Constraints on post-lexical processes in Dutch*

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1. Introduction

In this paper we will deal with a number of post-lexical Dutch phonological rules and their noticeable non-across-the-board application. The question that arises is if this is due to any constraints on their application. We will argue that these apparent incomplete applications can be explained by a domain-based approach to Dutch post-lexical phonology, in the sense of Nespor & Vogel (1986). Once domains are invoked, the non-across-the-board application can be accounted for.

2. Post-lexical Dutch phonology

The processes we will discuss are Consonant Degemination (deleting the first of two identical consonants), Obstruent Assimilation (regressively assimilating voice in a cluster with a plosive at the right), and Nasal Assimilation (assimilating a nasal to a following consonant).[1] The effects of these processes are displayed in (1):

(1) a. Consonant Degemination (= Deg):

vis soep	→	vi soep	'fish soup'
op pagina 12	→	o pagina 12	'on page 12'

b. Obstruent Assimilation (= OAs):

zak doek	→	zag doek	'handkerchief'
twistziek dametje	→	twistzieg dametje	'quarrelsome lady'

c. Nasal Assimilation (= NAs):

wijn jargon	→	wijŋ jargon	'wine jargon'
in België	→	im België	'in Belgium'

As is well-known, post-lexical rules have a number of properties that distinguish them from lexical rules (cf., for instance, Kaisse & Shaw 1985, Katamba 1993).

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Among these are (i) application across word-boundaries (they can apply to words after they have been grouped together into phrases), and (ii) non-structure-preservation (they may have an output that is at variance with the canonical patterns of the language).

The data in (1) show that the three rules under consideration are truly post-lexical for exactly these two reasons. First of all, they can apply across word-boundaries. And secondly, they can yield an output that is not attested underlyingly: (1a) gives open syllables ending in a short vowel, a non-possible underlying syllable-type (cf. Trommelen 1983, Van der Hulst 1984, Kager & Zonneveld 1986); in the output of (1b,c) are sounds that do not form part of the Dutch underlying phoneme inventory (a voiced velar plosive and a palatal nasal, respectively).

However, if the three rules discussed here are truly post-lexical, they should conform to a further property of post-lexical rules, which is automaticity: if the necessary conditions are present, the rule can apply; there are no specific words or grammatical contexts in which the application is blocked (automaticity still leaves room for optionality, another characteristic of post-lexical rule-application). Thus, there cannot be a situation in which, for instance, a specific word or set of words will not undergo Degemination:

(2) *XC[−degemination]
$XC_i\ C_iY \rightarrow XC_i\ C_iY$

However, automaticity appears to be violated sometimes; see (3) where Obstruent Assimilation is not applied throughout:

(3) a. een Groot-Belgisch hertogdom → grood belgisch
'a greater-Belgian duchy'
b. ze zijn meestal groot, Belgische herders → *grood belgische
'they are usually big, Belgian shepherds'

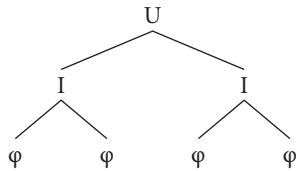
3. The post-lexical domain approach

Contrasts like the ones in (3) with respect to Obstruent Assimilation have been noticed before. For instance, Loots (1983:179) remarks that "the application of regressive assimilation of voice in Dutch is partly dependent on the strength of syntactic boundaries". A similar conclusion is drawn in Menert (1994:131) in her dissertation on voicing-assimilation data: "Dutch voice assimilation is [...] sensitive to boundary depth". Thus, both Loots and Menert claim that the degree of embedding may be the culprit of non-assimilation in cases like (3b).

Observations with respect to incomplete application as the result of 'degree of embedding' have been made for sandhi-phenomena in other languages as well, cf. Nespor & Vogel (1986), henceforth N&V. In their set-up, phonological rules are assigned to specific phonological domains, thus accounting for their (non-)appli-

cation. For processes of the type we are discussing here, they have the following three domains: φ, I, and U. Rough definitions of these domains, the relation between them, and an example of the motivation for their existence is depicted in (4); the page-numbers refer to N&V:

(4) φ: Prosodic domain in between Phonological Word and I
I: "[T]he domain over which an intonational contour is 'spread'" (Selkirk 1980)
U: "[T]he largest constituent in the prosodic hierarchy" (221)



English Intrusive *r* insertion (226ff.)

Spanish Nasal Assimilation (211ff.)

Italian Raddoppiamento (RS) (165ff.)

Our hypothesis is that Degemination, Obstruent Assimilation and Nasal Assimilation in Dutch are also domain-sensitive phenomena. This would explain the contrast in (3): there is (some) post-lexical domain D such that Obstruent Assimilation occurs within D but not across D-boundaries. The cluster in (3a) is nót separated by the D-boundary (that is, it is as a whole inside this domain), the cluster in (3b) ís (and therefore the cluster as a whole is not inside it).

To see if this is a fruitful hypothesis, we have to have a closer look at (possible) post-lexical domains in Dutch.

4. Post-lexical domains in Dutch?

On the one hand, the suggestion of domains in Dutch, in the N&V-sense of the word, is not a completely new enterprise. On the other, though, the outcome of research in this area is not overwhelmingly satisfactory.[2]

Menert, for instance, concludes (1994: 125) after ample investigations into Obstruent Assimilation, that "[…] no evidence was found for the existence and functioning of an intermediate phonological level of representation in Dutch, which would correspond with the notion of φ-phrase as N&V define it." She didn't research other phenomena in (possible) larger domains.

Booij, in his 1995 monograph on Dutch phonology, however, did. In general, he admits (1995: 146) that "[f]or Dutch, the issue of the prosodic domains of rules above the level of the prosodic word is an underresearched area". In particular, he discusses a number of phonological rules among which the three being dealt with here. Basing himself on Loots (1983), he concludes (p. 146) with respect to Obstruent Assimilation that "regressive assimilation clearly indicates that the rule has the IP [= Intonational Phrase] as its domain, and also that the rule applies more frequently if the consonants involved belong to the same phonological phrase". The

latter observation may seem to contradict Menert's findings. However, the largest φ's Booij takes into consideration consist of compounds: "there was a clear difference in frequency of application of regressive assimilation within compounds from that within sentences. Since the prosodic words of a compound of course belong to the same phonological phrase, we can state that voice assimilation applies more frequently in φ than in IPs". Hence, Booij's contrast between φ's and IP's in fact consists of a contrast between compounds and IP's, whereas Menert's data involve 'real' phrasal φ's. On Degemination, Booij simply observes that "its domain is the IP" on the basis of the example *Jan nam* 'John took' which surfaces with only one *n* (p. 151). However, this particular example may simply consist of only one φ, due to (a Dutch variant of) restructuring of non-branching φ's (N&V: 172ff.). Nasal Assimilation is somewhat trickier. Booij remarks that "[it] require[s] experimental underpinnings" and, basing himself on Nolan (1992), adds that "assimilations may be only partial". On the whole, though, he concludes that "[t]here is no evidence that Nasal Assimilation does not apply in the […] domain IP" (p. 147). Basically, his overall interpretation (p. 146) is:

> It is sufficient […] to assume that the probability of application of [phonological] rules above the word level decreases as the relevant prosodic domain becomes larger. In other words, I do not assign a particular prosodic domain to [phonological] rules, but generally they are restricted to being applied within intonational phrases.

However, in order to come to the conclusion that the processes are all I-bound, Booij should minimally have looked at domains beyond I's as well. This is one of the tasks we will set ourselves to below.

The main question that crops up, particularly in view of Booij's claim, is: is there simply one post-lexical domain I (that contains an implicit domain φ only for reasons of 'rule potential'), or is there evidence for more than one post-lexical domain?

The method to investigate this is to compare processes in different domains. Let us call them D-1, D-2, D-3 (where, roughly, D-1 = across words within φ; D-2 = across φ's within I; D-3 = across I's within U). If contrasts can be found, more than one domain-level exists.

As a point of departure, we will assign various syntactic constructions to these domains in accordance with their categorization in Italian, etc. as in (4). That is, we will not discuss the exact construction of D-1,2,3 (the "mapping", as N&V call it) from syntactic surface structures onwards, but simply base ourselves on the example-types they give and transpose these to Dutch.

5. Data

This section discusses some data that bear on the questions raised in the previous sections. These data are a selection from a larger dataset, with judgments based on native intuitions, and, in some cases, on inspection of recordings (not measurements) and informal ambiguity experiments. Pending quantitative experimental confirmation, however, our conclusions must remain cautious, as many judgments fall short from being completely secure.

As noted above, the methodology adopted here eschews preconceived notions on which prosodic domains are active in Dutch, if any, and how they are derived from syntactic representations. We do not, for instance, presume that for a Phonological Phrase in Dutch to be identified it is either necessary or sufficient to follow the rules that construct the domain of RS in Italian. Instead, we have constructed examples exemplifying a broad range of different syntactic configurations, and tested whether the construction type affects the applicability of the sandhi-rules under consideration. If prosodic domains bounding the application of Dutch sandhi-phenomena exist, they should emerge as generalizations over this data collection.

We have grouped the data into three categories, named D-1, D-2 and D-3. This categorization is based on a rough-and-ready approximation of the prosodic domains φ, I and U as described in Section 3. In view of the methodology described above, we clearly cannot assume a priori that categories that are defined in this manner correspond to any real prosodic domains that are active in Dutch. However, such a categorization does provide for ease of exposition, and will allow us to point out any immediate correspondences or discrepancies between domain definitions familiar from other languages and their potential Dutch counterparts.

Effects of syntactic construction type on the applicability of sandhi-rules can show up in two different ways: through contrasts within a rule, or across rules. A contrast within one rule obtains when we find that the rule applies in some, but not all syntactic configurations: such an observation could be explained by restricting the rule to a particular prosodic domain, corresponding to the category of configurations where the rule applies. A contrast across rules obtains when we find that, in a given syntactic configuration, one rules applies and another does not: such an observation can be explained by ascribing the two rules to different prosodic domains. Both types of contrast can provide evidence for a prosodic domains approach to restrictions on sandhi; we will provide examples of both types below.

The following three subsections present examples from domains D-1, D-2 and D-3 respectively.

5.1 D-1: Across words, within (typical) φ

This category includes syntactic configurations which are expected to give rise to boundaries on the "shallow" end of the scale. Although the sandhi-rules apply "across a word boundary" here (i.e., target and context of the rule are not contained in one phonological word ω), known φ-bound rules like RS and Liaison do apply in these syntactic configurations (i.e. the context for the rule is contained in what one would typically expect to form one Phonological Phrase). This category includes the sequence of P and N in $[_{PP}$ P $[_{NP}$ N$]]$, and the sequence of A and N in $[_{NP}$ $[_{AP}$ A$]$ N$]$.[3]

Table 1 presents a representative sample from this category. A "+" in the fourth column indicates that the rule may (optionally) apply, a "−" indicates the rule is blocked. The rules are abbreviated as indicated in (1) above.

Table 1. Across ω, within φ

Deg	P+N	Kees is een kerel uit **T**ilburg	+	'K. is a guy from T.'
	A+N	V&D heeft goedkoop **p**apier	+	'V&D has cheap paper'
OAs	P+N	Ik reken volledig op **D**irk	+	'I count fully on D.'
	A+N	een groot **b**ureau	+	'a large desk'
NAs	P+N	in **M**eppel	+	'in M.'
	A+N	een klein **p**robleem	+	'a small problem'

We find, unsurprisingly, that all three processes apply in these contexts. The absence of any contrasts means that these data do not provide evidence on prosodic domains; but the applicability of the rules does confirm their status as post-lexical rules.

5.2 D-2: Across φ's, within (typical) I

This category includes configurations in which, on the basis of findings for other languages, one would typically expect to find a φ-boundary: the context for the rule is not completely contained in one typical φ, although it is contained in one typical I. These are the type of configurations where RS and Liaison do not apply, but Spanish Nasal Assimilation does. Examples are N followed by PP-initial P or Adverb in $[_{NP}$ N PP$]$ (i.e. a PP-"complement" in N&V's terminology); N-head of subject-NP followed by predicate-initial element (typically V); and V followed by complement (NP). In some cases, constituents have been made branching in order to preclude Italian-like φ-restructuring (N&V: 172ff).

It should be noted that definitions of φ based on languages like Italian and

French do not easily carry over to Dutch in these cases. Consider for instance the N&V definition. In V2-structures, the subject is arguably contained in the maximal projection headed by the verb (CP). If one assumes that in these cases the recursive side of the verb is right, the subject should fall inside the φ headed by the verb; if the recursive side is left, the object should. Neither prediction is likely to be correct: Quené & Kager's (1992) work on Phonological Phrases and accentuation patterns in Dutch indeed postulates φ-boundaries in the configurations discussed in this section. It is important to note, however, that these questions do not need to be resolved here: as explained earlier, our methodology does not depend on the assumption that D-1 equals φ and D-2 equals I.

Consider then the data in Table 2; from here onward, glosses will be provided in the appendix.

Table 2. Across φ's, within I

Deg	N+PP	het scho**t** **t**egen de paal werd afgekeurd	+
	NP+VP	de buurma**n** **n**adert de zeventig	+
	V+NP	ik ke**n** **n**egentien talen	+
OAs	N+PP	het scho**t** **b**uiten het doel werd goedgekeurd	?
		een vi**s** **b**uiten de kom maakt het niet lang	+
	NP+VP	die inbraa**k** **d**oet me niks	+
		zo'n enge vi**s** **d**oet me niks	?
	V+NP	ik pa**s** **b**roeken en truien	+
		ik haa**t** **b**oze studenten	?
NAs	N+PP	een baa**n** **b**ij de spoorwegen	+
		een busbaa**n** **p**al naast de deur lijkt me geen pretje	?
	NP+VP	de buurma**n** **b**akt er niks van	+
	V+NP	ik steu**n** **K**erk en Maatschappij	+

We find that in these constructions Degemination still applies effortlessly. Obstruent Assimilation, on the other hand, appears more reluctant. In some examples, it clearly takes place. In others, it sometimes appears blocked, although our intuitions here are far from secure. We have not been able to trace the contrast in examples that allow or resist Obstruent Assimilation to differences in syntactic configuration, or to details of their segmental composition. At present, we have no sound explanation for the variation observed.[4] Finally, as for Nasal Assimilation, Table 2 shows that our intuitions tentatively place it in between Degemination and Obstruent Assimilation, but the data are not clear-cut.

Some of these intuitions can be rendered more secure by constructing ambiguity tests; see Table 3 ("amb" in column 4 indicates that a pronunciation that renders the utterance ambiguous is possible).

Table 3. Across φ's, within I, ambiguity test

Deg	N+PP	een plan(**t**) **t**egen de Berlijnse muur	amb
	NP+VP	de laa(**n**) **n**am het uitzicht weg	amb
NAs	N+PP	de kraa**n/m b**ij het stadhuis	amb
	NP+VP	de kraa**n/m b**leek al dicht te zijn	amb
	V+X	ik zoe**n/m m**instens zo hard als Kees ik ka**n/m m**eer dan jij	amb amb

The (potential) ambiguity of the examples in Table 3 confirms that Degemination applies in these contexts. A possible contrast between Degemination and Nasal Assimilation is not confirmed. Unfortunately, a similar test cannot be constructed for Obstruent Assimilation. An ambiguity test can be constructed for cases of Obstruent Assimilation feeding Degemination: e.g. *die miss(**t**) **d**oor de hele film kwam romantisch over* 'the miss/haze throughout the film seemed romantic'; however, our intuitions on the examples we have constructed are not decisive.

In this section, we have found a contrast within a rule: Obstruent Assimilation is always allowed in context D-1 but sometimes blocked in context D-2. This contrast tends to confirm the prosodic domains approach at a very basic level, in that there is a positive correlation between presumed domain level and applicability (as opposed to a negative correlation or none at all): as (our presumed) boundaries deepen, rule application becomes more difficult, so the effects found, though weak and as yet uncertain, are in the right direction. We have also found a contrast across rules: Obstruent Assimilation and Degemination differ, indicating that more than one prosodic domain is active in Dutch. Because of the uncertainty in the observations, these conclusions are tentative; the next section presents stronger contrasts.

5.3 D-3: Across I, within U

This category of constructions includes single Utterances, in which the context for the rule straddles a typical Intonational Phrase boundary: these constructions include dislocation structures, non-restrictive modifiers, vocative constructions and enumerations, which show a strong tendency to form separate I's (see N&V: 188 and references cited there).

As Table 4 shows, Degemination applies in these contexts, Obstruent Assimilation does not. Nasal Assimilation seems closer to Degemination than to Obstruent Assimilation, but the data are not clear-cut. Ambiguity tests confirm the finding for Degemination, but remain inconclusive for Nasal Assimilation; see Table 5.

Table 4. Across I's, within U

Deg	dislocation	ze zijn meestal zwar**t, t**eennagels	+
	non-restrictives	Mijn broer Koe**n, n**ergens te beroerd voor, gaat naar Afrika	+
	vocatives	Toe Kari**n, n**eem me niet zo in de maling	+
	enumeration	met een snufje pimen**t, t**wee takjes basilicum, en nootmuskaat	+
OAs	dislocation	ze zijn meestal groo**t, b**elgische bonbons	–
	non-restrictives	Mijn oudste zu**s, b**ijdehanter dan ik, gaat naar de universiteit	–
	vocatives	Stomme tru**t, b**lijf van me af!	–
	enumeration	ik koo**k, d**oe de afwas, verschoon de kattenbak	?–
NAs	dislocation	ze zijn meestal klei**n, j**onge spechten ze zijn meestal klei**n, p**oolse spechten	+ ?
	non-restrictives	Mijn voormalige buurma**n, k**apelaan van beroep, is ontslagen	+
	vocatives	Kari**n, k**ietel me niet zo alsjeblieft	+
	enumeration	met rozemarij**n, y**oghurtdressing en nootmuskaat met rozemarij**n, p**aprika en nootmuskaat	+ ?

These observations give rise to two fairly firm conclusions. We find a clear-cut within-rule effect for Obstruent Assimilation, which is not D-3, but probably D-2. We also confirm the contrast between Obstruent Assimilation and Degemination: Obstruent Assimilation is at most D-2, Degemination is at least D-3. As a result, there is evidence for the effects of post-lexical domains in Dutch, and for more than one post-lexical domain (contra Booij 1995).

From these domain-assignments for Obstruent Assimilation and Degemination, the following prediction can be derived: Obstruent Assimilation can feed Degemination in D-1 and D-2 but not in D-3. Fortunately, the combination of Obstruent Assimilation followed by Degemination allows for the construction of ambiguity tests. The prediction (as to the blocking of Obstruent Assimilation + Degemination in D-3) is confirmed by the data in Table 6 and Table 7.

Table 5. Across I's, within U, ambiguity test

Deg	disl.	ze schrikken vaak nogal van een vloo(**t**), **t**urkse soldaten	amb
	non-r.	die antieke houten poo(**t**), **t**amelijk beschadigd, bracht toch €200 op	?
	voc.	Zeg maa(**t**), **t**reiter me niet zo!	amb
	enum.	een handgemaakte pij(**p**), **p**ostmoderne boeken, en een fles wijn	amb
NAs	disl.	maar daar stond een kraa**n/m, b**ij het stadhuis	?
	non-r.	die nieuwe kraa**n/m, p**as bij de Gamma gekocht, is nu al naar de filistijnen	?
	enum.	luidruchtig gezoe**n/m, b**ijdehante opmerkingen, en ander middelbare-school gedrag	amb

Table 6. Across I's, within U: does OAs feed Deg?

disl.	ze zijn meestal die**p, b**elgische wijnglazen	–
non-r.	Mijn broer Pie**t, d**okter van beroep, is ontslagen	–
enum.	ik hou van Engelse dro**p, B**elgisch bier, en Duitse worst	–

Table 7. Across I's, within U: does OAs feed Deg? Ambiguity test

disl.	ze zijn vaak erg gehecht aan hun pij(**p**), **b**enedictijner monniken	not amb
non-r.	die antieke houten poo(**t**), **d**anig beschadigd, bracht toch €200 op	not amb
enum.	een oude handgemaakte pij(**p**), **b**ijna honderd kaarsen, en een fles wijn	?amb

6. Conclusions and further research

The data we have presented indicate that Obstruent Assimilation is D-2, whereas Degemination is D-3. Nasal Assimilation is more difficult to localize: it applies in more contexts than Obstruent Assimilation, but appears to be blocked in some contexts where Degemination occurs (see the question marks in Tables 4 and 5). As a possible explanation, we want to offer the following suggestions. The question marks in the tables indicate that the 'target' of assimilation is not fully reached. For instance, *n* assimilating to a labial consonant does not always become indistinguish-

able from underlying *m*. This does not entail, however, that no assimilation whatsoever takes place, because neither does it remain *n*. For instance, if we compare an (assimilating) compound such as *schoonmoeder* in the sentence *dat is mijn sch**oonm**oeder* 'that is my mother-in-law' with a dislocated structure such as *dat is niet sch**oon, m**oeder* 'that is not clean, mum', we end up with identical phonetics. Yet, these phonetics might slightly differ from data such as *dat is Eefje Sch**oo, m**oeder* 'that is E.S., mum' or *dat is Eefjes **oom, m**oeder* 'that is E.' s uncle, mum'. These (very subtle) differences might be due to the 'partiality' of Nasal Assimilation, already referred to in Section 3, which may cloud our perception of these nasals. If these suggestions can be maintained, the domain of Nasal Assimilation can be equated with that of Degemination, namely D-3.

The primary overall conclusion to be drawn from our observations is that (3), and the absence of Obstruent Assimilation in (3b) in particular, does not violate the automaticity associated with post-lexical rules. Instead, the blocking of Obstruent Assimilation can be explained as a domain effect. The existence of post-lexical domains delimiting the applicability of sandhi-rules in Dutch is confirmed by contrasts which show (i) that rules are sensitive to syntactic context; and (ii) that not all rules are allowed in the same syntactic contexts. The latter observation in particular shows that Booij's statement that the "probability" of rule application decreases with increasing domains is not sufficient: rules must be assigned to particular, and distinct domains.

Much work remains to be done. The first question is, how the various post-lexical domains in Dutch are constructed. Indications so far are that Obstruent Assimilation is I-bound (D-2) and Degemination (and possibly Nasal Assimilation) is U-bound (D-3), where the definitions for I and U roughly conform to the literature. We disagree with Booij (1995), who holds that Dutch phonological rules are generally restricted to being applied within Intonational Phrases. Like Menert (1994), on the other hand, we have not found convincing evidence for the existence of φ in Dutch.

Secondly, in view of the variability and uncertainty in many of our observations, quantitative confirmation of our findings in a sound experimental set-up is desirable. Menert (1994) has shown that perceptual ambiguity is a satisfactory measure of the application of phonological rules; one worthwhile experimental paradigm would use examples like those in Table 3, Table 5, and Table 7 to test the effect of syntactic context and rule-type on rule application.[5] In this context, it is also worthwhile to pursue the questions raised above with respect to the exact phonetics in Dutch of the nasals resulting from Nasal Assimilation.

Notes

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1. The choice of these processes was suggested by practical considerations: these rules allow for the easy construction of ambiguity-tests and 'feeding' relations.

2. Furthermore, work on domains for intonation rules in Dutch may not bear directly on the prosodic domains discussed here; see e.g. Gussenhoven 1992.

3. Note that it's not relevant for our present classificatory purposes what the precise syntactic analysis of these constructions is. It is to be expected, however, that when it comes to defining the mapping rules from syntactic to prosodic representations, existing proposals (e.g. that of N&V) will require revision due to developments in syntactic theory.

Not included are examples we constructed to test variations in the segmental make-up of the examples; no effects were found. Furthermore, these findings are shared by other members of the D-1 category, not exemplified here, including Adv+A configurations, and configurations of an auxiliary or VP-initial Adv followed by the first element of the remaining VP (V or O). Since the structure (branching direction) of the Dutch VP differs from languages like Italian, one might argue that the latter two types properly belong to category D-2; there is no evidence for this, however, since no contrasts within or across rules were found.

4. A speculative solution is that Obstruent Assimilation is not φ-bound (as shown by the +'s in Table 2) but I-bound (as the data in the next section suggest). It would then be blocked in the present class of configurations, just in case the φ-boundaries they contain are realized as I-boundaries: optional I-reconstruction (cf. N&V: 193ff) allows each φ to be realized as a separate I. However, further research is needed to render this hypothesis more than a speculation.

5. It may be worthwhile pursuing an anonymous reviewer's suggestion that voice assimilation of *k* provides better judgments than other obstruents, perhaps due to the non-phonemic status of [g].

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Appendix

This appendix contains glosses for the examples in Tables 2 through 7.

Table 2: 1. 'The shot that hit the post was disallowed'; 2. 'The neighbour approaches seventy'; 3. 'I speak nineteen languages'; 4. 'The shot outside the goal was allowed'; 5. 'a fish outside the bowl doesn't live long'; 6. 'That burglary doesn't bother me'; 7. 'Such a creepy fish doesn't bother me'; 8. 'I try on pants and sweaters'; 9. 'I hate angry students'; 10. 'A job with the railroads'; 11. 'A bus-lane right next to my door is no picnic'; 12. 'The neighbour is not successful'; 13. 'I support Church and Society'.

Table 3: 1. 'A plan/plant against the Berlin wall'; 2. 'The drawer/lane obstructed the view'; 3. 'The crane/stall near city hall'; 4. 'The tap/stall turned out to be closed already'; 5. 'I kiss/hum at least as forcefully as K.'; 6. 'I am-capable-of/comb more than you'.

Table 4: 1. 'They are usually black, toe nails'; 2. 'My brother K., daunted by nothing, is going to A.'; 3. 'C'mon K., don't pull my leg'; 4. 'With a pinch of pimento, two sprigs of basil and nutmeg'; 5. 'They are usually big, Belgian chocolates'; 6. 'My eldest sister, smarter than me, is going to university'; 7. 'Stupid bitch, don't touch me'; 8. 'I cook, do the dishes, clean the cat-litter box'; 9. 'They are usually small, young woodpeckers'; 10. 'They are usually small, Polish woodpeckers'; 11. 'My former neighbour, chaplain by profession, has been dismissed'; 12. 'K., please don't tickle me'; 13. 'With rosemary, yogurt dressing and nutmeg'; 14. 'With rosemary, pepper and nutmeg'.

Table 5: 1. 'They are often startled by a flea/fleet, Turkish soldiers'; 2. 'That antique wooden po/table leg, rather damaged, still yielded €200'; 3. 'C'mon mom/mate, don't tease me like that'; 4. 'A hand-made habit/pipe, postmodern books, and a bottle of wine'; 5. 'But there was a crane/stall, near the city hall'; 6. 'That new tap/stall, recently bought at G., is already completely damaged'; 7. 'Loud kissing/humming, wise-cracks, and other public school behaviour'.

Table 6: 1. 'They are usually deep, Belgian wine glasses'; 2. 'My brother P., physician by profession, has been dismissed'; 3. 'I love liquorice, Belgian beer, and German sausages'.

Table 7: 1. 'They are often quite attached to their habit/pipe, Benedictine monks'; 2. 'That antique wooden po/table leg, rather damaged, still yielded €200'; 3. 'A old hand-made habit/pipe, almost a hundred candles, and a bottle of wine'.