

APPENDIX I. FREQUENCY

As frequency differences among words affects their processing (Baayen et al., 2003), we established the frequencies of the words in our experiments. We estimated their frequency by using the frequencies of these words in the SdWaC corpus (Faafß and Eckart, 2013). This corpus was created by parsing all sentences from all websites that end in '.de' (Baroni et al., 2009). Shaoul and Tomaschek (2013) then used this corpus to establish the frequency of the words in CELEX (Shaoul and Tomaschek, 2013) that occur in the SdWaC corpus. Our estimates are based on the occurrences of words in CELEX, but with the more recent frequency counts of the SdWaC corpus.

We did not find frequency information of all words, in fact for 21% of our data we did not find frequency information (we did not find frequency information on 32% of Type 1 nouns, 19% of Type 2 nouns and 13% of Type 3 nouns).

We these caveats in mind, we calculated a regression model with Number (singular or plural) and Type (Type 1, Type 2 and Type 3) as predictors of the frequency per million. As can be seen in table 1 no main effect nor any interactions reached significance.

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	0.17	3.14	0.05	0.96
Type 2	7.46	4.34	1.72	0.09
Type 3	7.22	4.34	1.66	0.10
Plural	-0.14	4.93	-0.03	0.98
Type 2 * Plural	-7.24	6.55	-1.11	0.27
Type 3 * Plural	-6.12	6.48	-0.94	0.35

TABLE 1. Statistical comparison of the frequencies of the different type of words in our experiments.

In short, the frequencies if the three types of nouns in our experiments is comparable and any effect that we may find is attributable to factors other than (or, perhaps more accurately, in addition to a similar) frequency effect.

APPENDIX II. NEIGHBORHOOD DENSITY

An inhibitory effect is found among words that are phonologically or phonetically similar, and which do not stand in a morphological relationship to each other. The

similarity among words can be measured in several ways (Gahl and Strand, 2016), but often it is done in terms of phonemes. Words that differ one phoneme are called neighbors (Luce, 1985; Gahl and Strand, 2016). For example, the words *sling* and *fling* are neighbors. The response latencies to words with many neighbors is slowed down in comparison to words with a few neighbors (Luce, 1985; Luce and Pisoni, 1998; Pisoni et al., 1985). To ensure that the effects we found can indeed be ascribed to morphology and not on an effect of neighborhood density, we calculated the neighborhood density of our items. We created a data set of German word forms of nouns, verbs and adjectives by extracting 355.625 nouns from the CELEX corpus (Baayen et al., 1995; Shaoul and Tomaschek, 2013). We then created a list that contained all words that we used in our experiments; all singulars, plurals and diminutives. We then used the data set to calculate, for each word in our experiment, how many neighbors each had by using (Hall et al., 2015). For each word in our experiment we counted as neighbor each word in the data set that differed by one phoneme from the experimental word (Vitevitch and Luce, 1999). ¹ For example, we found that *Krug* 'mug' has 4 neighbors: *Krugs* 'mug GEN', *trug* 'bear PST', *klug* 'smart' and *Krieg* 'war'. We then used the density in a regression analysis. The density of plurals and singulars is higher than the density of diminutives, but other than that the densities are comparable. It is therefore unlikely that differences in neighborhood density among our words have contributed much to our results.

	Estimate	Std. Error	t value	Pr(> t)
(Intercept = Diminutive				
Type 1)	2.97	1.44	2.06	0.04
Plural	13.67	2.04	6.70	0.00
Singular	11.93	2.04	5.85	0.00
type 2	-1.90	2.04	-0.93	0.35
type 3	-2.47	2.04	-1.21	0.23
Plural × type 2	3.33	2.88	1.16	0.25
Singular × type 2	4.03	2.88	1.40	0.16
Plural × type 3	4.93	2.88	1.71	0.09
Singular × type 3	2.87	2.88	0.99	0.32

¹There are other methods of establishing neighborhoods (Gahl and Strand, 2016), and we tried them but our results remain the same.

APPENDIX III. MATERIAL

TABLE 2. Target type 1 items

type 1 targets					
Item	translation	exp. 1 word (sg)	exp. 2 word (pl)	exp. 1 nonce	exp. 2 nonce
Gans	<i>goose</i>	gans	gənzə	gens	ganzə
Hand	<i>hand</i>	hant	həndə	hənt	handə
Luft	<i>air</i>	luft	lʏftə	lʏft	luftə
Saft	<i>juice</i>	zaft	zəftə	zəft	zaftə
Wand	<i>wall</i>	vant	vəndə	vənt	vandə
Wolf	<i>wolf</i>	vɔlf	vɔelfə	vɔelf	vɔlfə
Bart	<i>beard</i>	baet	bætə	bæt	baætə
Korb	<i>basket</i>	kœap	kœəbə	kœap	kœabə
Marsch	<i>march</i>	maeʃ	mœəʃə	mœəʃ	maeʃə
Wurf	<i>throw</i>	vvef	vvefə	vvef	vvefə
Ball	<i>ball</i>	bal	bələ	bel	balə
Bauch	<i>stomach</i>	baʊx	bɔyçə	bɔyç	baʊxə
Baum	<i>tree</i>	baʊm	bɔymə	bɔym	baʊmə
Damm	<i>dam</i>	dam	dəmə	dəm	damə
Fuss	<i>foot</i>	fus	fy:sə	fy:s	fusə
Fluch	<i>curse</i>	flu:x	fly:çə	fly:ç	flu:xə
Kauz	<i>fogey</i>	kavts	kɔytsə	kɔyts	kavtsə
Krug	<i>jug</i>	kru:k	kʁy:gə	kʁy:k	kʁy:gə
Laus	<i>louse</i>	laus	lɔyzə	lɔys	laʊzə
Maus	<i>mouse</i>	maus	mɔyzə	mɔys	maʊzə
Rang	<i>rank</i>	raŋ	ʁeŋə	ʁeŋ	raŋə
Zahn	<i>tooth</i>	tsa:n	tse:nə	tse:n	tsa:nə
Saal	<i>hall</i>	za:l	ze:lə	ze:l	za:lə
Sack	<i>sack</i>	zak	ze:kə	ze:k	zakə
Saum	<i>seam</i>	zaʊm	zɔymə	zɔym	zaʊmə
Schwan	<i>swan</i>	ʃva:n	ʃvə:nə	ʃvə:n	ʃva:nə
Schwung	<i>momentum</i>	ʃvɔɪj	ʃvvi:jə	ʃvvi:j	ʃvvi:jə
Stall	<i>shed</i>	ʃtal	ʃtelə	ʃtel	ʃtalə
Zoll	<i>custom</i>	tsɔl	tsœlə	tsœl	tsɔlə
Zopf	<i>plait</i>	tsɔpf	tsœpfə	tsœpf	tsɔpfə

TABLE 3. Target type 2 items

type 2 targets					
Item	translation	exp. 1 word (sg)	exp. 2 word (pl)	exp. 1 nonce	exp. 2 nonce
Docht	<i>wick</i>	døxt	døxtə	dœçt	dœçtə
Dolch	<i>dagger</i>	dølc	dølcə	dœlcə	dœlcə
Fund	<i>find</i>	fønt	føndə	fønt	føndə
Kult	<i>cult</i>	kült	kültə	kylt	kyltə
Mast	<i>mast</i>	mast	mastə	mest	mestə
Pult	<i>desk</i>	pult	pultə	pylt	pyltə
Salz	<i>salt</i>	zalts	zaltsə	zelts	zeltsə
Takt	<i>beat</i>	takt	taktə	tækt	tæktə
Luchs	<i>lynx</i>	løks	løksə	lyks	lyksə
Kurs	<i>class</i>	kves	kvezə	kves	kvezə
Boot	<i>boat</i>	bøt	bø:tə	bø:t	bø:tə
Boss	<i>boss</i>	bøs	bøsə	bøs	bøsə
Bus	<i>bus</i>	bøs	bøsə	bys	bysə
Gas	<i>gas</i>	ga:s	ga:zə	ge:s	ge:zə
Huf	<i>hoof</i>	huf	hu:fə	hy:f	hy:fə
Kohl	<i>kale</i>	ko:l	ko:lə	kø:l	kø:lə
Pol	<i>pole</i>	pol	polə	pø:l	pø:lə
Ruf	<i>call</i>	ru:f	ru:fə	ry:f	ry:fə
Schaf	<i>sheep</i>	ſa:f	ſa:fə	ſe:f	ſe:fə
Tag	<i>day</i>	ta:k	ta:gə	te:k	te:gə
Tod	<i>death</i>	to:t	to:də	tø:t	tø:də
Haar	<i>hair</i>	ha:rə	ha:rə	he:rə	he:rə
Pfad	<i>path</i>	pfa:t	pfa:də	pfe:t	pfe:də
Paar	<i>pair</i>	pare	pa:rə	pe:rə	pe:rə
Tor	<i>gate</i>	tore	to:rə	tø:rə	tø:rə
Brot	<i>bread</i>	bro:t	bro:tə	brø:t	brø:tə
Knall	<i>bang</i>	knal	knalə	knel	knelə
Schluck	<i>swallow</i>	ſlu:k	ſlu:kə	ſlyk	ſlykə
Stoff	<i>fabric</i>	ſtø:f	ſtø:fə	ſtøef	ſtø:fə
Flur	<i>hall</i>	flu:rə	flu:rə	fly:rə	fly:rə

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TABLE 4. Target type 3 items

type 3 targets					
Item	translation	exp. 1 word (sg)	exp. 2 word (pl)	exp. 1 nonce	exp. 2 nonce
Fest	<i>celebration</i>	fest	festə	fəst	fəstə
Film	<i>film</i>	film	filmə	falm	falmə
Heft	<i>notebook</i>	heft	heftə	həft	həftə
Hirn	<i>brain</i>	hren	hrenə	hren	hrenə
Hirsch	<i>deer</i>	hreʃ	hreʃə	hœʃ	hœʃə
Keks	<i>cookie</i>	ke:ks	ke:ksə	ku:ks	ku:ksə
Kelch	<i>goblet</i>	kelç	kelçə	kalç	kalçə
Lift	<i>lift</i>	lift	liftə	laft	laftə
Pferd	<i>horse</i>	pfe:t	pfe:də	pfe:t	pfe:də
Wirt	<i>host</i>	vret	vretə	vret	vretə
Dieb	<i>thief</i>	di:p	di:bə	do:p	do:bə
Fett	<i>fat</i>	fet	fetə	fat	fatə
Fisch	<i>fish</i>	fif	fifə	fif	fifə
Kitz	<i>fawn</i>	kits	kitsə	kuts	kutsə
Reiz	<i>stimulus</i>	raits	raitsə	rauts	rautsə
Ring	<i>ring</i>	raŋ	raŋə	raŋ	raŋə
Sieb	<i>sieve</i>	zi:p	zi:bə	zo:p	zo:bə
Sinn	<i>sense</i>	zin	zinə	zvn	zvnə
Tisch	<i>table</i>	tif	tifə	tɔ:f	tɔ:fə
Pott	<i>mug</i>	pøt	pøtə	pøt	pøtə
Schuss	<i>shot</i>	ʃus	ʃysə	ʃes	ʃesə
Sohn	<i>son</i>	zo:n	zø:nə	zi:n	zi:nə
Wall	<i>rampart</i>	val	valə	vul	vulə
Rock	<i>skirt</i>	ʁɔ:k	ʁøkə	ʁak	ʁakə
Zug	<i>train</i>	tsu:k	tsy:gə	tse:k	tse:gə
Stier	<i>bull</i>	ʃti:r	ʃti:ʁə	ʃtore	ʃtore
Trieb	<i>instinct</i>	tʃi:p	tʃi:bə	tʃu:p	tʃu:bə
Zweig	<i>branch</i>	tsva:k	tsva:gə	tsva:k	tsva:gə
Blick	<i>gaze</i>	blik	blikə	blak	blakə
Brief	<i>letter</i>	bri:f	bri:fə	bro:f	bro:fə

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TABLE 5. Filler words

sg form	translation	sg form	translation	sg form	translation	sg form	translation
Blech	<i>iron sheet</i>	Blitz	<i>lightning</i>	Gleis	<i>track</i>	Greif	<i>griffin</i>
Greis	<i>old man</i>	Knick	<i>bend</i>	Kreis	<i>circle</i>	Kreuz	<i>cross</i>
Krieg	<i>war</i>	Preis	<i>price</i>	Schlitz	<i>groove</i>	Schmied	<i>smith</i>
Schrein	<i>shrine</i>	Schwein	<i>pig</i>	Spiel	<i>game</i>	SpieĀg	<i>skewer</i>
Spitz	<i>spitz</i>	Steg	<i>runway</i>	Stein	<i>stone</i>	Stiel	<i>handle</i>
Stil	<i>style</i>	Stück	<i>piece</i>	Zweck	<i>purpose</i>	Gnom	<i>gnome</i>
Brauch	<i>custom</i>	Braut	<i>bride</i>	Draht	<i>wire</i>	Flug	<i>flight</i>
Fluss	<i>river</i>	Frosch	<i>frog</i>	Gruss	<i>greeting</i>	Klang	<i>sound</i>
Kloß	<i>dumpling</i>	Klotz	<i>brick</i>	Knopf	<i>button</i>	Pflock	<i>plug</i>
Pflug	<i>plough</i>	Plan	<i>plan</i>	Platz	<i>place</i>	Schlauch	<i>pipe</i>
Schluss	<i>end</i>	Schwamm	<i>sponge</i>	Span	<i>blade</i>	Spass	<i>joke</i>
Stab	<i>bar</i>	Stadt	<i>city</i>	Stamm	<i>stem</i>	Stock	<i>stick</i>
Stoß	<i>kick</i>	Stuhl	<i>chair</i>	Traum	<i>dream</i>	Zwang	<i>bondage</i>
Schwur	<i>vow</i>	Gen	<i>gene</i>	Keil	<i>liner</i>	Pfeil	<i>arrow</i>
Busch	<i>bush</i>	Hut	<i>hat</i>	Pass	<i>passport</i>	Beet	<i>bed</i>
Beil	<i>axe</i>	Bein	<i>leg</i>	Bier	<i>beer</i>	Biss	<i>bite</i>
Deich	<i>dyke</i>	Ding	<i>thing</i>	Fell	<i>coat</i>	Föhn	<i>blow-dryer</i>
Gel	<i>gel</i>	Hain	<i>grove</i>	Hecht	<i>pike</i>	Heer	<i>army</i>
Heim	<i>home</i>	Hieb	<i>flourish</i>	Keim	<i>germinal</i>	Laib	<i>loaf</i>
Meer	<i>sea</i>	Netz	<i>net</i>	Reck	<i>high bar</i>	Reim	<i>rhyme</i>
Riss	<i>crack</i>	Scheich	<i>sheik</i>	Schein	<i>glint</i>	Schiff	<i>ship</i>
Sieg	<i>victory</i>	Speer	<i>javelin</i>	Teich	<i>pond</i>	Teig	<i>dough</i>
Teil	<i>part</i>	Tier	<i>animal</i>	Weg	<i>way</i>	Wein	<i>wine</i>
Zeug	<i>stuff</i>	Ziel	<i>goal</i>	Bass	<i>bass</i>	Fang	<i>catch</i>
Gaul	<i>horse</i>	Guss	<i>shower</i>	Hang	<i>slope</i>	Haut	<i>skin</i>
Hof	<i>court</i>	Kahn	<i>barge</i>	Kamm	<i>comb</i>	Koch	<i>chef</i>
Kopf	<i>button</i>	Lauf	<i>run</i>	Lohn	<i>wage</i>	Naht	<i>fissure</i>
Nuss	<i>nut</i>	Pfahl	<i>pale</i>	Rat	<i>advice</i>	Raum	<i>room</i>
Satz	<i>sentence</i>	Schopf	<i>tuft</i>	Ton	<i>tone</i>	Topf	<i>pot</i>
Zaun	<i>fence</i>	Chor	<i>choir</i>	Jahr	<i>year</i>	Recht	<i>law</i>
Vers	<i>verse</i>	Mönch	<i>monk</i>	Berg	<i>mountain</i>	Feind	<i>enemy</i>
Gift	<i>poison</i>	Gips	<i>cement</i>	Helm	<i>helmet</i>	Herd	<i>stove</i>
Kerl	<i>fellow</i>	Kern	<i>nucleus</i>	Nerz	<i>mink</i>	Pelz	<i>fur</i>
Pilz	<i>mushroom</i>	Rest	<i>rest</i>	Schelm	<i>rascal</i>	Scherz	<i>joke</i>
Schild	<i>shield</i>	Schirm	<i>umbrella</i>	Term	<i>term</i>	Werk	<i>work</i>
Wert	<i>value</i>	Wicht	<i>goblin</i>	Wind	<i>wind</i>	Wink	<i>cue</i>
Witz	<i>joke</i>	Zelt	<i>tent</i>	Dachs	<i>badger</i>	Halm	<i>blade</i>
Hund	<i>dog</i>	Farn	<i>brake</i>	Molch	<i>newt</i>	Mond	<i>moon</i>
Barsch	<i>perch</i>	Garn	<i>twine</i>	Gurt	<i>belt</i>	Hort	<i>hoard</i>
Lurch	<i>amphibian</i>	Mord	<i>murder</i>	Dampf	<i>steam</i>	Duft	<i>smell</i>
Faust	<i>fist</i>	Fuchs	<i>fox</i>	Gast	<i>guest</i>	Hals	<i>neck</i>
Kampf	<i>battle</i>	Lust	<i>desire</i>	Macht	<i>power</i>	Magd	<i>maidservant</i>
Nacht	<i>night</i>	Rumpf	<i>body</i>	Schacht	<i>chamber</i>	Schaft	<i>bootleg</i>
Schatz	<i>treasure</i>	Sucht	<i>addiction</i>	Sumpf	<i>swamp</i>	Tanz	<i>dance</i>
Wunsch	<i>wish</i>	Darm	<i>bowel</i>	Sarg	<i>coffin</i>	Turm	<i>tower</i>