrånj-* < PIE *$ur-eh_2-n-ie/o$-. This would give us either **rroj* or *roj*, depending on the development of the initial cluster, but not a diphthong. Genesin [2005b] mentions a *i*-present to PIE *reh_1d^h-, cf. OCS *raditi* 'to worry', OI *imraidi* 'to think'. This would develop as *reh_1d^hiom > *roz*, *reh_1d^hit > *ro*, which would then receive a present suffix *-ënj*. This cannot be true as we do not expect intervocalic *d^h* to drop. Orel [1998] connects it to ON *rǿkja* 'to care' and Gr. ἀρήγω 'to defend', but reconstructing on this basis would give the same problem.

I suggest a connection with PIE *$h_1roh_1-u-eh_2$ 'rest', cf. Gr. ἐρωή, PGm. *$r\bar{o}w\bar{o}$ > OHD *ruowa*, OE *row*, ON *ró* [Beekes, 2010]. This would develop into PAlb. *råwå*, from which a denominative *råwånj-* 'to rest'. We expect this to develop into *ruaj*; we would then have to assume a semantic development from 'to rest' to 'to wait (for)' and finally to 'to guard'.

3.2 **Verbs in** *-yej*

When looking for etymologies of verbs ending in *-yej*, one might be tempted to assume that these verbs are the result of a contraction of *$-VCönj$-. However, the verbs in *$-önj$- come from an earlier suffix *$-jånj$-. This means that in a con-struction *$-VCönj$- < *$-VCjånj$- the consonant is not intervocalic, and usually does not drop as a result. For example, Latin *merīdiāre* 'to take a siesta' is borrowed as Proto-Albanian *meridjånj-* which develops into Albanian *mërzej* 'to rest in the shade' rather than **bryej*. Also, the example *shkruaj* < *skriwånj-* shows that a front vowel present in the contraction does not trigger the palatalisation of *$å$* to *$ö$*. Still, there are some specific developments that can lead to a verb in *-yej*. One of these is a sound law, stated implicitely in Kortlandt [1996], that states that an intervocalic Proto-Albanian cluster *lj* develops into *$-ĺ-$* > *$-j-$*. In constructions of the form *$-Vljånj$- this *j* is lost, yielding the present ending *-yej*. An example of this is the verb *fyej* 'to insult', considered by Orel to be a denominative of *faj* 'guilt, sin'. This we can consider to be a loan from Rom. *fallia*, which is to be connected with Lat. *fallere* 'to deceive'. On the basis of this we can

reconstruct PAlb. *falja-* and a denominative *faljånj-*, which then would yield *fajöń > *fëöń > fyej*.

A related word is Buz. *fëjenj* 'to sin'. This too seems a denominative of *faj*, but a semantical develpoment from *fëjenj* to *fyej* is unlikely. Also, as can be seen from the Buzuku verb *luegn* /lyeń/ 'to smear', the verbal conjugation in -*yej* was present in Old Albanian already. For these reasons we must regard *fyej* and *fëjenj* as two similar, but independent, derivations of the noun *faj*. In this regard *fëjenj* must be the later one, that was made after the loss of intervocalic *j*.

The same development took place in *vyej* 'to be worth', which we can regard as a loan from Latin *valēre* 'to be worth'. This would have been borrowed as PAlb. *waljånj-*, which indeed develops into *vyej*. There is also a variant *vlej*, which we can explain by assuming that the pretonic *a* was lost here before the development *lj > *j*; so here we would expect *waljånj- > *wljånj- > *wlöń > vlej*.

A different kind of example is to be found in *yej* 'to wake'. Orel [1998] considers this a denominative from *yll* 'star', but this is semantically not ideal. Rather, I would consider it a borrowing from a Romance form *ēviglāre* from Latin *ēvigilāre*[9] 'to wake'. In Romance, the Latin cluster *gl* would yield a palatalised *ĺ*, so that we would get a palatalised *ö* after the loss of intervocalic consonants and contractions.

3.2.1 *lyej* 'to smear'

Following Orel [1998] this word is best to be considered a loan from Gr. ἔλαιον 'olive oil', Dor. ἔλαιϝον.[10] We can assume that this was borrowed as *elajwa-*, from which a denominative *elajwånj-* was created; the palatalisation of the diphthong is then due to the *-j-*. Note that the *j* was lost relatively late, since an intervocalic *j* does not cause palatalisation, as in *bluo < *mlh₂ioH*.

3.2.2 *zhyej* 'to smear'

This appears to be a denominative of *zhul* 'dirt'. This word has no certain etymology, so we cannot be sure why the intervocalic *l* was lost; perhaps it is a de-nominative based upon a plural *zhuje* nonexistent in modern Albanian, so that we could reconstruct *žuĺoń-*. However, this is very speculative if we have no in-formation about the etymology of this word.

3.2.3 *kryej* 'to reach'

This seems to be connected to *krye* 'head'. If we want to reconstruct this to PIE *ḱrh₂-es-* 'head'[11] (cf. Gr. κρᾱνίον 'skull', Skt. *śiras-* 'head'), a sensible reconstruction would be PAlb. *kröna- < PIE *ḱrh₂-os-no-*, which is comparable to Gr. κάρᾱ 'head', pl. κάρηνα < *ḱrh₂-es-n-h₂*. If

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[9] Note that Latin *vigilāre* 'to wake' would yield an initial **v*- when borrowed into Albanian.

[10] The alternatives, considering it as a loan from Lat. *linō* 'to anoint' [Meyer, 1891] or from Gr. ἀλείφω 'to anoint the skin with oil' [Camarda, 1864], have various phonological problems.

[11] see [Beekes, 2010] for more information about this reconstruction.

this is indeed the correct etymology, the denominative would have to be late, because the final *-n* must have been lost by the time this derivation was made. It is unclear how we would expect a formation like **krye-oń* to contract, but it is also possible that it was formed by analogy to other verbs in *-yej*.

3.2.4 *ngjyej* 'to paint' and *trushkyej* 'to steal from a holy place'

The word *ngjyej* is considered by Orel [1998] to be a loan from Lat. *unguere* 'to smear'.[12] However, a direct loan would yield PAlb. **ungwånj-*, which would explain the diphthong nor the palatalisation. We can solve both of these problems if we assume a Romance derivation from *unguere*. A possibility would be to assume a Romance form **unguālia*, which would be borrowed as PAlb. **ungwalja-*, from which a de-nominative **ungwaljånj-* would have been formed, which we indeed would expect to develop into *ngjyej*. Unfortunately, we do not have any Romance sources point-ing to the existence of such a word.

We face similar problems when trying to find an etymology for *trushkyej*. Orel [1998] considers this a loan from Rom. **trumpiscāre* (based upon Latin triumphāre), but this would yield ***trushkoj* in Albanian. Here too we would have to assume a Romance form **triumpiscālia*,which is undesirably complicated, but I do not see a better solution.

3.2.5 *rrëfej* 'to tell'

This word is very problematic. It is treated in this section because the form attested in Buzuku is *refuegn* /rëfyenj/. Orel [1998] considers this a loan from Lat. *referre* 'to tell'. However, we would expect PAlb. **referånj-* based on the Latin 1sg. *referō*, which would yield Alb. ***rëfroj* or something similar; in other words, we would not expect the intervocalic **r* to drop. Çabej [1976], on the other hand, sees it as a loan from Gr. φαίνω 'to show', after the monophthongisation of αι to [ε]; this, however, leaves the diphthongisation unexplained.

An alternative explanation is given by Genesin [2005b], who reconstructs **r̄ë-θö-ën*, with the root coming from PIE **k̑eHs-* 'to point to', cf. Ved. *śāsti* 'to instruct', OAv. *sāsti* 'to teach'. The development **k̑ > f* is different from the usual development to *th*, but this is an alternation we see more often: the word /uthullë/ 'vinegar' in Buzuku is reflected as /ufullë/ in Bogdani. There is also the word *fle* 'to sleep', which Klingenschmitt [1982] reconstructs as PIE **k̑lei-*, cf. Toch. A *klis-*, B *klänts-* 'to sleep'.[13] However, the conditions under which **k develops into f are unknown, so the reliability of this etymology can only be ascertained when this has been sorted out.

Equally speculative would be to assume that this was formed after the forms of Latin *referre* without thematic vowel, e.g. 2sg. *refers*, 3sg. *refert*. Regularly, a cluster **-rnj-* is simplified to a cluster **-nj-* with a lengthening of the preceding vowel. This is also the process that Orel assumes in *ziej* 'to boil', which he reconstructs as **džernj-* < PIE **gʷʰer-*, cf. Arm. *ǰer*

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[12] Camarda [1864] connects this word to Gr. χέω 'to smear', but Beekes [2010] reconstructs this as
*ǵheu- on the basis of Skt. *hutá-* 'sacrificed', from which we would expect a *dh* in the Albanian form.

[13] According to Rix [2002], the meaning of this root is 'to lean' and many other cognates are given, such as Av. *sraiiata*, Gr. κλίνω 'to lean', Lat. *dēclīnāre* 'to bend', OHD *hlinēn* 'to lean', Skt. *śráyate*. The meaning in Tocharian and Albanian, if this etymology is correct, would then be secondary.

'warmth', Gr. θέρομαι 'to become warm, to burn', OI *fogeir* 'to heat', Skt. *háras-* 'glow', where we should assume a development **džernja > *žēń > *ziej*. For *refyenj* we should then assume a development **refernja- > *rëfёń > *rëfõń*, where the rounding of the **ē* might have been caused by the preceding **f*. However, this seems unlikely, as *bie* 'to bring' has a similar development *bie < *bē[14] < *bera- < *bʰer-*, cf. Gr. φέρω 'to carry', Skt. *bhárati*, Lat. *ferre*, but here there is no rounding of the **ē*. It would require more research to determine whether this etymology is plausible, or one of the other two is to be preferred.

3.2.6 *gёrryej* 'to scratch'

Genesin [2005b] states that the etymology of this word is unclear. Orel [1998] considers it to be a denominative of *gёrresë* 'scraper', for which he reconstructs PAlb. **garatjå*. We would then expect a verb **garatjånj-*. However, the *-s- < *-tj-* does not drop intervocalically, so another etymology is needed. Genesin notes that there are many similar verbs, all having the meaning 'to scratch', like *gёrvisht, gerdhuc, gёrzhit, gёrruc, grith* and *gris*, and that these verbs are prone to onomatopoesis and phonoesthetics, so it might be impossible to trace this word back to Proto-Albanian, as was the case with *kruaj*.[15]

3.2.7 *thyej, shqyej* 'to break'

The etymology of *thyej* is unclear as well. Orel [1998] reconstructs **tšāinj-*, based on PIE **ḱēi-*'to sharpen', cf. Skt. *śiśāti*, Arm. *sowr* 'sword', Alb. *thikë* 'knife'. The problem is that we expect the PIE diphthong to be monophthongised within Proto-Albanian already, probably to *i*, since this is the reflex of PIE **ei*,[16] so this would yield ***thij*. Genesin [2005b] mentions a reconstruction PIE **keś-* 'to cut', cf. Skt. *śāsti*, Lat. *carēre* 'to miss', but here we would not expect a palatalisation of the diphthong.

Equally problematic is *shqyej*. Orel reconstructs PIE **sken-* but the oldest attestation is *skluej*. For this reason Genesin regards this word as a reflex of PIE **kelh₂-* 'to hit', cf. Gr. κλάω 'to destroy',[17] Lat. *percellere* 'to hit', Lit. *kalù* 'to hit', from which we would get a development analogous to *bluaj*; however, this would then yield ***shquaj*, as there would be no reason for palatalisation.

As an alternative to both I propose to reconstruct **ḱelH-[18]* for **kelh₂-*. This is possible, as in Balto-Slavic the cluster **ḱl* before a non-front vowel; we can then assume the depalatalised form was generalised in Lithuanian. This depalatalisation also happened in Albanian, as can be seen from *gju* 'knee' < PAlb. **gluna < *ǵnu-no*, cf. Gr. γόνυ, Lat. *genu*, Skt. *jānu-*. We can derive both Albanian forms from this root as follows. We may assume that in Albanian, the alternation between **ḱelH-* and **ḱlH-* was resolved by a paradigmatic split, yielding two Proto-

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[14] Klingenschmitt [1982] regards *bie* as /bje/ and considers the *ie* a regular development of PALb. **e*, so he asumes a development *bie < *be < *ber*. However, *bie* reflects a phonological /bíe/, so it cannot be the result of the sound law *je < *e*; see [Orel, 2000, p. 3-7] for more information about this sound law.

[15] Jokl [1911] reconstructs PIE **gred-*, but we do not expect the intervocalic **d* to drop. Mann [1950] connects it to Gr. χραίνω 'to stain', but this leaves the Albanian diphthong unexplained.

[16] As in *dimёr* 'winter' *< *ǵʰeimeno-*, cf. Gr. χειμών, Lit. *žiemà*.

[17] Beekes [2010] concludes that this root cannot account for the Greeks forms and rejects this etymology.

[18] If the Greek evidence is to be rejected we have no evidence for the nature of the laryngeal.

Albanian roots *tšel- and *klel-, where the latter is a contamination of *kl- and *tšel-. These were both made into *j-presents[19] *tšalja- and *klalja-. These were then given the suffix -ënj, which yielded *thejënj, *klejënj, which then developed into thyej and *klyej; the latter was then given the prefix sh- < PIE *$h_1eǵ^h$(s) 'out', cf. Gr. ἐκ, ἐξ, Lat. ex.

3.2.8   *ryej* 'to suffer'

According to Orel [1998], this word reflects PIE *Hreud-, cf. Skt. *ródati* 'to lament', Lat. *rudere* 'to roar', Lit. *raudà* 'crying', Slav. *rydati* 'to cry'. This etymology cannot be correct as the PIE *d is not expected to drop. The reconstruction *uren- by Çabej [1976] also cannot explain the Albanian diphthong. I am not able to find a better explanation for this word.

3.3   Overview

I conclude by giving a tabel with reconstructed Proto-Albanian forms for all the treated verbs, as well as their source, be they inherited words from PIE or loans from other languages. I use ◁ to denote derivations from, for example, nouns.

Albanian		Proto-Albanian		Source
bluaj 'to grind'	◁	*blåja-*	<	PIE *mel_2-ie/o-
gjuaj 'to hunt'	<	*saxånj-*	◁	PIE *sh_2g-so-
kryej 'to fulfill'	◁	*kröna-*	<	PIE *krh_2os-no-
quaj 'to call'	<	*klewånj-*	◁	PIE *ḱleu-os-
ruaj 'to guard'	<	*råwånj-*	◁	PIE *h_1reh_1-u-eh_2-
shqyej 'to break'	<	*iškleljånj-*	≪	PIE *$h_1eǵ^h$s-ḱelH-ie/o-
thyej 'to break'	◁	*drawa- ?	<	PIE *dreu- ?
	<	*r̄ë-θö-ën- ?	<	PIE *ḱeHs- ?
rrëfej 'to tell'	<	*wrefenj- ?	←	Gr. φαίνω ?
	≪	*refernj- ?	←	Lat. referre ?
luaj 'to play'	<	*lydånj-*	←	Lat. lūdere
pruaj 'to plunder'	<	*predånj-*	←	Lat. praedārī
pruaj 'to guard'	<	*parånj-*	←	Lat. parāre
rruaj 'to shave'	<	*radånj-*	←	Lat. rādere
shkruaj 'to write'	<	*skriwånj-*	←	Lat. scrībere
shuaj 'to extinguish'	<	*sedånj-*	←	Lat. sēdāre
truaj 'to dedicate'	<	*tradånj-*	←	Lat. tradere
vuaj 'to suffer'	<	*wiwånj-*	←	Lat. vīvere
vyej 'to be worth'	<	*waljånj-*	←	Lat. valēre
yej 'to wake'	<	*ewiljånj-*	←	Rom. *ēviglāre
fyej 'to offend'	<	*faljånj-*	←	Rom. *fallia
ngjyej 'to paint'	<	*ungwaljånj- ?	←	Rom. *unguālia ?

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[19] This is parallel to OCS *klati*, 1sg. *koljǫ*.

trushkyej 'to steal from a holy place'	<	**triumpiskaljånj-* ?	←	Rom. **triumphiscālia* ?
paguaj 'to pay'	<	**pagaånj-*	←	OIt. *pagare*
gatuaj 'to prepare'	<	**gatowånj-*	←	Slav. **gotovati*
lyej 'to smear'	<	**elajwånj-*	←	Gr. ἔλαιϝον
kruaj 'to scratch'	<	**krawånj-*	←	OHD *krauwōn* ?
zhyej 'to smear'	◁	**žulai* ?	<	?
gërryej 'to smear'	<	?	<	?
ryej 'to suffer'	<	?	<	?

4   Conclusion

The aim of this article was to 'regularise' the development of the verbs in *-oj* and *-uaj* (and *-ej* and *-yej*). This was done by explaining the absence of diphthongisation in the present singular of verbs in *-oj* and *-ej* from an analogy from the present plural and other parts of the verbal paradigm. Furthermore, the diphthongs in verbs in *-uaj* and *-yej* can almost all be shown to be the result of either a contraction of two vowels due to the loss of an intervocalic consonant, such as *shkruaj < *skriwånj-*, or due to the creation of nasal present verbs from words end-ing in a diphthong, such as *kryej ◁ krye*. This has several consequences. First, new etymologies for the words *shuaj, pruaj* 'to plunder', *gjuaj, ruaj, vyej, yej, thyej* and *shqyej* were found. Another consequence is that we now have a new instrument for finding etymologies for verbs in *-oj, -ej, -uaj* and *-yej*; verbs of the latter two conjugations are the result of either a contraction or the secondary creation of a nasal present verbs. Conversely, vowel contractions due to the loss of intervocalic consonants always yield a diphthong *ua* or *ye*, which limits possible etymologies for verbs in *-oj* and *-ej*. Some caution needs to be applied here, though, as we have already seen that verbs ending in *-oj* might secondarily receive the stem vowel ua, e.g. *pruaj* 'to defend' ≪ *proj* ← Lat. *parāre*. The reverse development might also be possible; for example, Orel [2000] regards *arnoj* 'to repair' as a borrowing from Latin *renovāre* 'to renew'. This would regularly yield **arnuaj*, which might have been reformed to *arnoj* on the basis of the aorist *arnova*. More research is needed to find out which factors played a role in this change of conjugation that has taken placein some verbs in *-uaj*. The question still remains whether the reverse development is a possibility as well.

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