

Unexpected species in the affixal forest: The case of Dutch and Afrikaans *-el* and *-er*.

Abstract

This paper concerns the verbal suffixes *-el* and *-er* in Dutch and Afrikaans. These suffixes often bring about an iterative and/or attenuative interpretation (cf. Weidhaas & Schmid 2015; Audring et al. 2017; Grestenberger & Lallulli 2019). They furthermore display the same morphological behavior and pragmatic features. This paper presents a detailed dictionary- and annotation study on the morphological, semantic and pragmatic properties of these two suffixes. Our analysis is stated in terms of the three-way division of suffix types as found in Creemers et al. (2018). We show that the *-el* and *-er* suffixes are categorically flexible suffixes, which are the closest to the stem with respect to other suffixes. As Creemers et al. (2018) state that Dutch does not have verbal suffixes that are in the position closest to the stem, this paper calls for a revision of that claim.

1. Introduction

This paper concerns the verbal suffixes *-el* and *-er* in Dutch and Afrikaans. The *-el* and *-er* suffixes are often referred to as *verbal diminutive suffixes* (cf. Weidhaas & Schmid 2015; Audring et al. 2017; Grestenberger & Lallulli 2019), and frequently indicate that an event is iterative or attenuative, or both. This is illustrated for Dutch in respectively (1)-(2) and (3)-(4).

- (1) *hupp-el-en* 'to skip (repeatedly)' (3) *krabb-el-en* 'to scratch lightly'
(2) *stuit-er-en* 'to bounce (repeatedly)' (4) *dobb-er-en* 'to float while rocking lightly'

In (1) and (2), the *-el* and *-er* suffixes bring about an iterative interpretation of the event, that is, the events of skipping and bouncing are presented as occurring repeatedly. In (3) and (4) these same suffixes bring about an attenuative interpretation, in the sense that the events are of low intensity – as indicated by the adverb 'lightly' in the English translation. In (5)-(6) two Afrikaans examples are given with an iterative interpretation, and in (7)-(8) two Afrikaans examples with an attenuative interpretation.^{1, 2}

- (5) *hobb-el* 'to bump up and down (repeatedly)' (7) *does-el* 'to sleep lightly'
(6) *blikk-er* 'to flicker (repeatedly)' (8) *knapp-er* 'to crackle lightly (of fire)'

In both these closely related West-Germanic languages, verbal suffixes are very rare (De Haas & Trommelen 1993; Combrink 1990). In Dutch, there are only two other verbal suffixes besides *-el* and *-er*, namely the productive suffix *-eer* (e.g. *alarm_N-eer_V-en* 'alarm-SUF-INFL `to warn'`), and the unproductive *-ig* (e.g. *steen_N-ig_V-en* 'stone-SUF-INFL `to stone'`). *The Handbook of Dutch Morphology* (De Haas & Trommelen 1993) devotes no more than two pages to the *-el* and *-er* suffixes. This is somewhat surprising, given that Dutch contains quite a large set of verbs containing these suffixes (see Audring et al. 2017, and section 4 of the current paper).

¹ Note that in Afrikaans, there is no infinitive marker *-en*. The infinitive has the same form as the indicative.

² Besides an attenuative interpretation, the verb *knapper* also has an iterative interpretation. As said above, these suffixes can bring about one of the two interpretations, but can also bring about both in one and the same verb.

Furthermore, even though these suffixes are now no longer fully productive, they were highly productive derivational suffixes in previous stages of Dutch.^{3,4}

In Afrikaans, the only verbal suffix that is explicitly mentioned in *Afrikaanse Morfologie* (Combrink 1990 – the Afrikaans equivalent of *The Handbook of Dutch Morphology*) is the productive suffix *-eer*. *-Er* is mentioned in the list of suffixes at the beginning of the handbook, but not discussed in the main text. The *-el* suffix is not listed.

Given that these two suffixes are part of the very small set of verbal suffixes in Dutch and Afrikaans, combined with the fact that the set of verbs containing these suffixes (henceforth *-el* and *-er* verbs) is quite large, it is surprising that there is hardly any literature on these suffixes. De Jager (1875) contains an extensive list of *-el* and *-er* verbs in Dutch, but most of the verbs on the list are no longer extant in Modern Dutch (Audring et al. 2017). A recent paper by Audring et al. (2017) focuses on the *-el* suffix only. Moreover, it is specifically devoted to a theoretical analysis thereof and does not contain a detailed list of *-el* verbs in Modern Dutch. A recent unpublished diachronic study on the *-el* and *-er* suffixes in Dutch (as well as English and German) is presented in Schmück (2019). As for Afrikaans, we are not aware of any study on Afrikaans morphology that discusses the *-el* and/or *-er* suffixes.

These suffixes are also found in other Germanic languages, e.g. German and its various dialects, English, and Scandinavian (see Audring et al. 2017 and Schmück 2019 for examples).⁵ The only detailed dictionary- and annotation study on German *-eln* is Weidhaas & Schmid (2015). As in the case of the paper on Dutch *-el* by Audring et al. (2017), these authors do not include German *-er* in their study.

The ability to express iteration and attenuation, as illustrated above, is not the only shared property of the *-el* and *-er* suffixes. With respect to their morphological properties, we see that they can attach to four types of bases, namely (i) a verbal base (i.e. an existing verb in Modern Dutch/Afrikaans), (ii) a nominal base (i.e. an existing noun in Modern Dutch/Afrikaans), (iii) a non-lexical root (a root that does not exist as an independent lexical item in Modern Dutch/Afrikaans), and (iv) a base which can both be a noun or a verb. Examples are given for Dutch *-el* in (9)-(12). The same types of morphological bases can accommodate the *-er* suffix, in both languages.

(9) *hink_V-el-en* ‘to hop repeatedly’ – *hink_V-en* ‘to limp’

(10) *moff_N-el-en* ‘to cover up’ – *mof_N* ‘sleeve’

(11) *kabb-el-en* ‘to ripple (of water)’ – no lexical base

(12) *krass_{V/N}-el-en* ‘to scrape lightly’ – *krass_V-en* ‘to scrape’ – *kras_N* ‘scratch’

Besides these four morphological base types, both Weidhaas & Schmid (2015) for German, and Audring et al. (2017) for Dutch, include in their typology cases in which it seems that the verb is in fact derived from a noun that inherently contains *-el*. Examples also exist for the *-er* suffix. An example for the *-el* suffix is given in (13), and for the *-er* suffix in (14).

³ The only recent neologism (added in 2017 to the *Van Dale Groot Woordenboek van de Nederlandse Taal*) with the *-el* suffix that we have found is *sportelen* ‘to sport recreationally, by elderly people’. We have not found any recent neologisms with the *-er* suffix.

⁴ See Weidhaas & Schmid (2015) on the productivity of the German suffix *-eln*, the cognate of Dutch and Afrikaans *-el*. See furthermore Kuhn (1961), Dettwiler et al. (2007) and Eichinger (2014) on the high productivity of this suffix in Swiss German.

⁵ In fact, the *-l* suffix with iterative and attenuative meaning was present in earlier stages/languages of many branches of the Indo-European language family (Van Bree 1996: 49).

(13) *cirkel*_{N-en} ‘to circle’ – *cirkel*_N ‘circle’ (14) (*aan*)*modder*_{N-en} ‘to skimp’ – *modder*_N ‘mud’

It is not clear whether the *-el* and *-er* morphemes in the verbs *cirkelen* and *aanmodderen* are the actual verbal suffixes. As Audring et al. (2017) note, the *-el* morpheme in nouns often came from the instrumental suffix *-el*, which was homophonous with the verbal suffix *-el*.⁶ Schmück (2019) mentions the same instrumental suffix origin for *-er* in certain Germanic nouns that can form the base for iterative/attenuative verbs such as (*aan*)*modderen*. Audring et al. (2017) set the *-el* morpheme in this type of *-el* verbs aside as a homophonous suffix, whereas Weidhaas & Schmid do not. The latter argue that this type of *-el* verb should be accounted for in the same way as the other types, because they can also indicate attenuation or signal endearment/pejorative meaning – two properties that cannot be accounted for as straightforwardly if one assumes two different but homophonous *-el* suffixes. Given this disagreement in the few works on the two verbal suffixes, the current study also investigates this fifth type of morphological base, to see whether the Dutch and Afrikaans data can shed new light on this issue.

As just indicated, a significant property which these two suffixes have in common is that they can be used to signal expressive meaning. Just like the nominal diminutive suffix (Jurafsky 1996), these suffixes can signal a positive or negative evaluation by the speaker of the event that is referred to. The two main types of expressive meaning involved are the signaling of endearment (a positive evaluation) and the signaling of a pejorative meaning (a negative evaluation). Examples for Dutch are given in (15)-(16).

(15) *bommel-en* ‘to buzz (of a bumblebee)’ (16) *bazel-en* ‘to waffle’

Our own native speaker judgments are that the verb *bommelen* can signal endearment (a cute and positive sound made by a bumblebee), whereas *bazelen* signals pejorative meaning. It is important to note, though, that expressing endearment or pejorative meaning is not the sole purpose of these suffixes. That is, the expressive meaning is an additional layer of meaning, aside from the semantic meanings of iteration and/or attenuation. Both suffixes should therefore be viewed as derivational suffixes which additionally can express the speaker’s evaluation of the event (see also Weidhaas & Schmid 2015: 189).

All in all, the clearly similar behavior of the *-el* and *-er* suffixes in their semantics (iteration/attenuation), morphology (being able to attach to the same morphological base types) and pragmatics (endearment/pejorative meaning), makes it worthwhile to investigate both suffixes in parallel.

The aim of this paper is twofold. On the descriptive front, we want to enrich the typology of the *-el* and *-er* verbs in West-Germanic by presenting a detailed dictionary- and annotation study of these verbs in Dutch and Afrikaans. As mentioned above, no such study exists for these languages, with the exception of Audring et al. (2017) on Dutch *-el* verbs, which however does not include a detailed annotation of the semantic, morphological and pragmatic properties of these verbs. On the analytical and theoretical front, we want to propose a unified analysis of the *-el* and *-er* verbs in all five morphological base types. This analysis builds on work by Creemers et al. (2018), who argue that there are three types of affixes that can be distinguished. We will show that the *-el* and *-er* suffixes are so-called ‘level Ia’ suffixes. This

⁶ As mentioned in Audring et al. (2017), Schönfeld and Van Loey (1964: 238-239) in fact propose that verbal suffix *-el* developed from a reanalysis of verbs that were derived from nouns containing the instrumental *-el* suffix. See Schmück (2019) for a similar analysis for the *-er* suffix.

type of suffix is positioned closest to the morphological base compared to other suffixes, it often has a low degree of productivity and a wide range of semantic meanings. Our analysis of the *-el* and *-er* suffixes as level Ia suffixes is particularly interesting for the typology of affix types in Dutch, as Creemers et al. (2018) argue that there are no verbal suffixes of level Ia in this language.

The outline of the paper is as follows. In section 2, we briefly discuss the two core previous studies on *-el* verbs, namely Audring et al. (2017) on Dutch, and Weidhaas & Schmid (2015). The latter paper is discussed in more detail, as the methodology of our dictionary- and annotation study is partly based on theirs. Furthermore, we discuss Creemers et al. (2018), which is the core paper for our analysis of how the *-el* and *-er* suffixes fit in the typology of Dutch and Afrikaans affix types. In section 3, we present the methodology of our dictionary and annotation study. In section 4, we present the results of this study. Section 5 is devoted to our analysis of the affix type the verbal suffixes belong to. As already mentioned above, we propose that the verbal suffixes are of type level Ia – affixes which are closest to the morphological base compared to the other two types of affixes. Section 6 draws the main conclusions.

2. Previous studies

2.1 Audring et al. (2017)

As mentioned in the introduction, the paper by Audring et al. (2017) is the only recent work which discusses the verbal suffix *-el* in Dutch extensively. They establish that iteration and attenuation are the core semantic meaning components of this suffix. They furthermore state that the morphological base of *-el* verbs can be either a verb or a noun, but that the large majority has a non-lexical root as a base. In addition, they mention that there is a set of verbs for which it is unclear whether the base is a verb or a noun. The four types of morphological bases were already presented in section 1, abstractly repeated here for convenience.

- | | |
|----------------------|--|
| (17) $X_V-el-en$ | X is unambiguously a verb |
| (18) $X_N-el-en$ | X is unambiguously a noun |
| (19) $X-el-en$ | X has no category, i.e. it is a non-lexical root |
| (20) $X_{V/N}-el-en$ | X is ambiguous, i.e. it can be either a noun or a verb |

However, Audring et al. do not present exact numbers for each type of morphological base, since they did not do a detailed annotation of the set of verbs containing the *-el* suffix in Dutch.

As mentioned above, they include a fifth type of base, namely nouns that already contain the *-el* suffix. Audring et al. argue that this suffix is a non-verbal, homophonous suffix. Accordingly, the set of verbs that contain a noun which in turn already contains this homophonous *-el* suffix, should be set aside from all the other verbs containing the verbal *-el* suffix.

In sum, the paper of Audring et al. forms a useful starting point regarding the Dutch *-el* suffix for the current study to build on, by providing five types of morphological bases that need to be considered when investigating verbs containing the *-el* suffix. As they do not present any detailed dictionary and/or annotation study, the current study has an obvious gap to fill.

2.2 Weidhaas & Schmid (2015)

Weidhaas & Schmid (2015) presents a detailed dictionary- and annotation study on the German cognate suffix of Dutch *-el*, namely *-eln*. They report a number of 273 verbs ending in *-eln*, based on a dictionary investigation in the *Rückläufiges Wörterbuch der Deutschen Gegenwartssprache* (Mater 2001). As the authors note, this number is an underestimation, as they did not include *-eln* verbs that also have a prefix, in order to keep the semantic and pragmatic annotation focused on the semantic/pragmatic contribution of suffix *-eln*. Moreover, they did not include *-eln* verbs from dialects, in which the *-eln* suffix seems much more productive than in Standard German (Weidhaas & Schmid 2015: 195).

They annotated the dataset of 273 *-eln* verbs for morphological, semantic and pragmatic properties. Differently from Dutch, German *-eln* verbs can also take an adjective as its base. On the morphological side, they use three morphological base types as annotation categories, the first two of which were also annotated for the subcategories *verb*, *noun* or *adjective*. Type I are bases that do not contain *-l-*. Base type II are bases that do contain *-l-*. For type I and type II, the base can be either a noun, verb or adjective. Base type III is what we have labeled above as a non-lexical root, i.e. a base for an *-eln* verb that does not exist in the language without the suffix. It is important to note, though, that Weidhaas & Schmid (2015) do not view this type as non-lexical roots from which *-eln* verbs can be derived by adding the suffix. Rather, they take the verbs that fall under this type as underived lexical items. The overview table of Weidhaas & Schmid is presented here in table 1.

	Type I: base without -l- <i>n</i> = 125 (45,8%)	Type II: base with -l- <i>n</i> = 126 (46,2%)	Type III: 'non-derived' <i>n</i> = 22 (8%)
Verb	74%	5%	n/a
Noun	17%	87%	n/a
Adjective	6%	2%	n/a
Unclear	3%	6%	n/a

Table 1. Overview base types of *-eln* verbs in German (Weidhaas & Schmid 2015: 195)

Weidhaas & Schmid's type I verbs thus include both the Audring et al. (2017)'s types in (17) and (18) above, whereas the former's type III corresponds to the latter's (19). Audring et al. (2017)'s type in which the base is ambiguous between a noun and verb (20) are included in the 'unclear' subcategories. Weidhaas & Schmid's type II correspond to Audring et al. (2017)'s fifth base type, namely nouns that already contain the *-el* suffix. As can be seen from the table, apparently in German there are a handful of verbs and adjectives that also belong to this type. Two main observations can be made from the table. First, the two biggest classes of bases are those of type I and type II, whereas type III is rather infrequent (8% of the data set). Recall from the previous subsection that Audring et al. (2017) claim that the majority of Dutch *-el* verbs have a non-lexical root as base. It thus seems that German and Dutch differ significantly in this respect. Second, in base type I (bases without *-l-*), the large majority are verbs, whereas in base type II (bases with *-l-*) the large majority are nouns.

As for the semantic and pragmatic annotation, Weidhaas & Schmid focus on different subcategories of the general property of attenuation of *-eln* verbs. These annotations were mainly based on descriptions in the lexical entries in the dictionary. For example, the use of adverbs such as *schwach* 'weak', *klein* 'small' or *leicht* 'light', or adverbs such as *ein bisschen* 'a little' were taken to be indicators of attenuation-related features of the verb under consideration. They divided the different flavors of semantic attenuation on the one hand and

pragmatic attenuation on the other hand in five subcategories each. As for semantic attenuation, the subcategories they propose are ‘low intensity’, ‘iteration’, ‘small pieces’, ‘playful-tentative’ and ‘playful-pretentive’. The order of the subcategories is in line with their prominence. As for the pragmatic attenuation, the subcategories are ‘language of proximity’, ‘contempt’, ‘affection and sympathy’, ‘trivialization’ and ‘euphemism’. Again, the order lines up with the prominence of these pragmatic features in the data set. Note that Weidhaas & Schmid do not suggest that these subcategories are unrelated, but rather that they form a semantically and conceptually coherent network (Weidhaas & Schmid 2015: 203).

In order to investigate the extent to which there is a relation between the base types and the semantic and pragmatic features of *-eln* verbs, Weidhaas & Schmid present the following overview table.

	Type I <i>base without -l-</i>	Type II <i>base with -l-</i>	Type III <i>‘non-derived’</i>
Semantic attenuation	82%	23%	91%
Pragmatic attenuation	46%	36%	77%
Both	36%	10%	68%
Neither	7%	51%	0%

Table 2. Semantic/pragmatic attenuation in the three types of verbs (Weidhaas & Schmid 2015: 198)

The data in the table show that semantic and pragmatic attenuation is in fact the most frequent in type III verbs, followed by type I verbs. Weidhaas & Schmid state that ‘these results are highly unexpected because the monomorphemic, non-derived structure of the Type III verbs seems to exclude the possibility that there is a link between *-l-* and either the semantico-pragmatic complex of attenuation or, for that matter, any other meaning possibly shared by these verbs’ (2015: 198). However, the fact that type III verbs in their study have such high percentages of semantic and pragmatic attenuation is only surprising if one follows their analysis of these verbs being non-derived verbs, in which *-l-* is not a verbal suffix. If one, in contrast, assumes that these verbs are derived from non-lexical roots to which this verbal suffix is added, with its attendant notion of attenuation, these results are what one would expect. From here on, we will assume that what Weidhaas & Schmid call ‘non-derived verbs’ are in fact verbs derived from non-lexical roots and the verbal suffix (cf. also Audring et al. (2017) above).

Another observation that can be made based on the data in table 2 is that the frequencies of semantic and pragmatic attenuation in type II verbs is much lower than in the other two types of verbs. As already mentioned in the introduction, Weidhaas & Schmid are reluctant to assume that there is a homophonous *-l-* suffix in (especially) the nouns from which their type II verbs are derived, as proposed by Audring et al. (2017) in the case of Dutch. They are reluctant to do so, because they think such an account would fail to explain why semantic and pragmatic attenuation also occurs for this type of verb. However, they note themselves that the low frequencies for semantic and pragmatic attenuation in type II verbs ‘supports the homonymy view to some extent’ (2015: 208). We will take up this issue by including Weidhaas & Schmid’s type II verbs in the current study on the *-el* and *-er* suffixes in Dutch, to see to what extent this type of verb behaves similarly in its semantics and pragmatics compared to the other types of verbs in Dutch and Afrikaans.

To conclude, Weidhaas & Schmid present a detailed dictionary- and annotation study into German *-eln* verbs. Setting aside the fact that we do not follow their assumption that their

type III verbs are non-derived verbs, their study is a valuable methodological example for our own dictionary- and annotation study, and their German results are a useful base to compare the Dutch and Afrikaans results to.

2.3 Creemers et al. (2018)

One of the main goals of Creemers et al. (2018) is to propose a more fine-grained division in the typology of derivational affixes than the classical two-way division of level I and level II affixes (Siegel 1974; Kiparsky 1982 et seq.; Selkirk 1982; Giegerich 1999 a.o.). In the classical two-way division, level I affixes are stress-shifting affixes and level II affixes are stress-neutral affixes. Furthermore, level I affixes may attach to bound stems (non-lexical roots), whereas level II affixes cannot. The order of the two types of affixes with respect to each other is that level II affixes can only occur more peripherally than level I affixes. Two other less prominent criteria to distinguish the two types of affixes that have been put forward are productivity and semantic transparency (Creemers et al. 2018: 49). That is, level I affixes are generally less productive than level II affixes, and level I affixes often have a less transparent meaning than level II affixes. Creemers et al. partly adopt this classical division of suffix types, however, they propose that affixes that belong to category level I can in fact be split up into two subcategories, which they label level Ia and level Ib affixes. An important criterium for an affix to fall in either of the two subcategories is their categorial flexibility. Both De Belder (2011) and Lowenstamm (2015) observe that in Dutch and English respectively, the same derivational affix can sometimes result in the creation of an adjective and sometimes in that of a noun. Examples for both languages from Creemers et al. (2018: 46-27) are given in (21) and (22).⁷

(21)	a. <i>-aat</i> _A	b. <i>-aat</i> _N	(Dutch)
	<i>accuur-aat</i>	<i>kandid-aat</i>	
	ACCUR-AAT	KANDID-AAT	
	'accurate'	'candidate'	
(22)	a. <i>-ian</i> _A	b. <i>-ian</i> _N	(English)
	<i>reptile_N-IAN</i>	<i>LIBRAR-IAN</i>	
	'reptilian'	'librarian'	

(21) shows that the Dutch suffix *-aat* can both result in an adjective ('accurate') and in a noun ('candidate'). Similarly, (22) shows that the English suffix *-ian* can either create an adjective ('reptilian') or a noun ('librarian'). These suffixes are far from the only affixes with such categorically flexible behavior (Creemers et al. 2018: 47). They are furthermore always level I suffixes under the classical two-way division, since they can affect the stress pattern of the stem. For instance, in the case of (22a), *reptile* has its main stress on the first syllable (réptile), but in *reptilian* the main stress has shifted one syllable to the right (reptílian).⁸ However, given that there are also level I affixes which do not show categorial flexibility, Creemers et al. propose to divide the set of level I affixes into a subcategory that shows categorial flexibility

⁷ We follow the glossing convention of Creemers et al. (2018). That is, bound lexical morphemes are glossed in small caps. These include both non-lexical roots and the affixes themselves. Independent forms (lexical roots) are glossed with the English translation and lexical category (V for verbal, N for nominal and A for adjective).

⁸ Note that stress shift can only be seen when an affix attaches to a lexical stem. In cases in (21) and (22b), the stem is a non-lexical root, for which the stress pattern prior to suffixation thus cannot be established. Stress shift is also excluded when the affix itself cannot bear stress, as in the case of affixes whose vowel is a schwa, for instance. See Creemers et al. (2018) for more discussion.

(level Ia) and a subcategory that does not (level Ib). The overview of the properties of the three types of affixes Creemers et al. propose is given in Table 3.

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

Table 3. Overview of properties of three types of affixes (Creemers et al. 2018: 50)

Let us consider an example affix for each level type.⁹ (23) illustrates the case of level Ia suffix *-iek*. This suffix can be stress shifting – the first property of a level Ia suffix – which can be seen when the stem is an independent lexical item. For instance, in (23b), the stem is the noun *canón* ‘*canon*’, which has the main stress on the second syllable. The derived adjective *canoniek* ‘*canonical*’, however, has the main stress on the suffix. (23) also shows the second property of a level Ia suffix, namely that it is categorially flexible. That is, in (23a) the suffix *-iek* derives a noun, in (23b) it derives an adjective, and in (23c) it can either derive a noun or an adjective. The third property of level Ia suffixes, being able to attach to a bound stem, is shown in (23a) and (23c) – both *pan-* and *ant-* are non-lexical roots. The final property of level Ia suffixes – its relative position w.r.t. the stem) will be illustrated below.

(23) a. <i>-iek</i> _N	b. <i>-iek</i> _A	c. <i>-iek</i> _{N/A}
<i>pan-iek</i>	<i>canon-iek</i>	<i>ant-iek</i>
PAN-IEK	canon _N -IEK	ANT-IEK
‘panic’	‘canonical’	‘antique’

In (24) the suffix *-(e)lijk* is used to illustrate the properties of level Ib suffixes. The first property, being able to shift stress, can be illustrated with the derived words in (24a) and (24b). The verbal stem *áanhoud* ‘*continue*’ in (24a) has its main stress on the first syllable, but after the suffix *-elijk* is attached, the stress shifts: *aanhóúdelijk* ‘*continuous*’. The nominal stem *vijand* ‘*enemy*’ in (24b) has the main stress on the first syllable. With the suffix *-lijk*, the stress shifts: *vijándelijk* ‘*hostile*’. The second property, not being categorially flexible, can be seen in (24): all words derived by the suffix *-(e)lijk* have an adjectival status. The third property, being able to attach to bound stems, is illustrated in (24c), where the suffix attaches to the non-lexical root *vro-*.

(24) a. <i>-(e)lijk</i> _A	b. <i>-(e)lijk</i> _A	c. <i>-(e)lijk</i> _A
<i>aanhoud-elijk</i>	<i>vijand-elijk</i>	<i>vro-lijk</i>
continue _V -LIJK	enemy _N -LIJK	VRO-LIJK
‘continuous’	‘hostile’	‘cheerful’

Now that we have determined that *-iek* is a level Ia suffix and *-(e)lijk* a level Ib suffix, we can illustrate the fourth property of these suffixes, namely their relative order with relation to the stem. According to Creemers et al., level Ia suffixes directly follow the stem. Level Ib suffixes

⁹ All examples are taken from Creemers et al. (2018), except (25c), as they only provided two examples to illustrate the suffix *-heid*. See their paper for more examples per affix type.

can also directly follow the stem, but when there is also a level Ia suffix in the derived word, the level Ib suffix will always occur outside of the level Ia suffix. This latter fact is illustrated in (25) (Creemers et al. 2018: 60).

- (25) a. *publ-iek-elijk*
 PUBL-IEK-LIJK
 ‘publicly’
- b. **publ-(e)lijk-iek*
 PUBL-LIJK-IEK

In (26) the suffix *-heid* is used to illustrate the properties of level II affixes. The first property, being stress neutral, can be seen especially in case of (26c): in the adjective *belééfd* ‘polite’, the main stress is on the second syllable. The position of stress remains the same after suffixation of *-heid*: *belééfdheid* ‘politeness’. The second property, being categorically rigid, can be seen in all three examples: the output is always a noun. The third property, not being able to attach to a bound stem is illustrated by all the stems being individual lexical items (*schoon* ‘clean’, *scheef* ‘askew’, *beleefd* ‘polite’).

- (26) a. *-heid*_N
schoon-heid
 clean_A-HEID
 ‘beauty’
- b. *-heid*_N
scheef-heid
 askew_A-HEID
 ‘flexure’
- c. *-heid*_N
beleefd-heid
 polite_A-HEID
 ‘politeness’

Finally, the fourth property of level II suffixes is illustrated in (27), namely the fact that they can only occur in a more peripheral position than level Ia and level Ib suffixes. (Creemers et al. 2018: 60).

- (27) a. *publ-iek-elijk-heid*
 PUBL-IEK-LIJK-HEID
 ‘the state of being public’
- b. **publ-heid-iek-elijk*
 PUBL-HEID-IEK-LIJK
- c. **publ-iek-heid-elijk*
 PUBL-IEK-HEID-LIJK

This concludes our discussion of Creemers et al. In our analysis of the verbal *-el* and *-er* suffixes in Dutch and Afrikaans in section 5, we will use their three-way division of affix types. Since they did not include the *-el* and *-er* suffixes in their typology of Dutch affixes, our study will thus expand their typology of Dutch affixes and apply it to the Afrikaans affixal domain.

3. Methodology

3.1 Data collection

A list of *-el* verbs and a list of *-er* verbs was collected from the *Van Dale Groot Woordenboek van de Nederlandse Taal* for Dutch and the *Woordeboek van die Afrikaanse Taal* and the *Handwoordeboek van die Afrikaanse Taal* for Afrikaans. For Dutch, the data collection proceeded in the following two steps. First, a search was done in the online version of the dictionary using a function that makes it possible to trace verbs ending in *-elen* or *-eren*. Second, the lists of verbs were manually checked for irrelevant or incorrect hits. Following the methodology of data collection of Weidhaas & Schmid (2015), we also manually filtered out all *-el* and *-er* verbs with an additional prefix. This was done in order for the semantic and pragmatic annotation not to be potentially influenced by the meaning of such additional prefixes. For Dutch, the data collection resulted in a list of 299 *-el* verbs and 109 *-er* verbs. For Afrikaans, the online version of the dictionary unfortunately does not provide a function to

search for a specific part-of-speech ending in a specific morpheme. This means that the data collection for Afrikaans proceeded differently from Dutch. As a first step, we manually checked whether the verbs on the Dutch lists of *-el* and *-er* verbs also occur in the *Woordeboek van die Afrikaanse Taal*. As a second step, one of the authors of the paper who is a native speaker investigated jointly with other native speakers whether there are *-el* and *-er* verbs in Modern Afrikaans that did not occur on the list of Dutch verbs. This data collection resulted in a list of 130 *-el* verbs and 53 *-er* verbs in Afrikaans.

3.2 Annotation

The data were annotated by one native speaker per language – two of the authors of the paper – in combination with information provided by the language specific dictionaries. One sociolinguistic and three categories of linguistic properties were annotated for. The sociolinguistic factor concerned ‘standard versus colloquial/dialectal’ status of the verbs. That is, in some cases the dictionary indicated a verb as ‘colloquial’ or ‘dialectal’. In such cases, these verbs were annotated for as ‘non-standard’. If no such indication was given, verbs were annotated as ‘standard’.

The three categories of linguistic properties that were annotated for are morphological, semantic, and pragmatic. The morphological annotation category concerned the morphological base type of the *-el* and *-er* verbs. We adopted the five morphological base types as proposed by Audring et al. (2017) (see section 1 and 2). The five types are given here in (28)-(32). The labeling of the types is ours. Note that this labeling is different than the order in which the base types are presented in Audring et al. We have changed the order in such a way that the types with a nominal base – our type II and III – follow each other in the order. In (33)-(37) respective abstract examples are given for Dutch. The same base types exist for *-er* verbs in Dutch, and for both *-el* and *-er* verbs in Afrikaans.¹⁰

(28) X_V - <i>el-en</i>	X is unambiguously a verb	Type I
(29) $X(-el\text{ included})_N$ -en	X is unambiguously a noun, which ends in <i>-el</i>	Type II
(30) X_N - <i>el-en</i>	X is unambiguously a noun	Type III
(31) X - <i>el-en</i>	X has no category, i.e. it is a non-lexical root)	Type IV
(32) $X_{V/N}$ - <i>el-en</i>	X is ambiguous between a noun and a verb	Type V

Concrete examples, as given above in the introduction, are repeated here respectively for clarity.

- (33) *hink_V-el-en* ‘to hop repeatedly’ – *hink_V-en* ‘to limp’
 (34) *moff_N-el-en* ‘to cover up’ – *mof_N* ‘sleeve’
 (35) *kabb-el-en* ‘to ripple (of water)’ – no lexical base
 (36) *krass_{V/N}-el-en* ‘to scrape lightly’ – *krass_V-en* ‘to scrape’ – *kras_N* ‘scratch’
 (37) *circe_N-en* ‘to circle’ – *circe_N* ‘circle’

The semantic annotation category comprised two subcategories. The first subcategory was the property of *iterativity*. That is, for each verb we annotated whether it has a semantic component of iteration or not. We adopted Weidhaas & Schmid (2015)’s annotation strategy for semantic properties to decide whether a verb has an iterative component or not. That is, the *-el* or *-er* verb is either compared to the verbal base verb if such verb exists in the language

¹⁰ In the case of Afrikaans, infinitival *-en* is absent, cf. footnote 1.

(i.e. in the case of morphological base type I, cf. (28)). If the dictionary indicated an iterative component for the *-el* or *-er* verb that was not present in the base verb, the *-el* or *-er* verb was annotated as iterative. As an example, consider again (33). The *-el* verb *hinkelen* has as its entry in the dictionary *zich met kleine sprongetjes voortbewegen* ‘to move oneself forward in small jumps’. The entry for its verbal base *hinken* is *mank lopen* ‘to limp’. In the entry for *hinkelen* the nominal constituent *kleine sprongetjes* ‘small jumps’ is used, the occurrence of ‘jumps’ in plural indicating an iterative event. This meaning component is not present in the entry for *hinken*; it is part of the semantics of *hinkelen* itself. Therefore, *hinkelen* was annotated with a ‘YES’ for iteration. If the *-el* or *-er* verb did not have a verbal base, we compared it to its closest synonym. For example, in the case of (39), the *-el* verb *zwendelen* does not have a verbal base. Its closest synonym is *frauderen* ‘to fraud’ (40).

(39) *zwendelen* ‘to scam/fraud’ (40) *frauderen* – ‘to fraud’

The dictionary entry for *zwendelen* is *oneerlijk zijn in de handel* ‘be dishonest during the trade’. The entry for *frauderen* is *fraude plegen* ‘to execute something fraudulent’. There is no indication of a semantic component of iteration in either of the two entries. The verb *zwendelen* was therefore annotated with a ‘NO’ for iteration. The second semantic subcategory was *intensity*. A property that *-el* and *-er* verbs have in common, but that has not been investigated in any detail in Weidhaas & Schmid (2015) for German or Audring et al. (2017) for Dutch, is that they can both indicate either low intensity (also labeled attenuation) or high intensity. We included the direction of intensity in our annotation to get a more detailed picture of the semantic range of these suffixes. We used the same annotation strategy as we did for iteration. That is, if there was a verbal base for a particular verb, it was assessed whether the verb with suffix was of a higher or lower intensity than the verb without suffix. In the case of verbs with other morphological base types, we compared them to the closest synonyms. An example of a Dutch *-el* verb that was annotated as ‘LOW INTENSITY’ is given in (40), an example of a verb that was annotated as ‘HIGH INTENSITY’ is given in (41), and a verb that was annotated as ‘NEUTRAL’ for intensity is given in (42).

(40) *pruttelen* ‘to simmer’ (41) *buffelen* ‘to beaver away’ (42) *knevelen* ‘to muzzle’

The pragmatic annotation category involved the positivity or negativity of the evaluation of the event expressed by the *-el* or *-er* verb. That is, we annotated for the verb being able to signal *endearment* (a positive evaluation) or *pejorative meaning* (a negative evaluation). Given that this is subjective (see also Weidhaas & Schmid 2015), we only annotated a verb as ‘YES’ for either endearment or pejorative meaning if the dictionary entry contained an adjective or adverb that was clearly positive or negative, or if we as native speakers had a very strong judgment about the presence of an endearing or pejorative meaning. If we had a slightly less strong judgment or if our intuition was that a particular context was needed for the verb to signal endearment or pejorative meaning, we annotated the verb as ‘POSSIBLE’ for the type of pragmatic meaning under consideration. In all other cases, we annotated the verb as ‘NO’ for the type of pragmatic meaning under consideration. An example of a Dutch *-el* verb that was annotated as ‘YES’ for endearment is given in (43). The dictionary entry for this verb is *speels bewegen* ‘to move playfully’, the adverb *speels* ‘playfully’ indicating endearment. An example of a Dutch *-el* verb that was annotated as ‘YES’ for pejorative meaning is given in (44).

The dictionary entry for this verb is *vervelend praten* ‘to talk in an annoying way’, the adverb *vervelend* ‘annoyingly’ indicating pejorative meaning.

(43) *dartelen* ‘to frolic’ (44) *wauwelen* ‘to waffle’

This concludes our presentation of the methodology of our dictionary and annotation study. The next section presents the results of this study.

4. Results

Let us first look at the sociolinguistic factor, namely whether a verb is part of the standard language or not. The numbers and percentages are given for the *-el* and *-er* verbs in both languages in Table 4.

	Dutch		Afrikaans	
	<i>-el</i>	<i>-er</i>	<i>-el</i>	<i>-er</i>
Standard	240 (80,6%)	95 (86,2%)	112 (86,2%)	50 (94,3%)
Non-standard	59 (19,4%)	14 (13,8%)	18 (13,8%)	3 (5,7%)
Total	299 (100%)	109 (100%)	130 (100%)	53 (100%)

Table 4. General overview of frequencies of standard/non-standard verbs

As can be seen from the table, the majority of the data set is part of the standard language. Only smaller subsets of *-el* and *-er* verbs in both languages were indicated as ‘colloquial’ or ‘dialectal’ in the respective dictionaries.

Let us now move on to the more narrowly linguistic categories. The first category we consider is the morphological base type of the verbs. Table 5 gives the frequencies per base type for the *-el* and *-er* verbs in both languages. Recall that type I verbs are verbs whose base is a verb, type II are verbs whose base is a noun which ends in *-el/-er*, type III are verbs whose base is a noun which does not end in *-el/-er*, type IV are verbs whose base is a non-lexical root, and type V are verbs whose base is ambiguous between a verb and noun.

	Dutch		Afrikaans	
	<i>-el</i>	<i>-er</i>	<i>-el</i>	<i>-er</i>
Type I	35 (11,7%)	15 (13,8%)	14 (10,8%)	9 (17,0%)
Type II	51 (17,1%)	2 (1,8%)	31 (23,9%)	8 (15,0%)
Type III	10 (3,3%)	3 (2,8%)	3 (2,3%)	3 (5,7%)
Type IV	128 (42,8%)	76 (69,7%)	75 (57,7%)	29 (54,7%)
Type V	75 (25,1%)	13 (11,9%)	7 (5,3%)	4 (7,6%)
Total	299 (100%)	109 (100%)	130 (100)	53 (100%)

Table 5. Frequency overview of morphological categories

The following observations can be made from table 5. A first observation is that for both *-el* and *-er* verbs in both languages, the largest set of verbs is of type IV – verbs whose base is a non-lexical root. This is in stark contrast with the German results as reported by Weidhaas & Schmid (2015), where the set of non-lexical roots as bases comprises only 8% of the total set of *-eln* verbs (see table 1). However, these data nuance the claim of Audring et al. (2017) that the large majority of the Dutch *-el* verbs are of this base type. That is, a percentage of 42,8% cannot be seen as ‘the large majority’, and the percentages of type I (11,7%), type II (17,1%) and especially type V (25,1%) are higher than one would expect if the large majority were of

one type only. A second observation is that type III is by far the smallest set of verbs in both languages for both the *-el* and *-er* verbs. A third observation is that type V is rarer in Afrikaans than in Dutch, whereas the reverse holds for type II. Besides these two differences in frequency patterns, all other frequencies are very similar in the two languages.

Next, we consider the semantic category and its two subcategories, namely iteration and intensity. The frequencies are given in table 6 for both languages and both the *-el* and *-er* verbs.

	Dutch		Afrikaans	
	<i>-el</i>	<i>-er</i>	<i>-el</i>	<i>-er</i>
iteration	240 (80,6%)	95 (86,2%)	110 (84,6%)	47 (88,7%)
no iteration	59 (19,4%)	14 (13,8%)	20 (15,%)	6 (11,3%)
low intensity	170 (56,9%)	45 (41,3%)	73 (56,2%)	23 (43,4%)
high intensity	52 (17,7%)	55 (50,5%)	27 (20,8%)	28 (52,8%)
neutral	76 (25,4%)	9 (8,2%)	30 (23,0%)	2 (3,8%)
Total	299 (100%)	109 (100%)	130 (100)	53 (100%)

Table 6. Frequency overview of semantic categories

The table shows the following relevant patterns. First, it can be seen that the large majority of *-el* and *-er* verbs in both languages have the semantic component of iteration. Second, we see in both languages that low intensity is more frequent with *-el* verbs compared to *-er* verbs, whereas the reverse holds for high intensity. However, low intensity is still quite frequent in *-er* verbs, high intensity with *-el* verbs being much lower in comparison. In other words, low intensity is quite a common property of both *-el* and *-er* verbs in both languages, whereas high intensity is a more prominent property of *-el* verbs than of *-er* verbs.

Let us now turn to the pragmatic annotation category and its two subcategories endearment and pejorative meaning. The frequencies are given in table 7.

	Dutch		Afrikaans	
	<i>-el</i>	<i>-er</i>	<i>-el</i>	<i>-er</i>
endearing	21 (7,0%)	2 (1,8%)	6 (4,6%)	2 (3,8%)
possibly endearing	78 (27,1%)	32 (29,6%)	28 (21,5%)	8 (1,9%)
not endearing	199 (65,9%)	75 (68,6%)	96 (73,9%)	43 (94,3%)
pejorative	74 (24,7%)	13 (11,9%)	17 (13,1%)	9 (17,0%)
possibly pejorative	78 (27,1%)	30 (27,5%)	52 (40,0%)	16 (30,2%)
not pejorative	146 (48,2%)	66 (60,6%)	61 (46,9%)	28 (52,8%)
Total	299 (100%)	109 (100%)	130 (100)	53 (100%)

Table 7. Frequency overview of pragmatic categories

We can observe the following from this table. First, both pragmatic features are present in a subset of both *-el* and *-er* verbs, and in both languages. Second, pejorative meaning is slightly more frequent overall than endearment. Third, especially the subset of *-er* verbs in Afrikaans has a very low frequency of endearment as a pragmatic feature.

Having looked at all linguistic categories separately, let us now investigate the relation between the morphological base type of the verbs on the one hand, and on the other their semantic and pragmatic properties on the other. Let us first examine the frequency tables of the semantic and pragmatic features per morphological base type for each subset of verbs in

turn.¹¹ Table 8 gives the frequencies of the semantic and pragmatic features per morphological base type of the subset of Dutch *-el* verbs, table 9 for the subset of Dutch *-er* verbs, table 10 for the subset of Afrikaans *-el* verbs and table 11 for the subset of Afrikaans *-er* verbs. What is important to notice from tables 8 to 11 is that for all subsets of verbs, and for all morphological base types, at least a subset of verbs shows the semantic features and/or pragmatic features we have considered. This is in line with the findings of Weidhaas & Schmid (2015) for the semantic and pragmatic features of German *-eln* verbs of different base types. Indeed, in their German data too a subset of all the morphological base types considered showed the semantic and pragmatic features related to attenuation.

	Iteration	Semantic		Pragmatic		total
		low intensity	high intensity	Endearment	Pejorative	
Type I	34 (87,1%)	27 (77,1%)	7 (20,0%)	20 (57,1%)	17 (48,6%)	35 (100%)
Type II	33 (64,7%)	12 (23,5%)	4 (7,8%)	4 (7,8%)	17 (33,3%)	51 (100%)
Type III	9 (90,0%)	4 (40,0%)	3 (30,0%)	1 (10,0%)	3 (30,0%)	10 (100%)
Type IV	95 (74,2%)	82 (64,1%)	8 (6,25%)	37 (28,9%)	55 (43,0%)	128 (100%)
Type V	69 (92,0%)	45 (60,0%)	18 (24,0%)	25 (33,3%)	25 (33,3%)	75 (100%)

Table 8. Frequencies semantic/pragmatic features per base type: Dutch *-el*

	Iteration	Semantic		Pragmatic		total
		low intensity	high intensity	Endearment	Pejorative	
Type I	15 (100%)	3 (20,0%)	12 (80,0%)	1 (6,7%)	4 (26,7%)	15 (100%)
Type II	1 (50,0%)	1 (50,0%)	0 (0,0%)	1 (50,0%)	1 (100%)	2 (100%)
Type III	2 (66,7%)	1 (33,3%)	1 (33,3%)	2 (66,7%)	2 (66,7%)	3 (100%)
Type IV	57 (75,0%)	37 (48,7%)	32 (42,1%)	27 (35,5%)	30 (39,5%)	76 (100%)
Type V	13 (100%)	3 (23,1%)	10 (76,9%)	3 (23,1%)	5 (38,5%)	13 (100%)

Table 9. Frequencies semantic/pragmatic features per base type: Dutch *-er*

	Iteration	Semantic		Pragmatic		total
		low intensity	high intensity	Endearment	Pejorative	
Type I	14 (100%)	10 (71,4%)	3 (21,4%)	6 (42,9%)	5 (35,7%)	14 (100%)
Type II	25 (80,6%)	10 (32,3%)	6 (19,4%)	3 (9,7%)	11 (35,5%)	31 (100%)
Type III	3 (100%)	0 (0,0%)	1 (33,3%)	0 (0,0%)	0 (0,0%)	3 (100%)
Type IV	62 (82,7%)	49 (65,3%)	15 (20,0%)	23 (30,7%)	51 (68,0%)	75 (100%)
Type V	6 (86,7%)	4 (57,1%)	2 (28,6%)	2 (28,6%)	2 (28,6%)	7 (100%)

Table 10. Frequencies semantic/pragmatic features per base type: Afrikaans *-el*

	Iteration	Semantic		Pragmatic		total
		low intensity	high intensity	Endearment	Pejorative	
Type I	9 (100%)	5 (55,6%)	3 (33,3%)	0 (0,0%)	2 (22,2%)	9 (100%)
Type II	5 (62,5%)	5 (62,5%)	3 (37,5%)	4 (50,0%)	5 (62,5%)	8 (100%)
Type III	3 (100%)	0 (0,0%)	2 (66,7%)	0 (0,0%)	0 (0,0%)	3 (100%)
Type IV	26 (89,7)	13 (44,8%)	16 (55,2%)	6 (20,7%)	17 (58,6%)	27 (100%)
Type V	4 (100%)	0 (0,0%)	4 (100%)	0 (0,0%)	1 (25,0%)	4 (100%)

Table 11. Frequencies semantic/pragmatic features per base type: Afrikaans *-er*

¹¹ For ease of exposition, the three-way annotation for the pragmatic features as 'YES', 'POSSIBLE' and 'NO' is collapsed in a two-way presentation. That is, all verbs annotated as 'YES' and 'POSSIBLE' have been counted as 'YES' in the tables 8-12.

Finally, table 12 presents the frequencies of all four subsets of verbs combined in one overview table. As we have seen in detail in the tables 8-11, table 12 gives us an immediate picture of the fact that for all morphological base types, a subset of verbs shows the semantic properties of iteration, low intensity and/or high intensity. The same goes for the pragmatic features of endearment and pejorative meaning. In sum, all morphological base types contain instances of these semantic and/or pragmatic meanings after suffixation of *-el/-er*. This suggests that the *-el* and *-er* verbs with morphological base type II – that is, a nominal base that already contains an *-el* or *-er* morpheme – should receive a similar analysis as the *-el/-er* verbs with any of the other morphological base types (cf. Weidhaas & Schmid 2015; *pace* Audring et al. 2017).

	Iteration	Semantic		Pragmatic		
		low intensity	high intensity	Endearment	Pejorative	total
Type I	72 (98,6%)	45 (61,6%)	25 (34,2%)	27 (37,0%)	28 (38,4%)	73 (100%)
Type II	55 (66,6%)	28 (30,4%)	13 (14,1%)	12 (13,0%)	34 (37,0%)	92 (100%)
Type III	17 (89,5%)	10 (52,6%)	7 (36,8%)	6 (31,6%)	5 (26,3%)	19 (100%)
Type IV	240 (78,45)	181 (59,2%)	71 (23,2%)	93 (30,4%)	153 (50,0%)	306 (100%)
Type V	92 (92,9%)	52 (52,5%)	34 (34,3%)	30 (30,3%)	33 (33,3%)	99 (100%)

Table 12. Frequency overview of semantic/pragmatic features per base type (all)

5. Analysis: *-el* and *-er* as level Ia suffixes

In order to determine what type of suffixes the *-el* and *-er* suffixes are, the properties per suffix type from Creemers et al. as mentioned in subsection 2.3, are repeated here for convenience.

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

Table 13. Overview of properties of three types of affixes (Creemers et al. 2018: 50)

The first property, being able to shift stress, is not a testable property in the case of the *-el* and *-er* suffixes. All morphological bases of the verbs in the dataset are monosyllabic, meaning that the suffix itself is the only morpheme to which stress could potentially be shifted. Since the only vowel in these suffixes is a schwa, which can never bear stress, stress shift onto the suffix can therefore never take place. The second property, being categorially flexible, can be either true or false in the case of the *-el* and *-er* suffixes, depending on whether one assumes the existence of a homophonous *-el* and *-er* in morphological base type II, or not. If one takes the homophony path, one assumes there to be a verbal suffix *-el* and verbal suffix *-er* for the other morphological base types, and a homophonous nominal suffix *-el* and nominal suffix *-er* for type II verbs. In such an analysis, the answer to the question whether the suffixes *-el* and *-er* are categorially flexible should thus be ‘no’, and therefore lead to the analysis of these suffixes as either level Ib or level II suffixes. However, if one assumes that the *-el* and *-er* suffixes are always the same suffixes in all morphological base types, one would analyze them as level Ia suffixes, given their ability to derive both nouns (type II bases, from which an *-el* or *-er* verb can be derived by null suffixation) and verbs (all other types). By looking at the third

property, being able to attach to a bound stem, we cannot decide between the two analyses, because this property is expected by both. Note also that this third property forces the homophony analysis to decide on level Ib status, since level II suffixes cannot attach to a bound stem. For the fourth property, the position of the suffix relative to the stem, the two analyses make different predictions, which means we can use that property to determine which analysis is correct. That is, the homophony analysis, in which the *-el* and *-er* suffixes are level Ib suffixes, predicts that *-el* and *-er* cannot co-occur with other level Ib suffixes. The uniform analysis of *-er* and *-el* as level Ia suffixes, which due to their categorical flexibility can both derive type II verbs and all other verb types, predicts that *-el* and *-er* should be able to occur inside level Ib suffixes. A suffix that is categorized as level Ib suffix by Creemers et al. (2018: 53-54) is *-ig*. In Afrikaans, this suffix is *-(e)(r)ig*. As in the case of *-el* and *-er*, for *-ig/-(e)(r)ig* it cannot be shown that they are stress shifting – the first property of level Ib affixes – since the vowel of the suffix is a schwa. The second property of level Ib affixes, being categorically rigid is illustrated for Dutch *-ig* in (46), and in (47) for *-(e)(r)ig*. Both suffixes always derive an adjective.

(46) a. <i>-ig</i> _A	b. <i>-ig</i> _A	c. <i>-ig</i> _A
<i>netel-ig</i>	<i>nootlott-ig</i>	<i>zuin-ig</i>
<i>nettle_{N-IG}</i>	<i>fate_{N-IG}</i>	<i>ZUIN-IG</i>
'precarious'	'fatal'	'stingy'

(47) a. <i>-ig</i> _A	b. <i>-ig</i> _A	c. <i>-ig</i> _A
<i>netel-ig</i>	<i>noodlott-ig</i>	<i>suin-ig</i>
<i>nettle_{N-IG}</i>	<i>fate_{N-IG}</i>	<i>SUIN-IG</i>
'precarious'	'fatal'	'stingy'

The fourth property, the relative order with respect to the base, is shown in (48)-(49) for Dutch *-ig* and in (50)-(51) for Afrikaans *-(e)(r)ig*. Recall from subsection 2.3 that *-iek* is a level Ia suffix, and that *-heid* is a level II suffix. The examples thus show that *-ig/-(e)(r)ig* follows level Ia suffixes, and precedes level II suffixes, meaning that its relative position is that of a level Ib suffix.

(48) a. <i>ant-iek-ig_A</i>	b. * <i>ant-ig-iek</i>	(49) a. <i>zuin-ig-heid</i>	b. * <i>zuin-heid-ig</i>
<i>ANT-IEK-IG</i>	<i>ANT-IG-IEK</i>	<i>ZUIN-IG-HEID</i>	<i>ZUIN-HEID-IG</i>
'antique-like'		'stinginess'	

(50) a. <i>pan-iek-erig</i>	b. * <i>pan-erig-iek</i>	(51) a. <i>suin-ig-heid</i>	b. * <i>suin-heid-ig</i>
<i>PAN-IEK-IG</i>	<i>PAN-IG-IEK</i>	<i>SUIN-IG-HEID</i>	<i>SUIN-HEID-IG</i>
'panicky'		'stinginess'	

Having illustrated the level Ib status of *-ig/-(e)(r)ig*, let us now examine the relative order of those suffixes and the *-el* and *-er* suffixes. In both Dutch and Afrikaans, *-ig/-(r)ig* can appear after suffixation of *-el* or *-er*, whereas the reverse order is ungrammatical. This is illustrated in table 14 for all verb types for both the *-el* and *-er* verbs, and in both languages.¹²

¹² Note that in the ungrammatical orders of *-ig* and *-er*, we target the ungrammaticality of this order with *-er* as the verbal suffix, which should not be confused with the comparative morpheme *-er*. For example, *blikkiger* is

	Dutch		Afrikaans	
	<i>-el</i>	<i>-er</i>	<i>-el</i>	<i>-er</i>
Type I	hakk-el-ig *hakk-ig-el	knapp-er-ig *knapp-ig-er	hakk-el-rig *hakk-rig-el	glibb-er-ig *glibb-ig-er
Type II	cirk-el-ig *cirk-ig-el	modd-er-ig *modd-ig-er	korr-el-rig *korr-rig-el	sluim-er-ig *sluim-ig-er
Type III	kring-el-ig *kring-ig-el	blikk-er-ig *blikk-ig-er	spikk-el-rig *spikk-rig-el	snipp-er-ig *snipp-ig-er
Type IV	aarz-el-ig *aarz-ig-el	treit-er-ig *treit-ig-er	babb-el-rig *babb-rig-el	stott-er-ig *stott-ig-er
Type V	drupp-el-ig *drupp-ig-el	snott-er-ig *snott-ig-er	hobb-el-rig *hobb-rig-el	knipp-er-ig *knipp-ig-er

Table 14. Order of *-el/-er* w.r.t. stem and level Ib suffix *-ig/-rig*

The fact that *-el* and *-er* precede the level Ib suffixes *-ig/-(e)(r)ig*, indicates that the former should be analyzed as level Ia suffixes rather than level Ib suffixes. Thus, the relative order of the *-el* and *-er* suffixes with relation to the stem and other suffixes works in favor of the uniform analysis of *-el* and *-er*, whereas it does not for the homophony analysis. We therefore assume that the uniform analysis of the *-el* and *-er* suffixes, which takes these suffixes to be level Ia suffixes, and hence categorically flexible, to be on the right track. Furthermore, the advantage of a uniform analysis of the *-er* and *-el* suffixes for all base types, makes it easier to account for the fact that a subset of verbs of base type II also show the semantic and pragmatic features present in a subset of other verb types. The fact that not all *-el* and *-er* verbs show exactly the same set of semantic features is also in line with the level Ia analysis of these suffixes, as level Ia affixes are taken to be less semantically transparent compared to affixes of other levels, with level II suffixes being the most semantically transparent (Creemers et al. 2018: 49).

In sum, a uniform analysis of *-el* and *-er* suffixes in *-el* and *-er* verbs of all base types, in which these suffixes have level Ia status and are therefore categorically flexible, is supported by the relative order of *-el* and *-er* with respect to the stem and other suffixes, and by the fact that they can attach to non-lexical roots. Such an analysis makes it easier to understand why a subset of type II verbs show the same semantic and pragmatic properties as the verbs of other base types: since they contain the same suffix, it is not unsurprising they are able to signal the same semantic and pragmatic behavior. However, since level Ia suffixes in general have less transparent semantics than higher level suffixes, we can still account for the fact that not all *-el* and *-er* verbs have exactly the same set of semantic and pragmatic features. The analysis of *-el* and *-er* suffixes in Dutch (and Afrikaans) as level Ia suffixes is an interesting expansion of the typology of Creemers et al. (2018:59), given that they claim that there are no level Ia verbal suffixes in Dutch. This study thus suggests that this claim should be revised.

6. Conclusion

The aim of this paper was two-fold. Descriptively, this study has aimed at enriching the typological description of Germanic *-el* and *-er* suffixes and the types of verbs they derive. This was executed by means of a detailed dictionary- and annotation study on *-el* and *-er* verbs in

grammatical as a comparative form of the adjective *blikkig* ‘can-like’, but not as the deverbal adjective of *blikkeren* ‘flikker’.

Dutch and Afrikaans, in which the morphological, semantic and pragmatic properties of these verbs were investigated. Following Audring et al. (2017) we included five types of morphological bases in the data set. The same five base types were also found for the Dutch *-el* verbs, Afrikaans *-el* verbs and Afrikaans *-er* verbs. The results of the annotation study have shown that in both *-el* and *-er* verbs and in both languages, type IV verbs (based on a non-lexical root) are the most frequent. As for the semantic features, our study showed that the large majority of verbs has an iterative meaning component. In addition, both *-el* and *-er* verbs in both languages can have a semantic component of high or low intensity, with high intensity more frequent for *-er* verbs than for *-el* verbs. Concerning the pragmatic features of *-el* and *-er* verbs, the study has shown that in both *-el* and *-er* verbs, and in both languages, endearment and pejorative meaning is possible, though the former is less frequent overall than the latter. Finally, the descriptive part of the study has also shown that the semantic and pragmatic features under consideration are present in a subset of all morphological verb types in both languages.

On the analytical front, this study aimed at determining whether one uniform analysis of *-el* and *-er* suffixes in verbs of all morphological base types was to be preferred over a homophony analysis of two homophonous suffixes for both *-el* and *-er*, and to analyze the level of the *-el* and *-er* suffixes. We have argued for a uniform analysis for *-el* and *-er* in all five morphological base types, and hence do not take the *-el* and *-er* suffixes in type II verbs – in which the *-el* and *-er* morphemes are part of the nominal base – to be different from the *-el* and *-er* suffixes in the verbs with other morphological base types. In terms of the three-way division of affix-types in Creemers et al. (2018), the *-el* and *-er* suffixes were shown to be level Ia suffixes, which challenges Creemers et al. (2018)'s claim that there are no verbal level Ia suffixes in Dutch.

Even though this was only a first detailed dictionary- and annotation study into Dutch and Afrikaans *-el* and *-er* verbs, we hope to have shown that the *-el* and *-er* suffixes are interesting morphemes from a morphological, semantic and pragmatic perspective. Interesting future research would include corpus and experimental studies (on the semantic and pragmatic properties of these verbs), as well as further detailed morphological investigation of the small set of Dutch and Afrikaans verbal suffixes and their position in the Dutch and Afrikaans affix systems.

7. Appendix

The appendix lists all the verbs in the data set of this study. First, all Dutch *-el* verbs are listed in alphabetical order, second all Dutch *-er* verbs, third all Afrikaans *-el* verbs, and last all Afrikaans *-er* verbs.

Verb	Language	Suffix	English translation	Base type
<i>aarzelen</i>	Dutch	-el	to doubt	Type IV
<i>babbelen</i>	Dutch	-el	to babble	Type IV
<i>bazelen</i>	Dutch	-el	to twaddle	Type IV
<i>bedelen</i>	Dutch	-el	to beg	Type IV
<i>beitelen</i>	Dutch	-el	to whittle	Type II
<i>bengelen</i>	Dutch	-el	to dangle/swing	Type II
<i>boemelen</i>	Dutch	-el	to pub-crawl	Type IV
<i>bokselen</i>	Dutch	-el	to beaver away	Type I

<i>bommelen</i>	Dutch	-el	to hum/zoom	Type III
<i>borrelen</i>	Dutch	-el	to bubble	Type V
<i>bottelen</i>	Dutch	-el	to bottle	Type II
<i>brabbelen</i>	Dutch	-el	to babble/mumble	Type IV
<i>braggelen</i>	Dutch	-el	to spill	Type IV
<i>breidelen</i>	Dutch	-el	to restrain	Type II
<i>briezelen</i>	Dutch	-el	to betray	Type II
<i>brijzelen</i>	Dutch	-el	to crush	Type IV
<i>broddelen</i>	Dutch	-el	to work badly	Type IV
<i>brokkelen</i>	Dutch	-el	to crumble	Type III
<i>bubbelen</i>	Dutch	-el	to bubble	Type II
<i>buffelen</i>	Dutch	-el	to beaver away	Type II
<i>buitelen</i>	Dutch	-el	to summersault	Type IV
<i>bundelen</i>	Dutch	-el	to bundle	Type II
<i>bungelen</i>	Dutch	-el	to dangle	Type II
<i>circelen</i>	Dutch	-el	to circle	Type II
<i>dartelen</i>	Dutch	-el	to frolic	Type IV
<i>debbelen</i>	Dutch	-el	to twiddle	Type IV
<i>dekselen</i>	Dutch	-el	to surpass	Type II
<i>dinkelen</i>	Dutch	-el	to go robbing	Type IV
<i>dobbelen</i>	Dutch	-el	to play dice	Type IV
<i>doddelen</i>	Dutch	-el	to stutter	Type IV
<i>doezelen</i>	Dutch	-el	to faint away	Type IV
<i>dommelen</i>	Dutch	-el	to drowse	Type IV
<i>dompelen</i>	Dutch	-el	to douse	Type IV
<i>drentelen</i>	Dutch	-el	to stroll	Type IV
<i>dreutelen</i>	Dutch	-el	to linger	Type IV
<i>drevelen</i>	Dutch	-el	to float	Type IV
<i>dribbelen</i>	Dutch	-el	to dribble	Type IV
<i>droedelen</i>	Dutch	-el	to doodle	Type IV
<i>druppelen</i>	Dutch	-el	to drip	Type V
<i>duikelen</i>	Dutch	-el	to fall	Type V
<i>duimelen</i>	Dutch	-el	to do nothing	Type V
<i>duizelen</i>	Dutch	-el	to feel dizzy	Type IV
<i>dutselen</i>	Dutch	-el	to drowse	Type IV
<i>dwarrelen</i>	Dutch	-el	to whirl	Type IV
<i>eikelen</i>	Dutch	-el	to nark	Type III
<i>fazelen</i>	Dutch	-el	to murmur	Type I
<i>femelen</i>	Dutch	-el	to gossip	Type IV
<i>fikkelen</i>	Dutch	-el	to cut clumsily	Type IV
<i>foefelen</i>	Dutch	-el	to deceive/hide	Type II
<i>foetelen</i>	Dutch	-el	to do something in secret	Type IV
<i>foezelen</i>	Dutch	-el	to do shady business	Type II
<i>fonkelen</i>	Dutch	-el	to sparkle	Type V
<i>frazelen</i>	Dutch	-el	to start talking (of kids)	Type IV
<i>fribbelen</i>	Dutch	-el	to twiddle	Type IV
<i>friemelen</i>	Dutch	-el	to fiddle with	Type IV

<i>frommelen</i>	Dutch	-el	to twiddle	Type IV
<i>frutstelen</i>	Dutch	-el	to fiddle with	Type IV
<i>gaffelen</i>	Dutch	-el	to work with a gaff	Type II
<i>garrelen</i>	Dutch	-el	to walk unsteadily	Type IV
<i>geselen</i>	Dutch	-el	to whip	Type II
<i>giechelen</i>	Dutch	-el	to giggle	Type V
<i>gniffelen</i>	Dutch	-el	to chuckle	Type V
<i>gobbelen</i>	Dutch	-el	to spurt	Type IV
<i>grabbelen</i>	Dutch	-el	to grab	Type V
<i>grommelen</i>	Dutch	-el	to mutter	Type V
<i>guichelen</i>	Dutch	-el	to act crazy	Type IV
<i>hakkelen</i>	Dutch	-el	to stutter	Type I
<i>haspelen</i>	Dutch	-el	to mess up	Type IV
<i>heibelen</i>	Dutch	-el	to quarrel	Type II
<i>hinkelen</i>	Dutch	-el	to hop	Type I
<i>hobbelen</i>	Dutch	-el	to bump	Type V
<i>hoddelen</i>	Dutch	-el	to work clumsily	Type IV
<i>hoetelen</i>	Dutch	-el	to mess up	Type IV
<i>hommelen</i>	Dutch	-el	to buzz	Type II
<i>huichelen</i>	Dutch	-el	to feign	Type IV
<i>huppelen</i>	Dutch	-el	to skip	Type I
<i>husselen</i>	Dutch	-el	to shake	Type I
<i>jengelen</i>	Dutch	-el	to whine	Type V
<i>jeuzelen</i>	Dutch	-el	to complain	Type I
<i>joechelen</i>	Dutch	-el	to cheer	Type I
<i>joggelen</i>	Dutch	-el	to joggle	Type IV
<i>jubelen</i>	Dutch	-el	to jubilate	Type V
<i>kabbelen</i>	Dutch	-el	to gurgle	Type IV
<i>kachelen</i>	Dutch	-el	to stroll	Type IV
<i>kekelen</i>	Dutch	-el	to talk loudly	Type IV
<i>keutelen</i>	Dutch	-el	to do unimportant things	Type V
<i>keuvelen</i>	Dutch	-el	to chat along	Type IV
<i>kibbelen</i>	Dutch	-el	to quibble	Type IV
<i>kiepelen</i>	Dutch	-el	to pinch	Type I
<i>kietelen</i>	Dutch	-el	to tickle	Type V
<i>kinkelen</i>	Dutch	-el	to shatter	Type V
<i>klepelen</i>	Dutch	-el	to clapper	Type II
<i>klingelen</i>	Dutch	-el	to jingle	Type I
<i>klommelen</i>	Dutch	-el	to mess up	Type IV
<i>klungelen</i>	Dutch	-el	to skimp	Type V
<i>knabbelen</i>	Dutch	-el	to nibble	Type V
<i>knevelen</i>	Dutch	-el	to muzzle	Type II
<i>knibbelen</i>	Dutch	-el	to pettifog	Type IV
<i>knoedelen</i>	Dutch	-el	to crinkle	Type IV
<i>knoefelen</i>	Dutch	-el	to mess up	Type IV
<i>knuddelen</i>	Dutch	-el	to spill	Type IV
<i>knuppelen</i>	Dutch	-el	to club	Type II

<i>kokkelen</i>	Dutch	-el	to strum	Type V
<i>konkelen</i>	Dutch	-el	to gossip	Type II
<i>korrelen</i>	Dutch	-el	to granulate	Type II
<i>krabbelen</i>	Dutch	-el	to scratch	Type V
<i>krakelen</i>	Dutch	-el	to shout	Type I
<i>kramakkelen</i>	Dutch	-el	to suffer	Type IV
<i>krasselen</i>	Dutch	-el	to scratch	Type V
<i>krekelen</i>	Dutch	-el	to mutter	Type I
<i>krengelen</i>	Dutch	-el	to haggle	Type IV
<i>kreukelen</i>	Dutch	-el	to scrunch up	Type V
<i>kriebelen</i>	Dutch	-el	to itch	Type V
<i>krijzelen</i>	Dutch	-el	to grind	Type IV
<i>krimpelen</i>	Dutch	-el	to ripple	Type V
<i>kringelen</i>	Dutch	-el	to form circles	Type V
<i>kronkelen</i>	Dutch	-el	to twist	Type V
<i>kruimelen</i>	Dutch	-el	to crumble	Type V
<i>kuchelen</i>	Dutch	-el	to cough lightly	Type V
<i>kukelen</i>	Dutch	-el	to crow	Type V
<i>kwakkelen</i>	Dutch	-el	to suffer from illness	Type V
<i>kwanselen</i>	Dutch	-el	to trade messily	Type IV
<i>kwebbelen</i>	Dutch	-el	to tattle	Type V
<i>kwetelen</i>	Dutch	-el	to gossip	Type IV
<i>kwezelen</i>	Dutch	-el	to act excessively pious	Type IV
<i>kwikkelen</i>	Dutch	-el	to shake	Type IV
<i>kwispelen</i>	Dutch	-el	to waggle	Type V
<i>lepelen</i>	Dutch	-el	to spoon	Type II
<i>lummelen</i>	Dutch	-el	to do nothing	Type V
<i>maggelen</i>	Dutch	-el	to write badly	Type IV
<i>metselen</i>	Dutch	-el	to build with bricks	Type IV
<i>meuzelen</i>	Dutch	-el	to nibble	Type I
<i>miegelen</i>	Dutch	-el	to drizzle	Type IV
<i>moffelen</i>	Dutch	-el	to whisk	Type III
<i>mokkelen</i>	Dutch	-el	to appease	Type IV
<i>mompelen</i>	Dutch	-el	to mumble	Type IV
<i>monkelen</i>	Dutch	-el	to laugh mockingly	Type IV
<i>morrelen</i>	Dutch	-el	to fumble	Type IV
<i>murmelen</i>	Dutch	-el	to mumble	Type IV
<i>nestelen</i>	Dutch	-el	to make a nest	Type V
<i>neutelen</i>	Dutch	-el	to linger	Type IV
<i>neuzelen</i>	Dutch	-el	to whine	Type V
<i>nibbelen</i>	Dutch	-el	to nibble	Type IV
<i>orgelen</i>	Dutch	-el	to play on an organ	Type II
<i>paggelen</i>	Dutch	-el	to waggle	Type IV
<i>pappelen</i>	Dutch	-el	to try to heal oneself with homemade remedies	Type IV
<i>peddelen</i>	Dutch	-el	to paddle	Type II
<i>peuzelen</i>	Dutch	-el	to nibble	Type IV

<i>piepelen</i>	Dutch	-el	to trick someone	Type II
<i>pikkelen</i>	Dutch	-el	to limp	Type IV
<i>pimpelen</i>	Dutch	-el	to drink excessively	Type IV
<i>pingelen</i>	Dutch	-el	to haggle	Type V
<i>poedelen</i>	Dutch	-el	to play in the water	Type V
<i>poekelen</i>	Dutch	-el	to talk excessively	Type IV
<i>popelen</i>	Dutch	-el	to lurk	Type IV
<i>pratelen</i>	Dutch	-el	to chat	Type I
<i>preukelen</i>	Dutch	-el	to fiddle with	Type IV
<i>prevelen</i>	Dutch	-el	to murmur	Type V
<i>priegelen</i>	Dutch	-el	to do very detailed work	Type IV
<i>prikkelen</i>	Dutch	-el	to prickle	Type V
<i>pronselen</i>	Dutch	-el	to blunder	Type IV
<i>prutselen</i>	Dutch	-el	to mess up lightly	Type I
<i>pruttelen</i>	Dutch	-el	to simmer	Type V
<i>puikelen</i>	Dutch	-el	to harm	Type IV
<i>pungelen</i>	Dutch	-el	to smuggle	Type II
<i>puzzelen</i>	Dutch	-el	to puzzle	Type II
<i>rabbelen</i>	Dutch	-el	to talk frantically	Type IV
<i>rammelen</i>	Dutch	-el	to clatter	Type V
<i>raspelen</i>	Dutch	-el	to rasp	Type V
<i>ratelen</i>	Dutch	-el	to talk frantically	Type V
<i>razelen</i>	Dutch	-el	to shake	Type V
<i>remelen</i>	Dutch	-el	to wiggle	Type IV
<i>reutelen</i>	Dutch	-el	to rattle	Type V
<i>reuzelen</i>	Dutch	-el	to rustle	Type IV
<i>revelen</i>	Dutch	-el	to talk nonsense	Type IV
<i>riedelen</i>	Dutch	-el	to play music	Type V
<i>rijmelen</i>	Dutch	-el	to make meaningless rhymes	Type V
<i>rimpelen</i>	Dutch	-el	to ripple	Type V
<i>rinkelen</i>	Dutch	-el	to clatter	Type V
<i>ritselen</i>	Dutch	-el	to rustle	Type V
<i>rochelen</i>	Dutch	-el	to rattle	Type V
<i>roddelen</i>	Dutch	-el	to gossip	Type V
<i>roefelen</i>	Dutch	-el	to pluck	Type IV
<i>rommelen</i>	Dutch	-el	to rumble	Type V
<i>ronkelen</i>	Dutch	-el	to snore	Type I
<i>ronselen</i>	Dutch	-el	to recruit	Type IV
<i>ruggelen</i>	Dutch	-el	to doubt	Type IV
<i>ruiselen</i>	Dutch	-el	to rustle	Type V
<i>rutselen</i>	Dutch	-el	to hustle	Type IV
<i>ruzelen</i>	Dutch	-el	to moult	Type IV
<i>sabbelen</i>	Dutch	-el	to suckle	Type V
<i>sappelen</i>	Dutch	-el	to hardly manage to get by	Type IV
<i>scaffelen</i>	Dutch	-el	to stroll	Type IV
<i>scharrelen</i>	Dutch	-el	to scrounge	Type V
<i>schemelen</i>	Dutch	-el	to flicker	Type IV

<i>schoffelen</i>	Dutch	-el	to hoe	Type II
<i>schotelen</i>	Dutch	-el	to serve on a plate	Type II
<i>schrerelen</i>	Dutch	-el	to walk with big steps	Type IV
<i>schrafelen</i>	Dutch	-el	to scrape together	Type IV
<i>schravelen</i>	Dutch	-el	to scratch	Type I
<i>schrobbelen</i>	Dutch	-el	to card	Type I
<i>schrompelen</i>	Dutch	-el	to ripple	Type V
<i>schuifelen</i>	Dutch	-el	to shuffle	Type V
<i>semmelen</i>	Dutch	-el	to nag	Type IV
<i>sijpelen</i>	Dutch	-el	to seep	Type V
<i>sjachelen</i>	Dutch	-el	to waggle	Type IV
<i>sjaukelen</i>	Dutch	-el	to back and forth while praying	Type IV
<i>sjoemelen</i>	Dutch	-el	to cheat	Type IV
<i>sjouwelen</i>	Dutch	-el	to chat	Type IV
<i>sleutelen</i>	Dutch	-el	to tinker	Type II
<i>slungelen</i>	Dutch	-el	to slouch	Type V
<i>smiespelen</i>	Dutch	-el	to whisper	Type IV
<i>smikkelen</i>	Dutch	-el	to enjoy eating	Type IV
<i>smoezelen</i>	Dutch	-el	to stain	Type IV
<i>smokkelen</i>	Dutch	-el	to smuggle	Type V
<i>snabbelen</i>	Dutch	-el	to chatter	Type V
<i>sneukelen</i>	Dutch	-el	to enjoy eating	Type IV
<i>sneuvelen</i>	Dutch	-el	to perish	Type IV
<i>snorkelen</i>	Dutch	-el	to snorkel	Type II
<i>snuffelen</i>	Dutch	-el	to sniff	Type V
<i>sobbelen</i>	Dutch	-el	to limp	Type IV
<i>spatelen</i>	Dutch	-el	to put on with a spatula	Type II
<i>speekselen</i>	Dutch	-el	to induce hypersalivation	Type II
<i>spikkelen</i>	Dutch	-el	to speckle	Type II
<i>sportelen</i>	Dutch	-el	to do sport recreationally	Type I
<i>sprankelen</i>	Dutch	-el	to sparkle	Type III
<i>sprenkelen</i>	Dutch	-el	to sprinkle	Type V
<i>sprikkelen</i>	Dutch	-el	to speckle	Type IV
<i>sprokkelen</i>	Dutch	-el	to collect	Type V
<i>stamelen</i>	Dutch	-el	to stammer	Type V
<i>stechelen</i>	Dutch	-el	to cheat	Type IV
<i>stempelen</i>	Dutch	-el	to stamp	Type II
<i>stendelen</i>	Dutch	-el	to make music going from café to café	Type IV
<i>stevelen</i>	Dutch	-el	to walk at a high pace	Type IV
<i>stijfselen</i>	Dutch	-el	to take through starch	Type II
<i>stippelen</i>	Dutch	-el	to speckle	Type V
<i>stoetelen</i>	Dutch	-el	to make a mess	Type IV
<i>stokelen</i>	Dutch	-el	to push	Type I
<i>stommelen</i>	Dutch	-el	to stumble	Type IV
<i>streuvelen</i>	Dutch	-el	to be confused	Type IV
<i>stribbelen</i>	Dutch	-el	to except	Type I

<i>strompelen</i>	Dutch	-el	to stumble	Type V
<i>strubbelen</i>	Dutch	-el	to bicker	Type IV
<i>struikelen</i>	Dutch	-el	to trip	Type V
<i>stuivelen</i>	Dutch	-el	to blow	Type V
<i>stuntelen</i>	Dutch	-el	to waggle	Type IV
<i>suizelen</i>	Dutch	-el	to whizz	Type I
<i>sukkelen</i>	Dutch	-el	to suffer from illness	Type V
<i>tafelen</i>	Dutch	-el	to dine	Type II
<i>tegelen</i>	Dutch	-el	to put tiles	Type II
<i>teutelen</i>	Dutch	-el	to chat	Type I
<i>tinkelen</i>	Dutch	-el	to cling	Type V
<i>tinselen</i>	Dutch	-el	to tease	Type IV
<i>tintelen</i>	Dutch	-el	to tingle	Type V
<i>tippelen</i>	Dutch	-el	to hook	Type V
<i>tjaffelen</i>	Dutch	-el	to stumble	Type I
<i>tokkelen</i>	Dutch	-el	to strum	Type V
<i>toortelen</i>	Dutch	-el	to mess up	Type II
<i>trakelen</i>	Dutch	-el	to stumble	Type II
<i>trampelen</i>	Dutch	-el	to frolic	Type IV
<i>trappelen</i>	Dutch	-el	to stamp	Type V
<i>trentelen</i>	Dutch	-el	to linger	Type IV
<i>treutelen</i>	Dutch	-el	to linger	Type IV
<i>treuzelen</i>	Dutch	-el	to linger	Type IV
<i>triefelen</i>	Dutch	-el	to talk nonsense	Type IV
<i>trippelen</i>	Dutch	-el	to tiptoe	Type V
<i>troggelen</i>	Dutch	-el	to trick	Type IV
<i>trommelen</i>	Dutch	-el	to drum	Type V
<i>truntelen</i>	Dutch	-el	to frolic	Type I
<i>trutselen</i>	Dutch	-el	to linger	Type I
<i>tuimelen</i>	Dutch	-el	to tumble	Type V
<i>tuttelen</i>	Dutch	-el	to fuss	Type I
<i>twinkelen</i>	Dutch	-el	to twinkle	Type V
<i>veugelen</i>	Dutch	-el	to pick at	Type II
<i>vendelen</i>	Dutch	-el	to pace up and down	Type IV
<i>waffelen</i>	Dutch	-el	to chat loudly	Type II
<i>waggelen</i>	Dutch	-el	to waggle	Type V
<i>wamelen</i>	Dutch	-el	to show signs of pregnancy	Type IV
<i>wankelen</i>	Dutch	-el	to shake	Type IV
<i>warrelen</i>	Dutch	-el	to whirl	Type IV
<i>wauwelen</i>	Dutch	-el	to waffle	Type V
<i>weifelen</i>	Dutch	-el	to doubt	Type IV
<i>wemelen</i>	Dutch	-el	to teem	Type V
<i>wentelen</i>	Dutch	-el	to wallow	Type V
<i>wervelen</i>	Dutch	-el	to whirl	Type V
<i>wichelen</i>	Dutch	-el	to foresee the future from signs	Type IV
<i>wiebelen</i>	Dutch	-el	to wiggle	Type V
<i>wiegelen</i>	Dutch	-el	to wiggle	Type V

<i>wiekelen</i>	Dutch -el	to flap to stay in a position (of birds)	Type V
<i>wispelen</i>	Dutch -el	to waggle	Type IV
<i>wriemelen</i>	Dutch -el	to wriggle	Type V
<i>wrikkelen</i>	Dutch -el	to pry	Type I
<i>wroetelen</i>	Dutch -el	to root	Type I
<i>zemelen</i>	Dutch -el	to nitpick	Type IV
<i>zengelen</i>	Dutch -el	to tingle	Type IV
<i>zwatelen</i>	Dutch -el	to waffle	Type I
<i>zwendelen</i>	Dutch -el	to scam	Type V
<i>zwijselen</i>	Dutch -el	to swoon	Type V
<i>zuireren</i>	Dutch -el	to whirl	Type I
<i>bakeren</i>	Dutch -er	to bask	Type IV
<i>blikkeren</i>	Dutch -er	to flicker	Type III
<i>blubberen</i>	Dutch -er	to speak unclearly	Type III
<i>bulderen</i>	Dutch -er	to roar	Type IV
<i>dabberen</i>	Dutch -er	to paw on the ground	Type I
<i>daveren</i>	Dutch -er	to bellow	Type IV
<i>denderen</i>	Dutch -er	to rumble	Type IV
<i>dobberen</i>	Dutch -er	to rock while floating	Type IV
<i>dodderen</i>	Dutch -er	to be sleepy	Type IV
<i>donderen</i>	Dutch -er	to thunder	Type IV
<i>flabberen</i>	Dutch -er	to hang messily (of clothing)	Type IV
<i>fladderen</i>	Dutch -er	to waver	Type IV
<i>flakkeren</i>	Dutch -er	to flare	Type IV
<i>flikkeren</i>	Dutch -er	to flicker	Type IV
<i>flubberen</i>	Dutch -er	to be flabby	Type III
<i>fluisteren</i>	Dutch -er	to whisper	Type IV
<i>foeteren</i>	Dutch -er	to scold	Type IV
<i>gabberen</i>	Dutch -er	to steal	Type I
<i>gakkeren</i>	Dutch -er	to twaddle	Type IV
<i>genotteren</i>	Dutch -er	to enjoy intensely	Type III
<i>gibberen</i>	Dutch -er	to giggle	Type IV
<i>glibberen</i>	Dutch -er	to slither	Type IV
<i>glimmeren</i>	Dutch -er	to glimmer	Type I
<i>glisteren</i>	Dutch -er	to sparkle	Type IV
<i>glitteren</i>	Dutch -er	to glitter	Type V
<i>haperen</i>	Dutch -er	to flag	Type IV
<i>hotteren</i>	Dutch -er	to waggle	Type IV
<i>jakkeren</i>	Dutch -er	to rush	Type IV
<i>kekkeren</i>	Dutch -er	to hiss (of cats)	Type IV
<i>kiekeren</i>	Dutch -er	to whistle (of certain birds)	Type IV
<i>kieperen</i>	Dutch -er	to fall	Type I
<i>kladderen</i>	Dutch -er	to blot	Type I
<i>klakkeren</i>	Dutch -er	to clack repeatedly	Type I
<i>klapperen</i>	Dutch -er	to clapper	Type V
<i>klateren</i>	Dutch -er	to gurgle	Type IV
<i>klauteren</i>	Dutch -er	to clamber	Type IV

<i>klefferen</i>	Dutch	-er	to clamber	Type IV
<i>kleisteren</i>	Dutch	-er	to glitter	Type IV
<i>klepperen</i>	Dutch	-er	to rattle	Type V
<i>kletteren</i>	Dutch	-er	to clatter	Type IV
<i>kleuteren</i>	Dutch	-er	to hammer	Type IV
<i>klunderen</i>	Dutch	-er	to rumble softly	Type IV
<i>knapperen</i>	Dutch	-er	to crackle	Type I
<i>knetteren</i>	Dutch	-er	to sizzle	Type IV
<i>kneuteren</i>	Dutch	-er	to sit together and chat	Type IV
<i>knipperen</i>	Dutch	-er	to blink	Type I
<i>knisperen</i>	Dutch	-er	to rustle	Type IV
<i>koteren</i>	Dutch	-er	to pick	Type IV
<i>kudderen</i>	Dutch	-er	to be sickly	Type IV
<i>kuieren</i>	Dutch	-er	to stroll	Type IV
<i>kwabberen</i>	Dutch	-er	to tremble (of flesh)	Type V
<i>kwetteren</i>	Dutch	-er	to twitter	Type IV
<i>labberen</i>	Dutch	-er	to slowly move up and down	Type IV
<i>lanteren</i>	Dutch	-er	to loaf around	Type IV
<i>lebberen</i>	Dutch	-er	to lap up	Type V
<i>leuteren</i>	Dutch	-er	to chat	Type IV
<i>lubberen</i>	Dutch	-er	to hang loosely (of clothing)	Type II
<i>luieren</i>	Dutch	-er	to laze out	Type IV
<i>luimeren</i>	Dutch	-er	to slumber	Type IV
<i>luisteren</i>	Dutch	-er	to listen	Type IV
<i>lunderen</i>	Dutch	-er	to loiter	Type IV
<i>mekkeren</i>	Dutch	-er	to bleat	Type I
<i>mijmeren</i>	Dutch	-er	to muse	Type IV
<i>modderen</i>	Dutch	-er	to fiddle around	Type II
<i>mopperen</i>	Dutch	-er	to grumble	Type IV
<i>motteren</i>	Dutch	-er	to drizzle	Type IV
<i>murmuren</i>	Dutch	-er	to murmur	Type IV
<i>oeteren</i>	Dutch	-er	to go about clumsily	Type IV
<i>otteren</i>	Dutch	-er	to have a hard time	Type IV
<i>paloeteren</i>	Dutch	-er	to deceive	Type IV
<i>peuteren</i>	Dutch	-er	to finger	Type IV
<i>plapperen</i>	Dutch	-er	to babble	Type IV
<i>pletteren</i>	Dutch	-er	to crush	Type I
<i>ploeteren</i>	Dutch	-er	to plod	Type IV
<i>poperen</i>	Dutch	-er	to move restlessly	Type IV
<i>pulkeren</i>	Dutch	-er	to finger	Type I
<i>schetteren</i>	Dutch	-er	to blast	Type IV
<i>schitteren</i>	Dutch	-er	to twinkle	Type IV
<i>schobberen</i>	Dutch	-er	to stroll	Type IV
<i>schodderen</i>	Dutch	-er	to rock	Type I
<i>sidderen</i>	Dutch	-er	to shudder	Type IV
<i>slenteren</i>	Dutch	-er	to saunter	Type IV
<i>slidderen</i>	Dutch	-er	to slide	Type IV

<i>slingeren</i>	Dutch -er	to swing	Type V
<i>slofferen</i>	Dutch -er	to shuffle	Type V
<i>sluieren</i>	Dutch -er	to drag	Type V
<i>sluimeren</i>	Dutch -er	to snooze	Type IV
<i>smodderen</i>	Dutch -er	to spill	Type IV
<i>snateren</i>	Dutch -er	to cackle	Type V
<i>snipperen</i>	Dutch -er	to shred	Type IV
<i>snotteren</i>	Dutch -er	to sniffle	Type V
<i>speieren</i>	Dutch -er	to shine intensely	Type IV
<i>spetteren</i>	Dutch -er	to spatter	Type V
<i>spodderen</i>	Dutch -er	to walk fast	Type IV
<i>sputteren</i>	Dutch -er	to sputter	Type IV
<i>stotteren</i>	Dutch -er	to stutter	Type V
<i>stuiteren</i>	Dutch -er	to bounce	Type I
<i>suddereren</i>	Dutch -er	to simmer	Type IV
<i>tetteren</i>	Dutch -er	to rant	Type V
<i>teuteren</i>	Dutch -er	to linger	Type IV
<i>tjakkeren</i>	Dutch -er	to make loud sounds (of birds)	Type IV
<i>toeteren</i>	Dutch -er	to honk	Type V
<i>tokkeren</i>	Dutch -er	to pluck	Type I
<i>trompetteren</i>	Dutch -er	to trumpet	Type V
<i>utteren</i>	Dutch -er	to work slowly	Type IV
<i>wapperen</i>	Dutch -er	to flap	Type I
<i>wipperen</i>	Dutch -er	to hop	Type I
<i>zinderen</i>	Dutch -er	to vibrate with heat	Type IV
<i>zwabberen</i>	Dutch -er	to swab	Type IV
<i>babbel</i>	Afrikaans -el	to babble/chatter	Type IV
<i>basel</i>	Afrikaans -el	to talk nonsense	Type IV
<i>bedel</i>	Afrikaans -el	to beg	Type IV
<i>bengel</i>	Afrikaans -el	to ring (a bell)	Type II
<i>boemel</i>	Afrikaans -el	to waste time	Type II
<i>borrel</i>	Afrikaans -el	to bubble	Type II
<i>bottel</i>	Afrikaans -el	to bottle	Type II
<i>brabbel</i>	Afrikaans -el	to talk unintelligibly	Type II
<i>breidel</i>	Afrikaans -el	to control	Type II
<i>broddel</i>	Afrikaans -el	to produce bad work	Type IV
<i>brokkel</i>	Afrikaans -el	to break in pieces	Type IV
<i>buitel</i>	Afrikaans -el	to tumble	Type IV
<i>bundel</i>	Afrikaans -el	to bind (a book)	Type II
<i>bungel</i>	Afrikaans -el	to swing back and forth/wobble	Type IV
<i>dartel</i>	Afrikaans -el	to frolic/skip joyfully	Type IV
<i>dobbel</i>	Afrikaans -el	to gamble	Type IV
<i>doesel</i>	Afrikaans -el	to sleep lightly	Type II
<i>dommel</i>	Afrikaans -el	to slumber	Type II
<i>dompel</i>	Afrikaans -el	to dunk (in water)	Type IV
<i>drentel</i>	Afrikaans -el	to walk slowly	Type IV
<i>dribbel</i>	Afrikaans -el	to dribble	Type IV

<i>druppel</i>	Afrikaans -el	to drip	Type V
<i>duikel</i>	Afrikaans -el	to dive	Type I
<i>duisel</i>	Afrikaans -el	to feel dizzy	Type IV
<i>dwarrel</i>	Afrikaans -el	to move in an irregular manner	Type IV
<i>femel</i>	Afrikaans -el	to talk in a boring manner	Type IV
<i>friemel</i>	Afrikaans -el	to play with the fingers nervously	Type IV
<i>frommel</i>	Afrikaans -el	to play with the fingers nervously	Type IV
<i>gaffel</i>	Afrikaans -el	to lift/pick up	Type II
<i>gesel</i>	Afrikaans -el	to hit	Type II
<i>giggel</i>	Afrikaans -el	to giggle	Type IV
<i>grabbel</i>	Afrikaans -el	to grab	Type IV
<i>grommel</i>	Afrikaans -el	to rumble	Type I
<i>hakkel</i>	Afrikaans -el	to stutter	Type I
<i>haspel</i>	Afrikaans -el	to move with effort/difficulty	Type IV
<i>hinkel</i>	Afrikaans -el	to play	Type I
<i>hobbel</i>	Afrikaans -el	to hop up and down	Type V
<i>huigel</i>	Afrikaans -el	to pretend/be a hypocrite	Type IV
<i>huppel</i>	Afrikaans -el	to skip	Type I
<i>jubel</i>	Afrikaans -el	to express exuberant joy	Type II
<i>kabbel</i>	Afrikaans -el	to ripple (water)	Type II
<i>kekkel</i>	Afrikaans -el	to cackle	Type IV
<i>kibbel</i>	Afrikaans -el	to bicker	Type IV
<i>kietel</i>	Afrikaans -el	to tickle	Type IV
<i>klepel</i>	Afrikaans -el	to ring a bell	Type V
<i>klingel</i>	Afrikaans -el	to jingle	Type I
<i>klungel</i>	Afrikaans -el	to make metal-like sounds	Type II
<i>knabbel</i>	Afrikaans -el	to bite/nibble	Type IV
<i>knibbel</i>	Afrikaans -el	to nibble	Type IV
<i>knuppel</i>	Afrikaans -el	to hit	Type II
<i>konkel</i>	Afrikaans -el	to conspire	Type IV
<i>korrel</i>	Afrikaans -el	to pick grapes	Type II
<i>krabbel</i>	Afrikaans -el	to scribble	Type V
<i>kreukel</i>	Afrikaans -el	to wrinkle	Type II
<i>kriebel</i>	Afrikaans -el	to fidget	Type IV
<i>kringel</i>	Afrikaans -el	to move circularly	Type I
<i>kronkel</i>	Afrikaans -el	to move with sharp turns	Type II
<i>kruimel</i>	Afrikaans -el	to crumble	Type II
<i>krummel</i>	Afrikaans -el	to crumble	Type II
<i>kwansel</i>	Afrikaans -el	to trade	Type IV
<i>kwispel</i>	Afrikaans -el	to move back and forth (a tail)	Type IV
<i>lepel</i>	Afrikaans -el	to spoon	Type II
<i>moffel</i>	Afrikaans -el	to mute/dampen sound	Type IV
<i>mompel</i>	Afrikaans -el	to mumble	Type IV
<i>murmel</i>	Afrikaans -el	to murmur	Type IV
<i>nestel</i>	Afrikaans -el	to be cosy	Type IV
<i>peusel</i>	Afrikaans -el	to snack	Type IV
<i>pimpel</i>	Afrikaans -el	to drink strong alcohol	Type IV

<i>pingel</i>	Afrikaans -el	to back-fire (a car)	Type IV
<i>popel</i>	Afrikaans -el	to be overwhelmed	Type IV
<i>prewel</i>	Afrikaans -el	to mumble	Type IV
<i>prikkel</i>	Afrikaans -el	to prick	Type V
<i>prutsel</i>	Afrikaans -el	to be mean	Type IV
<i>pruttel</i>	Afrikaans -el	to simmer	Type I
<i>rammel</i>	Afrikaans -el	to make a rumbling noise	Type II
<i>ratel</i>	Afrikaans -el	to rattle	Type II
<i>rinkel</i>	Afrikaans -el	to jingle	Type IV
<i>ritsel</i>	Afrikaans -el	to rustle	Type IV
<i>roggel</i>	Afrikaans -el	to gurgle	Type IV
<i>rommel</i>	Afrikaans -el	to make a rumbling noise	Type IV
<i>ronsel</i>	Afrikaans -el	to lure/entice	Type IV
<i>ruisel</i>	Afrikaans -el	to make a rustling sound	Type I
<i>rymel</i>	Afrikaans -el	to rhyme	Type I
<i>sirkel</i>	Afrikaans -el	to circle	Type II
<i>skarrel</i>	Afrikaans -el	to scurry	Type IV
<i>skoffel</i>	Afrikaans -el	to work with a spade	Type II
<i>skottel</i>	Afrikaans -el	to bath	Type II
<i>skuifel</i>	Afrikaans -el	to walk slowly, dragging feet	Type I
<i>smokkel</i>	Afrikaans -el	to smuggle	Type IV
<i>sneuwel</i>	Afrikaans -el	to die	Type IV
<i>snorkel</i>	Afrikaans -el	to snorkle	Type V
<i>snuffel</i>	Afrikaans -el	to sniff	Type IV
<i>spikkel</i>	Afrikaans -el	to speckle	Type III
<i>sprankel</i>	Afrikaans -el	to sparkle	Type IV
<i>sprengel</i>	Afrikaans -el	to sprinkle	Type IV
<i>sprokkel</i>	Afrikaans -el	to gather wood	Type II
<i>stamel</i>	Afrikaans -el	to stutter	Type IV
<i>stempel</i>	Afrikaans -el	to stamp	Type II
<i>stippel</i>	Afrikaans -el	to make dots	Type III
<i>stommel</i>	Afrikaans -el	to fidget	Type IV
<i>stribbel</i>	Afrikaans -el	to argue	Type IV
<i>strompel</i>	Afrikaans -el	to walk in an unstable manner	Type IV
<i>struikel</i>	Afrikaans -el	to stumble	Type IV
<i>suisel</i>	Afrikaans -el	to make a hissing sound	Type I
<i>sukkel</i>	Afrikaans -el	to struggle	Type IV
<i>swendel</i>	Afrikaans -el	to scam	Type II
<i>swymel</i>	Afrikaans -el	to get dizzy	Type II
<i>sypel</i>	Afrikaans -el	to seep	Type IV
<i>tinkel</i>	Afrikaans -el	to tinkle	Type IV
<i>tintel</i>	Afrikaans -el	to prickle	Type II
<i>tokkel</i>	Afrikaans -el	to play an instrument with fingers	Type IV
<i>trappel</i>	Afrikaans -el	to step	Type I
<i>treusel</i>	Afrikaans -el	to work slowly	Type IV
<i>trippel</i>	Afrikaans -el	to run with short steps	Type IV
<i>trommel</i>	Afrikaans -el	to drum	Type III

<i>tuimel</i>	Afrikaans -el	to roll over	Type IV
<i>vonkel</i>	Afrikaans -el	to sparkle	Type V
<i>vroetel</i>	Afrikaans -el	to fidget	Type IV
<i>waggel</i>	Afrikaans -el	to waddle	Type IV
<i>wandel</i>	Afrikaans -el	to walk	Type IV
<i>wankel</i>	Afrikaans -el	to walk unsteadily	Type IV
<i>warrel</i>	Afrikaans -el	to whirl	Type IV
<i>weifel</i>	Afrikaans -el	to be indecisive	Type IV
<i>wemel</i>	Afrikaans -el	to teem	Type IV
<i>wentel</i>	Afrikaans -el	to turn	Type IV
<i>werwel</i>	Afrikaans -el	to move around a central point	Type IV
<i>wiebel</i>	Afrikaans -el	to move back and forth	Type IV
<i>wiegel</i>	Afrikaans -el	to move back and forth	Type I
<i>wiggel</i>	Afrikaans -el	to predict the future	Type IV
<i>wriemel</i>	Afrikaans -el	to teem	Type IV
<i>blikker</i>	Afrikaans -er	to flicker	Type IV
<i>bulder</i>	Afrikaans -er	to rumble	Type IV
<i>dobber</i>	Afrikaans -er	to float (on waves)	Type II
<i>donder</i>	Afrikaans -er	to thunder/rumble	Type II
<i>flabber</i>	Afrikaans -er	to flap	Type I
<i>fladder</i>	Afrikaans -er	to flap (wings)	Type IV
<i>flakker</i>	Afrikaans -er	to flicker	Type IV
<i>flikker</i>	Afrikaans -er	to flicker	Type III
<i>fluister</i>	Afrikaans -er	to whisper	Type II
<i>foeter</i>	Afrikaans -er	to beat	Type IV
<i>glibber</i>	Afrikaans -er	to slip	Type I
<i>glimmer</i>	Afrikaans -er	to glimmer/shine	Type I
<i>glinster</i>	Afrikaans -er	to glisten	Type IV
<i>jakker</i>	Afrikaans -er	to run around	Type IV
<i>klakker</i>	Afrikaans -er	to make a clacking sound	Type I
<i>klapper</i>	Afrikaans -er	to make a clapping sound	Type V
<i>klater</i>	Afrikaans -er	to clatter	Type IV
<i>klepper</i>	Afrikaans -er	to make a clapping sound	Type V
<i>kletter</i>	Afrikaans -er	to make clashing sounds	Type IV
<i>klodder</i>	Afrikaans -er	to work in a messy manner	Type IV
<i>klouter</i>	Afrikaans -er	to climb	Type IV
<i>knapper</i>	Afrikaans -er	to crackle	Type I
<i>knetter</i>	Afrikaans -er	to crackle	Type IV
<i>knipper</i>	Afrikaans -er	to blink	Type V
<i>knister</i>	Afrikaans -er	to crackle softly	Type IV
<i>kuier</i>	Afrikaans -er	to visit	Type II
<i>kwetter</i>	Afrikaans -er	to chirp	Type IV
<i>leuter</i>	Afrikaans -er	to babble	Type IV
<i>luier</i>	Afrikaans -er	to relax	Type IV
<i>luister</i>	Afrikaans -er	to listen	Type IV
<i>mopper</i>	Afrikaans -er	to complain	Type I
<i>mymer</i>	Afrikaans -er	to think deeply	Type IV

<i>peuter</i>	Afrikaans -er	to tinker around/tamper	Type IV
<i>ploeter</i>	Afrikaans -er	to struggle/be unenthusiastic	Type IV
<i>sidder</i>	Afrikaans -er	to shudder	Type II
<i>sketter</i>	Afrikaans -er	to make a loud, shrill sound	Type IV
<i>skitter</i>	Afrikaans -er	to shimmer	Type IV
<i>slenter</i>	Afrikaans -er	to move slowly	Type IV
<i>slinger</i>	Afrikaans -er	to move in an unstable manner	Type II
<i>sluier</i>	Afrikaans -er	to cover	Type II
<i>sluimer</i>	Afrikaans -er	to slumber	Type II
<i>snater</i>	Afrikaans -er	to cackle/honk (geese)	Type IV
<i>snipper</i>	Afrikaans -er	to cut in pieces	Type III
<i>snotter</i>	Afrikaans -er	to sniff	Type I
<i>spetter</i>	Afrikaans -er	to spatter	Type I
<i>sputter</i>	Afrikaans -er	to spit	Type IV
<i>stotter</i>	Afrikaans -er	to stutter	Type IV
<i>teuter</i>	Afrikaans -er	to move very slowly	Type IV
<i>toeter</i>	Afrikaans -er	to hoot (car)	Type V
<i>trompetter</i>	Afrikaans -er	to play a trumpet	Type III
<i>verpletter</i>	Afrikaans -er	to destroy	Type IV
<i>wapper</i>	Afrikaans -er	to blow in the wind	Type IV
<i>wipper</i>	Afrikaans -er	to flutter	Type I

8. References

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