More species in the affixal forest
The case of Dutch and Afrikaans -el and -er

Engela de Villiers, Cora Cavirani-Pots, and Dany Jaspers
CRISSP/KU Leuven and Stellenbosch University

Contact Information:
CRISSP, KU Leuven
Email: engela.devilliers@kuleuven.be
cora.pots@kuleuven.be
dany.jaspers@kuleuven.be

KU LEUVEN

Introduction: verbal diminutive suffixes

Dutch and Afrikaans have two verbal diminutive suffixes *-el* and *-er* which indicate that an event is iterative or attenuative.

(1) *hupp-el-en* 'to skip' (repeatedly)

(2) *blikk-er* 'to flicker' (repeatedly)

(3) *krabb-el-en* 'to scratch lightly'

(4) *sluim-er* 'to sleep lightly'

In Afrikaans, iteration or attenuation can also be signalled by verbal reduplication:

(5) Die vrou **toet- toet** vir die eende wat oor die pad loop.
The woman honk honk for the ducks what over the road walk
'The woman keeps honking at the ducks that are walking across the road.'

> **Main question**:
> Even though there are clear parallels between the *-el* and *-er* suffixes, no attention has been given to the relation between them, nor has a unified analysis been proposed. We would like to explore the following question:
>
> **Can we give a unified analysis for the *-el* and *-er* suffixes in the context of Creemers et al.'s (2018) typology of affixes?**

Previous literature

Creemers et al. (2018) propose a more fine-grained division in the typology of derivational affixes.

Properties of affixes

Properties	Level I		Level II
	Level Ia	Level Ib	
Can be stress shifting?	YES	YES	NO
Categorially flexible?	YES	NO	NO
Can attach to bound stem?	YES	YES	NO
Relative position w.r.t. stem	1	2	3

Level Ia -iek:

1. *cánon* 'canon' > *canoniek* 'canonical'
2. *pan-iek* (noun) 'panic'; *canon-iek* (adjective) 'canonical'; *ant-iek* (noun or adjective) 'antique'
3. both *pan-* and *ant-* are non-lexical roots

Level Ib -(e)lijk:

1. *áánhoud* 'continue' > *aanhóúdelijk* 'continuous'
2. *aanhoud-elijk* 'continuous'; *vijand-elijk* 'hostile'; *vro-lijk* 'cheerful' (adjective)
3. *vro-* is a non-lexical root
4. level Ia suffixes directly follow the stem; level Ib suffixes occur outside of the level Ia suffix.
   - *publ-iek-elijk* **publ-(e)lijk-iek* 'publicly'

Level II -heid:

1. *belééfd* 'polite' > *belééfdheid* 'politeness'
2. *schoon-heid* 'beauty'; *scheef-heid* 'flexure'; *beleefd-heid* 'politeness' (noun)
3. *schoon* 'clean', *scheef* 'askew', and *beleefd* 'polite' are all lexical items

4. *publ-iek-elijk-heid* **publ-heid-iek-elijk* **publ-iek-heid-elijk* 'state of being public'
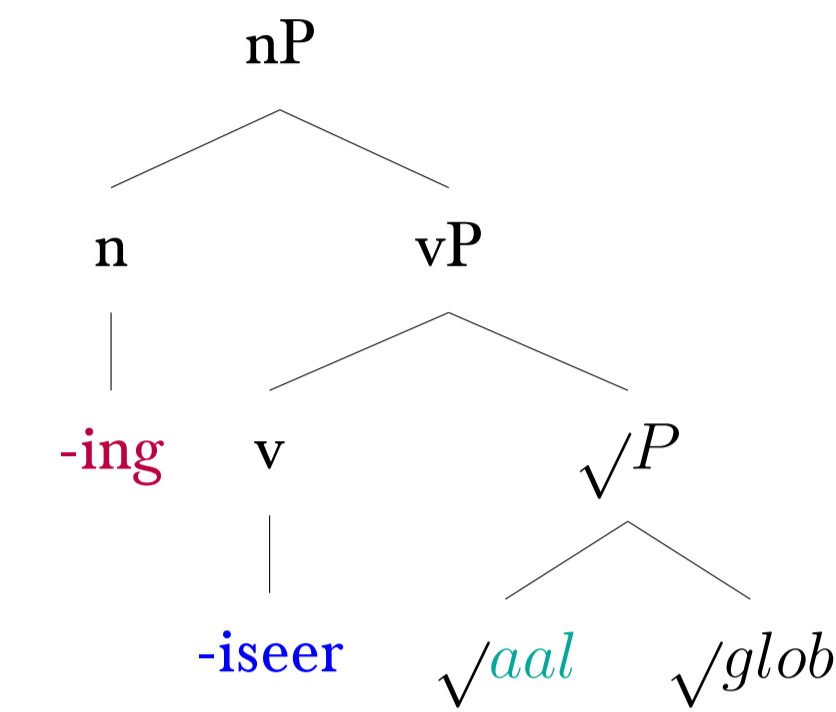
- Level Ia suffixes attach to roots and are categorially flexible because they are roots themselves.
- Level Ib suffixes attach to roots and are categorially rigid because they spell out categorial heads.
- Level II suffixes attach to categorised material and are categorially rigid because they spell out categorial heads.

The ability to express iteration and attenuation is not the only property that the *-el* and *-er* suffixes share. Audring et al. (2017) claim that *-el* verbs can have 5 **morphological base types**:

1. Verbal base
2. Nominal base containing *-el/-er*
3. Nominal base without *-el/-er*
4. Non-lexical root
5. Base which can be both a noun or a verb

For type II verbs, Audring et al. (2017):
- claim that the *-el* morpheme in nouns often came from the homophonous instrumental suffix *-el*;
- set this type of *-el* verb aside as a homophonous suffix.

For type II verbs, Weidhaas & Schmid (2015):
- argue that this type of *-el* verb should be accounted for in the same way as the other types, as they can also indicate attenuation and iterativity.
- These properties cannot be accounted for as straightforwardly if one assumes two different but homophonous *-el* suffixes.

One of our goals was to investigate which of these contrasting views is the most plausible.

Results

A list of both Dutch and Afrikaans *-el* and *-er* verbs were collected in the **dictionary and annotation study**:
- Dutch: 299 *-el* verbs and 109 *-er* verbs
- Afrikaans: 130 *-el* verbs and 52 *-er* verbs

The three categories of linguistic properties that were annotated for are **semantic** (iteration and attenuation), **pragmatic** (endearment and pejorative meaning), and **morphological** (5 morphological base types as mentioned above).

Morphological categories

	DU -*el*	DU -*er*	AF -*el*	AF -*er*
Total number of verbs	299	109	130	52
Type I	11,7%	13,8%	10,8%	17,3%
Type II	17,1%	1,8%	23,9%	15,4%
Type III	3,3%	2,8%	2,3%	5,8%
Type IV	42,8%	69,7%	57,7%	53,8%
Type V	25,1%	11,9%	5,3%	7,7%

- In both Dutch and Afrikaans, the largest set of verbs is type IV - verbs whose base is a non-lexical root;
- Type III is the smallest set of verbs;
- Type V is rarer in Afrikaans than in Dutch, whereas the reverse holds for type II.

For all morphological base types, at least a subset of verbs show the semantic features and/or pragmatic features we have considered.

The analysis

We propose that the *-el* and *-er* suffixes are level Ia suffixes in the sense of Creemers et al. (2018).

Our analysis of the *-el/-er* suffixes as level Ia suffixes is particularly interesting for the typology of affix types in Dutch, as Creemers et al. (2018) do not identify verbal suffixes of level Ia in this language.

We draw on the properties of suffix types as in Creemers et al. (2018):
- 1st property: not testable in this case
- 2nd property: either YES or NO depending on whether one assumes homophonous *-el* and *-er* in morphological base type II, or not.
  - Homophony analysis: Not categorially flexible, and thus suffixes should be either level Ib or level II.
  - Uniform analysis: Categorially flexible, and thus suffixes should be level Ia.
- 3rd property: cannot distinguish as it is expected by both.
- 4th property: two analyses make different predictions about the position of the suffix relative to the stem.
  - Homophony analysis: *-el/-er* cannot occur inside level Ib suffixes.
  - Uniform analysis: *-el/-er* suffixes should be able to occur inside level Ib suffixes.

When considering Dutch *-ig* and Afrikaans *-(e)(r)ig* suffixes (level Ib as categorised by Creemers et al. 2018), we see that they occur after suffixation of *-el/-er*, whereas the reverse is ungrammatical.

	Dutch		Afrikaans	
	-*el*	-*er*	-*el*	-*er*
Type I	hakk-el-ig	knapp-er-ig	hakk-el-rig	glibb-er-ig
	*hakk-ig-el	*knapp-ig-er	*hakk-rig-el	*glibb-ig-er
Type II	cirk-el-ig	modd-er-ig	korr-el-rig	sluim-er-ig
	*cirk-ig-el	*modd-ig-er	*korr-rig-el	*sluim-ig-er
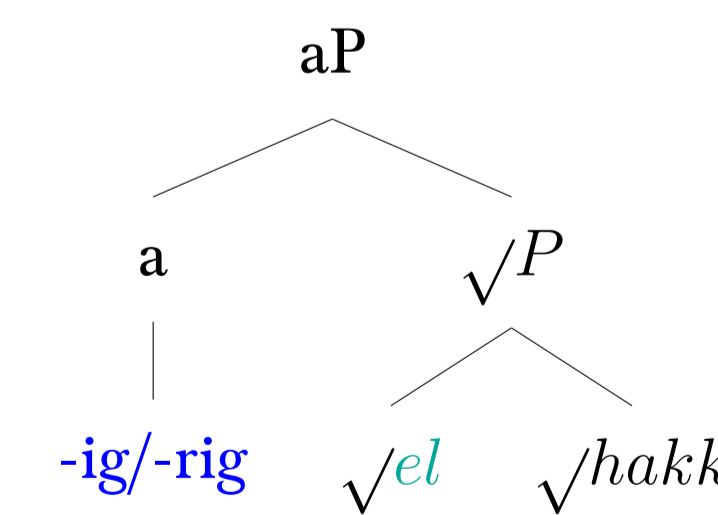
The fact that *-el/-er* precede the level Ib suffixes *-ig/-(e)(r)ig*, while the reverse order is impossible, indicates that the former should be analysed as level Ia suffixes rather than level Ib suffixes.

Status of suffixes

Even though the Dutch and Afrikaans *-el/-er* suffixes show very similar semantic, pragmatic, and morphological behaviour, another study we did seems to suggest that the status of these suffixes is different in the two languages.

We did an experiment with nonsense words which had the *-el* and *-er* suffixes. We wanted to test if the Dutch and Afrikaans participants associate these suffixes with attenuation and/or iteration. Based on this questionnaire, we found that:

- The Dutch speakers included the attenuative and/or iterative interpretations in their descriptions.
- Afrikaans speakers could not even always recognise these suffixes as verbalising suffixes, much less the semantic properties of the suffixes.

These results suggest that Afrikaans *-el* and *-er* suffixes have become part of the lexical root.

The reduplication facts in Afrikaans support this hypothesis:

Reduplication in Afrikaans

	AF -*el*	AF -*er*
Total number of verbs	130	52
Base reduplication	1,5%	1,9%
Verb reduplication	21,5%	22,6%
Both	1,5%	3,8%
Neither	75,5%	71,5%

- Most Afrikaans verbs in this study do not allow for either base or verb reduplication.
- Verb reduplication is much more frequent than base reduplication.
- This might be caused by the fact that the verbal diminutive suffixes have lost their suffixal status in Afrikaans.
- It thus seems as if the entire verb now brings about the iterative and/or attenuative meaning, rather than just the suffixes themselves.
- This might furthermore explain why only a small set of these verbs can occur in verbal reduplication as this is in and of itself a means of conveying iterative/attenuative meaning (Botha 1988).

Conclusion

> - We have argued for a uniform analysis for *-el* and *-er* across all 5 morphological base types;
> - We have shown *-el* and *-er* suffixes to be level Ia suffixes, which corrects an oversight in Creemers et al. (2018);
> - We have argued that Afrikaans *-el/-er* suffixes have lost their suffixal status and have become part of the lexical root.

Outlook

Directions for future research:
- Corpus and experimental studies on the semantic and pragmatic properties of these verbs;
- Further detailed morphological investigations of the small set of verbal suffixes and their position in the Dutch and Afrikaans affix systems;
- Explore the reduplication facts in Afrikaans a bit more and propose an analysis for these facts.

References

- **Audring**, J., **Booij**, G. and **Jackendoff**, R. 2017. Menscheln, kibbelen, sparkle. Verbal diminutives between grammar and lexicon. LiN 2017, 1-15. - **Creemers**, A., Don, J. and Fenger, P. 2018. *Some affixes are roots, others are heads.* Language and Linguistic Theory. - **Botha**, R. P. 1988. Form and meaning in word formation. A study of Afrikaans Reduplication. Cambridge: CUP - **Jurafsky**, D. 1996. Universal tendencies in the semantics of the diminutive. Language 72(3). 533-578. - **Weidhaas**, T. and **Schmid**, H.-J. 2015. Diminutive verbs in German. Semantic analysis and theoretical implications. Morphology 25(2). 183-228.