

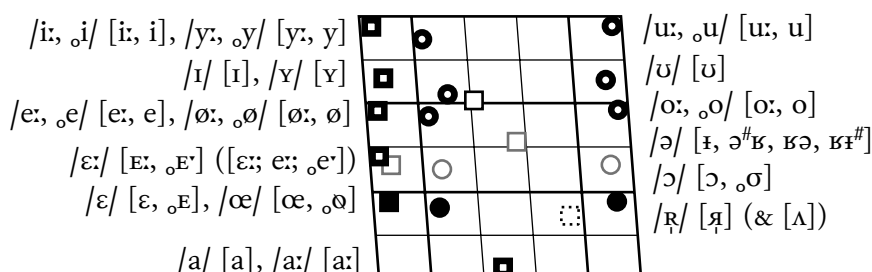
# 5. German

5.0. The neutral pronunciation of (Germany) German is provided in this chapter. Afterwards (§ 5.4.1), we will concisely present the accent of north-east Germany (ie former East Germany, ex-DDR), as used in professional TV and radio broadcastings, which differs only in a few nuances. We will also add the accents of Austria (§ 5.4.2), Switzerland (§ 5.4.3) and South Tyrol or Alto Adige (in north-eastern Italy, § 5.4.4), including some clearly non-neutral indications, which have been chosen (because of their frequency and diffusion) among those that will be given in a specific monograph –*German Pronunciation*– which will deal with the various regional accents of the whole German-speaking territory in greater detail.

## Vowels

5.1.1. fig 5.1 shows the neutral articulations of modern neutral German, which presents seven pairs of opposing short and long vowels in stressed syllables, with the important addition of a timbric difference too (except for /a, a:/, whose timbric difference is now regional). As can be seen from fig 5.1, too, long vowels are realized by closer vocoids, and a modern phonemic transcription must obviously reflect this characteristic: /i:, ɪ; e:, ε; a:, a/, /y:, ʏ; ø:, œ/, /u:, u; o:, ɔ/.  
 But we have to add another ‹inconvenient› long phoneme, /ɛ:/, which opposes both /e:/ (because of timbre) and /ε:/ (because of length). Frequently, it merges with /e:/, mainly in the North, but this pronunciation is not recommendable as neutral, all the more so as current spelling clearly shows it. Indeed, for a modern neutral pronunciation, the most appropriate realization is an intermediate one, [ɛ:], in fact in fig 5.1 the other variants are shown as separate ones.

fig 5.1. German monophthongs.



In addition, we find the typical unstressed phoneme, /ə/ [ɪ], which is realized differently when close to /ʀ/: [ə] (/ə<sup>#</sup><sub>R</sub>, ɐə/ [ɐɐ, ɐɪ]), except for word-final /ʀə<sup>#</sup>/ [ɐɪ]), and in checked syllables with /ʀ/ (as we will see shortly after, in the examples), where we actually have /ʀ/ [ʀ]; although it derives from //əʀ//).

Let us now see some examples: [ˈmi:tɪ] /ˈmi:tə/ *Miete*, [ˈmitɪ] /ˈmitə/ *Mitte*; [ˈvɛ:k] /ˈvɛk/ *Weg*, [ˈvɛk] /ˈvɛk/ *weg*; [ˈʃtat] /ˈʃtat/ *Staat*, [ˈʃtat] /ˈʃtat/ *Stadt*; [ˈhy:tɪ] /ˈhy:tə/ *Hütte*, [ˈhytɪ] /ˈhytə/ *Hütte*; [ˈhø:lɪ] /ˈhø:lə/ *Höhle*, [ˈhœlɪ] /ˈhœlə/ *Hölle*. In addition, [ˈʔɛ:ʁɪ] /ˈɛ:rə/ *Ähre*, [ˈʔɛ:ʁɪ] /ˈɛ:rə/ *Ehre* and [ˈtʰɛ:lɪ] /ˈtʰɛ:lɪ/ *Täler*, [ˈtʰɛ:lɪ] /ˈtʰɛ:lɪ/ *Teller*; finally, [ˈzɔ:nɪ] /ˈzɔ:nə/ *Sonne*, [ɡəˈtʰrʊŋkɪ] /ɡəˈtʰrʊŋkɪ/ *getrunken*, [ɡəˈʁa:dɪ] /ɡəˈʁa:də/ *gerade*, [ˈʔʊnzəʁɪ] /ˈʊnzəʁə/ *unsere*, [ˈʔʊnzəʁɪ] /ˈʊnzəʁɪ/ *unserer*.

The last example (as well as a previous one – *Täler*) shows [ɹ] /ʀ/ -er, which is more traditionally rendered phonemically as //əʀ// (and even as //ər//); but /ʀ/ is more convenient, since its most normal and frequent realization is as an intense faryngealized uvular approximant [ɹ]. It is a fact that a <vocalization> is also possible, as [ʌ] (and this symbol is certainly more appropriate than <[ɐ]>, which however is found in many publications), that is represented by a broken-line white marker (fig 5.1); but it does not occur in a systematic way. As a matter of fact, more often we find [ɹ], or even [ɹ̥, ɹ̥̄]; occasionally, even something like [ʌʁ, ʌʁ, ʌʁ̥] (ie a back-central vocoid with traces of the contoids shown) is surely apter than a simple and pure vocoid.

5.1.2. We must add that, in unstressed syllables, /ɛ, œ, ɔ/ are realized as closer vocoids, [ɛ, œ, ɔ] (cf fig 5.1): [ʔɛntʃʊldɪɡʊn] /ɛntʃʊldɪɡʊn/ *Entschuldigung*, [ʔɔkˈtʰo:bɹ] /ɔkˈtʰo:bɹ/ *Oktober*, [ˈpʰœɹkœlt] /ˈpʰœrkœlt/ *Pörkölt*. Again, in unstressed syllables, also /i, e, y, ø, u, o/ are to be added, even in phonemic transcriptions: [ˌmikʁoˈfo:n] /ˌmikroˈfo:n/ *Mikrofon*, [ˌʁealiˈtʰɛ:t; -ɛ:t] /ˌrealiˈtɛ:t/ *Realität*, [ˌdʏnaˈmit] /ˌdynaˈmit/ *Dynamit*, [ˌʔøkoloˈɡi:] /ˌøkoloˈɡi:/ *Ökologie*, [ˌʔuniˌvɛɹziˈtʰɛ:t; -ɛ:t] /ˌuniˌvɛɹziˈtɛ:t/ *Universität*, [ˌfonoloˈɡi:] /ˌfonoloˈɡi:/ *Phonologie*. We must say at once that, in current or familiar pronunciation, unstressed /i, e, y, ø, u, o/ easily become /ɪ, ɛ, ʏ, œ, ʊ, ɔ/ [ɪ, ɛ, ʏ, œ, ʊ, ɔ] (except when word-final): [ˌmikʁoˈfo:n, ˌʁealiˈtʰɛ:t (-ɛ:t), ˌdʏnaˈmit, ˌʔøkoloˈɡi:, ˌʔuniˌvɛɹziˈtʰɛ:t (-ɛ:t), ˌfonoloˈɡi:], and [ʔɛntʃʊldɪɡʊn, ɪn-], but: [ˈɡʊmi] /ˈɡʊmi/ *Gummi*, [ˈzi:mɪle, -ɪ] /ˈzi:mile/ *Simile*, [ˈpʰlɔ:tɪ] /ˈplɔ:tɪ/ *Platy*, [ˈtʰɛ:bu] /ˈtʰɛ:bu/ *Zebu*, [ˈmɛksɪko, -ɪ] /ˈmɛksiko/ *Mexiko*.

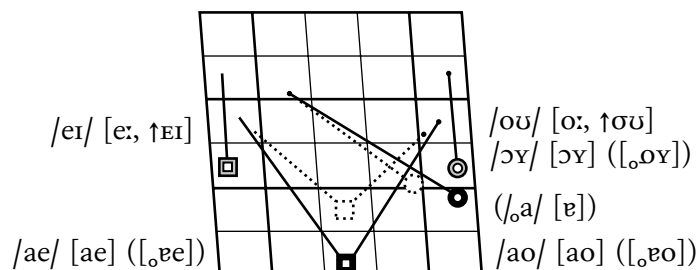
Unstressed /a, ɔ/ pose no problems to modern neutral pronunciation, since they always become [a]: [ʔaˈɡa:vɪ] /aˈɡa:və/ *Agave*, [ʔaˈmɛ:ʁɪka, -ɪ] /aˈmɛ:ʁɪka/ *Amerika*, [ʔaˈfɹɪka, -ɪ] /aˈfɹɪka/ *Afrika*, [ˌʔafɹɪˈkʰa:tɪ, -ɪ] /afriˈkʰa:tə/ *Affrikate*. Instead, in certain transcriptions of traditional neutral pronunciation, we may find </a/>, which somehow corresponds to </a:/>; but there is not much coherence at all among different dictionaries and textbooks: [ʔaˈɡa:vɪ, ʔaˈɡa:; ʔaˈmɛ:ʁɪka, ʔaˈmɛ:ʁɪka, -ɪ; ʔaˈfɹɪka, ʔaˈfɹɪka, -ɪ; ˌʔafɹɪˈkʰa:tɪ, -a:tɪ]. Except for some loanwords, the GWDA systematically gives </a/ > (ie /o/a/) for unchecked grapho-syllables (a <strange> criterion indeed, to be frank), whereas Langenscheidt's dictionaries still using /a:/ mark /o/a/.

5.1.3. fig 5.2 shows the diphthongs of neutral German: three basic and two secondary ones (the latter are marked in grey and are used in English loanwords). Their neutral duration, both in stressed and unstressed syllables, is always intermediate between the short ([ʔalɪ] /ˈalə/ *alle*) and the long ([ʔa:lɪ] /ˈa:lə/ *Ahle*) ones. The three genuine diphthongs are [ae, ao, ɔʏ] /ae, ao, ɔʏ/ (often badly represented as

⟨/ai, au, oy~oi/⟩): [ˈbaen] /ˈbaen/ *Bein*, [ˈʔaelɪ] /ˈaɛlə/ *Eile*, [ˈmae] /ˈmae/ *Mai*; [ˈbaom] /ˈbaom/ *Baum*, [ˈʔaogɪ] /ˈaogə/ *Auge*, [ˈthao] /ˈtao/ *Tau*; [ˈlɔytɪ] /ˈlɔytɪ/ *läuten*, [ˈʔɔylɪ] /ˈɔylə/ *Eule*, [ˈnoʏ] /ˈnoʏ/ *neu*. The two additional ones, in grey, in the most spontaneous pronunciation type, merge into /e:, o:/ (but this depends on words and speakers, too): [ˈle:di, ˈle:idi] /ˈle:di/ *Lady*, [ˈgɛ:, ˈgɛ:ɪ] /ˈgɛ:ɪ/ *gay*, [ˈno:ˈhao, ˈnoʊˈhao] /ˈnoʊˈhao/ *Know-how*, [ˈʃo:, ˈʃoʊ] /ˈʃoʊ/ *Show*.

The broken-line white markers show two possible realizations of /ae, ao/, in reduced forms (cf § 5.3.1), [ɐe, ɐo], as in: [ɐen] /aen/ *ein*, [ɐos] /aos/ *aus* (also [ɔʏ] /ɔʏ/: [ɔʏç] /ɔʏç/ *euch*). The marker corresponding to [ɐ] is also valid for reduced forms with /a/, as a possible variant: [ɔəs] /das/ *das*. We have intentionally not placed it in the monophthong vocogram (fig 5.1), also to avoid confusion with the –quite frequent, but not recommendable– use of ⟨[ɐ]⟩ to indicate our [ɶ, ɶ] (or, at best, [ʌ], see fig 5.1 and the first part of § 5.1, and the second part of § 5.2).

fig 5.2. German diphthongs.



5.1.4. In French loanwords with original nasalized vowels, we more normally find regular German timbres of /ɛ, œ, a, ɔ/ (according to stress force) followed by /ŋ/: [ˈthɛŋ] /ˈtɛŋ/ *Teint*, [ˈpʰaɶfœŋ] /ˈpʰaɶfœŋ/ *Parfum*, [ˈʔaŋˈsaŋbɪ] /aŋˈsaŋbɪ/ *Ensemble*, [ˈbɔŋˈbɔŋ] /bɔŋˈbɔŋ/ *Bonbon*. Assimilation is possible, too, as in [ˈʔanˈsambɪ, ˈbɔmˈbɔŋ]); although in more careful pronunciation real nasalized vocoids are possible, but generally followed by /ŋ/: [ˈthɛ̃ŋ, ˈpʰaɶ̃fœ̃ŋ, ˈʔãŋˈsãŋbɪ, ˈbɔ̃ŋˈbɔ̃ŋ].

In a more careful –but less frequent– kind of pronunciation, actual nasalized vocoids may occur, without any *N*. They are long or half-long if stressed, and short if unstressed: [ˈthɛ̃:, ˈpʰaɶ̃fœ̃:, ˈʔã̃sã̃:bɪ, ˈbɔ̃ˈbɔ̃:]; in words ending in *-on* and *-an*, even a completely Germanized pronunciation is frequent with /o:n, a:n/: [ˈbalkɔŋ, -o:n; -ɔ̃ŋ; -ɔ̃:] /balkɔŋ, -o:n/ *Balkon*, [eˈkʰʁaŋ, -a:n; -ãŋ; -ã:] /eˈkʰʁaŋ, -a:n/ *Ekran*. In addition, when nasalization is present, words with /aŋ/ can show timbres that are closer to the French ones: [ˈʔã̃sã̃:bɪ, ˈʔã̃sã̃:bɪ, ˈʔã̃ŋˈsã̃ŋbɪ, ˈʔã̃ŋˈsã̃ŋbɪ], [ˈʃans(ɛ), -aŋ-, -ãŋ-, -ãŋ-, -ãr-, -ãr:] /ˈʃans(ə)/ *Chance* (in words such as this, /ə#/ can drop).

## Consonants

5.2. fig 5.3 shows the necessary consonant articulations which are needed for a good German pronunciation, including taxophonic variants. The examples will even show the devoicing of voiced stops, after pauses or voiceless consonants and of voiced constrictives only after voiceless consonants.

fig 1.9-15, instead, give the programs, grouped by manners of articulation, of all the contoids given in the chapters of this volume (even as secondary, occasional, or regional variants) for the 12 languages treated. This exposition makes the necessary comparisons between different languages more immediate.

fig 5.3. Table of German consonants.

	bilabial	labiodental	dental	denti-alveolar	alveolar	postalveo-palatal protruded	prepalatal	palatal	velar	uvular	pharyngealized uvular	laryngeal
N	m	[m]		[ɱ]	n		[ɲ]		ŋ	[ŋ]		
K	p	b		ɸ	d				k	g		[ʁ]
KS		pf	ts			tʃ						
X	[β]	f	v									
S			s	z		ʃ	ʒ	[ʂ]	ç	[j]	/x/	[χ ʁ]
J								/j/				[ʁ] h
R					[ʀ]					/ʀ/		
L					[ɫ]	l		[ʎ]				

+ [ɸ, ɸf, ɸv] & /m, n/ [ɱ, m, n, ɱ, n, ɱ, n; m, n, ɱ, n, ɱ, n] (cf fig 1.9.1)

## Nasals

5.2.1.1. There are three phonemes for this manner of articulation, /m, n, ŋ/, with a certain number of taxophones by assimilation ([m], [m, ɱ, n, ɱ, n, ɱ, n], and [ŋ, ɲ]): [ˈman] /ˈman/ *Mann*, [ˈhɛmt] /ˈhɛmt/ *Hemd*, [ˈvɛ:m] /ˈvɛ:m/ *wem*, [ˈnaen] /ˈnaen/ *nein*, [kˈni:] /kˈni:/ *Knie*, [ˈtʃe:n] /ˈtʃe:n/ *zehn*, [ˈtʁɪŋkɪ] /ˈtʁɪŋkɪ/ *trinken*, [ˈʔamˌbiːtŋ] /ˈanbiːdŋ/ *anbieten*, [ˈfʏnf] /ˈfʏnf/ *fünf*, [ˈʔʊns] /ˈʊns/ *uns* (strictly [[ʔʊns]], but [n] is sufficient), [dɪˈtʰantɛ] /dɪˈtantə/ *die Tante* (strictly [[dɪˈtʰantɛ]]), [ˈvʏnʃŋ] /ˈvʏnʃŋ/ *wünschen*, [kɔnˈʁa:də] /kɔnˈra:də/ *Konrade*, [ˈmʏnçŋ] /ˈmʏnçŋ/ *München*, [ˈʔaŋlŋ] /ˈaŋlŋ/ *angeln*, [ˈlɛŋst] /ˈlɛŋst/ *längst*, [ˈlɛŋʁ] /ˈlɛŋʁ/ *länger*, [ˈziŋŋ] /ˈziŋŋ/ *singen*, [ˈtʃʊŋʃ] /ˈtʃʊŋʃ/ *Zunge*, [bɛˈdɪŋŋ] /bɛˈdɪŋŋ/ *Bedingung*, [ˈtʃaetʊŋ] /ˈtʃaetʊŋ/ *Zeitung*, [ˈtʃaetʊŋŋ] /ˈtʃaetʊŋŋ/ *Zeitungen*. (For /ʊŋ#, ʊŋŋ#/ we have [ʊŋ#, ʊŋŋ#].)

Please, note that the sequence /nj/ –and /lj/ as well– has two different realizations in stressed syllables, for tautosyllabic (after /V:/) or heterosyllabic (after /V/) elements: [ˈli:njɛ] /ˈli:njə/ *Linie*, [ʃamˈpʰaŋjɛ] ([[an-jɛ]]) /ʃamˈpanjɛ/ *Champagner*.

In lexical compounding, even for the negative prefix *un-*, in slow <sup>or</sup> accurate pronunciation, people try to maintain [n], whereas –currently– it is assimilated to the place of articulation of the following C.

As an actual compromise, here we will show that it is possible to have articulations which maintain an apical contact but add *secondary coarticulations* (without full contacts). These coarticulations are: *bilabial* [ɸ], *labiodental* [ɸf], *velar* [ɸ]: [ʔʊmˌbɛndɪç, ʔʊɸ-] /ʊnbɛndɪç/ *unbändig*, [ʔʊŋˌvɪʁklɪç, ʔʊɸ-] /ʊnvɪʁklɪç/ *unwirk-*

*lich*, [ʔʊŋgɪʁeːgɪt, ʔʊŋ-] /ʊŋgəreːgɪt/ *ungeregelt*. Below, we will find that a couple of these phones occur as intense too, [ɲ, ɳ].

In other cases, with less different coarticulations, assimilation (which is often considered to be less recommendable, on pure graphical and morphological bases) appears to be less noticeable, thus it is applied in a spontaneous though unconscious way.

5.2.1.2. Including two intense nasal phonemes too, /m, n/ (instead of //əm, ən//), we have five of them, with all their various taxophones ([m] for /m/, and [m, m̥, n̥, n̥, ɲ, ɳ] for /n/) [ʔa:t̥m] /'a:t̥m/ *Atem*, [ʔzi:b̥m] /'zi:b̥n/ *sieben*, [ʔne:mm̥] /'ne:m̥n/ *nehmen*, [ʔʃa:f̥ɲ] /'ʃa:f̥n/ *scharfen*, [ʔhɔp̥f̥ɲs] /'hɔp̥f̥ns/ *Hopfens*, [ʔkhat̥s̥n̥] /'khat̥s̥n̥/ *Katzen*, [ʔdu:d̥n̥] /'du:d̥n̥/ *Duden* (rigorously [ʔdu:d̥ɲ]), [ʔphant̥ɲ] /'phant̥n̥/ *pan-tschen*, [ʔap̥b̥r̥ɛn̥n̥] /'ap̥b̥r̥ɛn̥n̥/ *abbrennen*, [ʔm̥ɛ:t̥ç̥ɲ; m̥ɛ:t̥-] /'m̥ɛ:t̥ç̥n̥/ *Mädchen*, [ʔfli:ɲ] /'fli:ɲn̥/ *fliegen*, [ʔza:g̥ɲ] /'za:g̥n̥/ *sagen*, [ʔtshaet̥ʊn̥n̥] /'tshaet̥ʊn̥n̥/ *Zeitungen*, [ʔbr̥ɪŋ̥ɲ] /'br̥ɪŋ̥n̥/ *bringen*, [ʔv̥ɪʁ̥n̥, -ʁ̥ɳ, -ɪʁ̥n̥, -ɪʁ̥ɳ] /'v̥ɪʁ̥n̥/ *wirren*, [ʔtsha:l̥ɲ] /'tsha:l̥n̥/ *zahlen*, [ʔg̥ɛ:ɲ] /'g̥ɛ:n̥/ *gehen*.

Let us observe, however, that there are cases where intense nasals are less favored, as results from such forms as [ʔb̥ɪnd̥ɲd̥ɲ] /'b̥ɪnd̥ɲd̥n̥/ *bindenden* (with theoretical sequences of [N̥], [ʔb̥ɪnd̥ɲd̥n̥], which are possible in faster speech, but mostly not in intonemes).

As can be seen, it is more convenient to distinguish between /N̥/ and /əN̥/. It is sufficient to know that, if pronunciation becomes slower or more controlled, it is easy to go back to [n̥], or [ɲ]: from [ʔzi:b̥m, 'za:g̥ɲ] to [ʔzi:b̥n, 'za:g̥n̥] and [ʔzi:b̥ɲn̥, 'za:g̥ɲn̥], or from [ʔtsha:l̥n̥, 'g̥ɛ:ɲ] to [ʔtsha:l̥ɲn̥, 'g̥ɛ:ɲn̥]. However, generally, except in intonemes, forms such as *gehen* can even become [ʔg̥ɛ:n̥].

5.2.1.3. In the previous section, we have shown up to *six* taxophones for the two intense nasals, /m, n/. At first sight, they might seem to be excessive; nevertheless, by concretely considering actual phonetic reality, it is clear that only in quite approximate transcriptions could it be possible to renounce them. Besides, in order not to complicate things <without reason>, even *nine* could be useful, indeed: [m̥, n̥, m̥ɲ, n̥ɲ, m̥ɳ, n̥ɳ, m̥ɳ̥, n̥ɳ̥]. (All this without considering a denti-alveolar [ɲ̥], for which a simple [n̥] is sufficient, as in [ʔʁaen̥ɳ̥'gu:t̥n̥ 'θaŋk] [[ʔʁaen̥ɳ̥'gu:t̥ɳ̥ 'θaŋk] /aen̥ɳ̥'gu:t̥n̥ 'taŋk/ *einen guten Tank*.)

However, we will show them only here, since these examples belong to actual sentences taken from passages of connected speech, and we will put them in double square brackets that indicate an objective precision, but perhaps a less pressing one. We are dealing with sequences where /n̥, m̥/ and the tautosyllabic C before them, /<sup>#</sup>CN̥<sup>#</sup>/, determine their exact place of articulation, [m̥, m̥ɲ, n̥, n̥ɲ, m̥ɳ̥, n̥ɳ̥], just as in the examples seen above. Even the initial C of following syllables affect the result, by coarticulation, in a more or less evident way, according to the places of articulation directly involved. This happens every time two phones come into contact with one another; and, of course, this is done to render pronunciation more fluent and natural (certainly not to further complicate life!).

Among the taxophonically relevant actual cases in German, after experiencing

all possibilities, the following instances are worthwhile mentioning and exemplifying. As a matter of fact, should they not be applied, the result would be articulatory straining, indeed.

5.2.1.4. For practical reasons, we will start from /C<sub>n</sub>/ [C<sub>m</sub>]. We can see that when they are followed by labiodentals (/pf, f, v/), the coarticulation of [m] and [pf, f, v] produces an intense *labiodentalized* bilabial [m̥]: [ˈzi:b̥m̥ ˈpfhɛ:ʀdɛ] /ˈzi:b̥n̥ ˈpfɛ:ʀdə/ *sieben Pferde*, [ˈzi:b̥m̥ ˈfɛtɛʀ] /ˈzi:b̥n̥ ˈfɛtɛʀ/ *sieben Vetter*, [ˈzi:b̥m̥ ˈva:ʒŋ] /ˈzi:b̥n̥ ˈva:ʒŋ/ *sieben Wagen*.

When /C<sub>n</sub>/ [C<sub>m</sub>] is followed by laminal C, /t, d, ts, z, n, l/, we have a *denti-alveo–bilabial* [m̥]: [ˈzi:b̥m̥ ˈtʰa:ʒɪ] /ˈzi:b̥n̥ ˈtʰa:ʒə/ *sieben Tage*, [ˈzi:b̥m̥ ˈdɛ:maʀk] /ˈzi:b̥n̥ ˈdɛ:maʀk/ *sieben DM*, [ˈzi:b̥m̥ ˈtʰɪmɛʀ] /ˈzi:b̥n̥ ˈtʰɪmɛʀ/ *sieben Zimmer*, [ˈzi:b̥m̥ ˈnɛçtɪ] /ˈzi:b̥n̥ ˈnɛçtə/ *sieben Nächte*, [ˈzi:b̥m̥ ˈlɛndɛʀ] /ˈzi:b̥n̥ ˈlɛndɛʀ/ *sieben Länder*.

Finally, for /C<sub>n</sub>/ [C<sub>m</sub>] + /k, g, ʀ/, we find an intense *velarized* bilabial nasal [m̥]: [ˈzi:b̥m̥ ˈkʰatʂŋ] /ˈzi:b̥n̥ ˈkʰatʂŋ/ *sieben Katzen*, [ˈzi:b̥m̥ ˈgɛŋɪ] /ˈzi:b̥n̥ ˈgɛŋə/ *sieben Gänge*, [ˈzi:b̥m̥ ˈʀɛ:dɛʀ] /ˈzi:b̥n̥ ˈʀɛ:dɛʀ/ *sieben Räder*.

5.2.1.5. As far as /C<sub>m</sub>/ [C<sub>m</sub>] -em is concerned (which is not derived by assimilation, but is original, for //C<sub>m</sub>m//), three groups deserve careful attention. In fact, for /C<sub>m</sub>/ [C<sub>m</sub>] + /pf, f, v/, we find a *labiodental* [m̥]: [m̥ɪt̥d̥i:z̥m̥ ˈpfhɛ:ʀt] /m̥ɪt̥d̥i:z̥m̥ ˈpfɛ:ʀt/ *mit diesem Pferd*, [ʀɪn̥d̥i:z̥m̥ ˈvalt] /ɪnd̥i:z̥m̥ ˈvalt/ *in diesem Wald*.

For /C<sub>m</sub>/ [C<sub>m</sub>] + /t, d, ts, z, n, l/, once again, we have a *denti-alveo–bilabial* [m̥]: [ˈtʂu:ð̥aen̥m̥ ˈtʰɪmɛʀ] /ˈtʂu:ð̥aen̥m̥ ˈtʰɪmɛʀ/ *zu deinem Zimmer*, [ˈbae:ð̥i:z̥m̥ ˈlɪçt] /ˈbae:ð̥i:z̥m̥ ˈlɪçt/ *bei diesem Licht*. For /C<sub>m</sub>/ [C<sub>m</sub>] + /k, g, ʀ/, a *velar–bilabial* [ŋ̥]: [ˈfo:ʀmaen̥m̥ ˈkɔʀpf] /ˈfo:ʀmaen̥m̥ ˈkɔʀpf/ *vor meinem Kopf*, [m̥ɪt̥d̥aen̥m̥ ˈʀɪŋ] /m̥ɪt̥d̥aen̥m̥ ˈʀɪŋ/ *mit deinem Ring*.

5.2.1.6. For /C<sub>n</sub>/ [C<sub>n</sub>] + /p, b, m/, for the third time we find a *denti-alveo–bilabial* [m̥]: [ˈg̥u:t̥ŋ ˈpʰʁ̥aɛs] /ˈg̥u:t̥ŋ ˈpʰraɛs/ *guten Preis*, [ˈg̥u:t̥ŋ ˈbal] /ˈg̥u:t̥ŋ ˈbal/ *guten Ball*, [ˈg̥u:t̥ŋ ˈmɔʀʒŋ] /ˈg̥u:t̥ŋ ˈmɔʀʒŋ/ *guten Morgen*.

For /C<sub>n</sub>/ + /pf, f, v/, we have a *labiodentalized* alveolar [r̥]: [ˈg̥u:t̥ŋ ˈpʰfl̥ɛ:ʒɪ] /ˈg̥u:t̥ŋ ˈpʰfl̥ɛ:ʒɪ/ *guten Pfleger*, [ˈg̥u:t̥ŋ ˈfaŋ] /ˈg̥u:t̥ŋ ˈfaŋ/ *guten Fang*, [ˈg̥u:t̥ŋ ˈvaen] /ˈg̥u:t̥ŋ ˈvaen/ *guten Wein*. For /C<sub>n</sub>/ + /k, g, ʀ/, we find a *velarized* alveolar [ʀ̥]: [ˈg̥u:t̥ŋ ˈkʰɛlɪʀ] /ˈg̥u:t̥ŋ ˈkʰɛlɪʀ/ *guten Keller*, [ˈg̥u:t̥ŋ ˈgast] /ˈg̥u:t̥ŋ ˈgast/ *guten Gast*, [ˈg̥u:t̥ŋ ˈʀo:t̥vaen] /ˈg̥u:t̥ŋ ˈʀo:t̥vaen/ *guten Rotwein*.

Besides, for /C<sub>n</sub>/ [C<sub>n</sub>] + /p, b, m/, we again find a *velar–bilabial* [ŋ̥]: [ˈg̥e:ʒ̥ŋ ˈpʰo:l̥ŋ] /g̥e:ʒ̥ŋ ˈpʰo:l̥ŋ/ *gegen Polen*, [ˈg̥e:ʒ̥ŋ ˈbɛlʒ̥j̥ŋ, -j̥ŋ] /g̥e:ʒ̥ŋ ˈbɛlʒ̥j̥ŋ/ *gegen Belgien*, [ˈg̥e:ʒ̥ŋ ˈmɛks̥i:ko] /g̥e:ʒ̥ŋ ˈmɛks̥i:ko/ *gegen Mexiko*.

For /C<sub>n</sub>/ [C<sub>n</sub>] + /pf, f, v/, we find a *labiodentalized* velar [r̥]: [ˈg̥e:ʒ̥ŋ ˈpʰfant̥] /g̥e:ʒ̥ŋ ˈpʰfant̥/ *gegen Pfand*, [ˈg̥e:ʒ̥ŋ ˈfʀaŋk̥ʀaɛç] /g̥e:ʒ̥ŋ ˈfʀaŋk̥ʀaɛç/ *gegen Frankreich*, [ˈg̥e:ʒ̥ŋ ˈvaʀt̥] /g̥e:ʒ̥ŋ ˈvaʀt̥/ *Gegenwart*.

For /C<sub>n</sub>/ [C<sub>n</sub>] + /t, d, ts, z, n, l/, we have a *denti-alveolarized* velar [r̥]: [ˈg̥e:ʒ̥ŋ ˈtʰael̥] /g̥e:ʒ̥ŋ ˈtʰael̥/ *Gegenteil*, [ˈg̥e:ʒ̥ŋ ˈdʀae̥] /g̥e:ʒ̥ŋ ˈdʀae̥/ *gegen drei*, [ˈg̥e:ʒ̥ŋ ˈtʂɛ̥] /g̥e:ʒ̥ŋ ˈtʂɛ̥/ *gegen zwei*, [ˈg̥e:ʒ̥ŋ ˈzɛks̥] /g̥e:ʒ̥ŋ ˈzɛks̥/ *gegen sechs*, [ˈg̥e:ʒ̥ŋ ˈnɔʏn̥] /g̥e:ʒ̥ŋ ˈnɔʏn̥/ *gegen neun*, [ˈg̥e:ʒ̥ŋ ˈlaest̥ʊn̥] /g̥e:ʒ̥ŋ ˈlaest̥ʊn̥/ *Gegenleistung*.

5.2.1.7. In the case of /C<sub>ŋ</sub>/ [C<sub>ŋ</sub>] + /pf, f, v/, obviously, things do not change: [mɪtʃʌrfŋ ʰo:tos] /mitʃʌrfŋ ʰo:tos/ *mit scharfen Fotos*; equally, for /C<sub>ŋ</sub>/ [C<sub>ŋ</sub>] + /t, d, ts, z, n, l/: [mɪtʃʌrfŋ ʰʃe:nŋ; ʰʃe:-] /mitʃʌrfŋ ʰʃe:nŋ/ *mit scharfen Zähnen*.

Instead, for /C<sub>ŋ</sub>/ [C<sub>ŋ</sub>] + /k, g, r/, we have a *velarized* labiodental [ʃ̠]: [mɪtʃʌrfŋ ʰkɪŋŋ] /mitʃʌrfŋ ʰkɪŋŋ/ *mit scharfen Klängen*.

For /C<sub>ŋ</sub>/ [C<sub>ŋ</sub>] + /p, b, m/, for the fourth time we find a *denti-alveo–bilabial* [ɱ]: [mɛ:ʦŋpɛnzjonaɪt, -aŋ-, -ãŋ-, -ã-, -sj-; ʰmɛ:ʦ-] /mɛ:ʦŋpɛnzjonaɪt, -aŋ-, -sj-/ *Mädchenpensionat*; besides, + /pf, f, v/, we have a *labiodentalized* alveolar [ɾ]: [mɛ:ʦŋfɛʝvntliç; ʰmɛ:ʦ-] /mɛ:ʦŋfɛʝvntliç/ *mädchenfreundlich*; then, + /k, g/, we have a *velarized* alveolar [ʁ̠]: [mɛ:ʦŋkɪlʌsɛ; ʰmɛ:ʦ-] /mɛ:ʦŋkɪlʌsɛ/ *Mädchenklasse*.

For /C<sub>ŋ</sub>/ [C<sub>ŋ</sub>] + /p, b, m/, we find for the third time a *velar–bilabial* [ɱ̠]: [ʰʃaetʊŋŋ ɸubliʰʃi:ʁŋ, -ʁ̠, -ʁŋ, -ʁ̠] /ʰʃaetʊŋŋ ɸubliʰʃi:ʁŋ/ *Zeitungen publizieren*.

For /C<sub>ŋ</sub>/ [C<sub>ŋ</sub>] + /pf, f, v/, we again have a *labiodentalized* velar [ɾ̠]: [ʰʃaetʊŋŋ ʰfɪkhaofŋ] /ʰʃaetʊŋŋ ʰfɪkhaofŋ/ *Zeitungen verkaufen*.

Lastly, for /C<sub>ŋ</sub>/ [C<sub>ŋ</sub>] + /t, d, ts, z, n, l/, once again we find a *denti-alveolarized* velar [ɾ̠]: [ʰʃaetʊŋŋ ʰle:zŋ] /ʰʃaetʊŋŋ ʰle:zŋ/ *Zeitungen lesen*.

In grammemes (and frequent lexemes), as *in, ein, von, ins, uns, dann, schon, Montag*, in current speech, it is not at all rare that /V<sub>n</sub>/ + /-(C)<sup>#</sup>, (C)<sup>#</sup>/ becomes [V<sub>n</sub>, ̃n, ̃] (with progressively stronger nasalization, up to a complete dropping of /n/): [ʔɪnsʰkhi:no, ʔis-] /ɪnsʰkhi:no/ *ins Kino...*

## Stops

5.2.2.1. There are three diphonic pairs, /p, b; t, d; k, g/, which are peculiar because in word-final position (and in postnuclear position, but with some <oddities> that we will see) only the voiceless elements occur. In addition, /p, t, k/, after pauses and in stressed syllables (not preceded by /s, ʃ/ that belong to the same lexeme), are <aspirated>. Besides, /t, d/ are denti-alveolar (and rigorously the most appropriate symbols would be [t̠, d̠]), but it is sufficient to use [t, d], unless it is thought to be important to insist on this nuance).

Here are some examples: [pʰaʰphi:ʁ] /paʰpi:ʁ/ *Papier*, [pʰlats] /ʰplats/ *Platz*, [ʰʃpɛçŋ] /ʰʃpɛçŋ/ *sprechen*, [ʰhalp] /ʰhalp/ *halb*, [ʰʔapt] /ʰʔapt/ *Abt*, [ʰɪçʰpʰaɪkɛ] /ɪçʰpʰaɪkɛ/ *ich parke*, [ʰʊnt] /ʰʊnt/ *und*, [ʰlu:pɛ] /ʰlu:pɛ/ *Lupe*, [ʰɛbɛ] /ʰɛbɛ/ *Ebbe*, [ʰbɪtɛ] /ʰbɪtɛ/ *bitte*; [ʰto:t] /ʰto:t/ *Tod*, [ʰtʰɛ:tŋ] /ʰtʰɛ:tŋ/ *treten*, [ʰʃtʰɛ:ʃɛ] /ʰʃtʰɛ:ʃɛ/ *Straße*, [ʰlaet] /ʰlaet/ *Leid*, [ʰʃtʰɛ:ɪŋkt] /ʰʃtʰɛ:ɪŋkt/ *es trinkt*, [ʰlaedɪ] /ʰlaedɪ/ *leider*, [ʰdʌŋkɪ] /ʰdʌŋkɪ/ *danken*, [ʰkɪnt] /ʰkɪnt/ *Kind*, [ʰkʰɛ:ʁɛs] /ʰkʰɛ:ʁɛs/ *Kreis*, [dʰɛsʰkhi:no] /dʰɛsʰkhi:no/ *das Kino*, [(ʰaɛŋ)kʰnal] /ʰ(aɛŋ)kʰnal/ *(ein) Knall*, [gʰbɪɪɪgɛ] /gʰbɪɪɪgɛ/ *Gebirge*, [gʰɪŋ] /gʰɪŋ/ *ging*.

5.2.2.2. What is too often described as <aspiration> of stops before pauses, is actually nothing but the <explosion> of the phones (that we will show only here with [∗]), not <aspiration>, which is a different thing: [ʰskalp∗] /ʰskalp/ *Skalp*, [ʰtʰa:t∗] /ʰtʰa:t/ *Tat*, [ʰkʰɛk∗] /ʰkʰɛk/ *keck*. Some authors go as far as to indicate something like

⟨[ʰaphthɪ, ʰytlɪ]⟩, for [ʰaptɪ] /'taptə/ *tappte*, [ʰytɪ] /'rytlə/ *rüttle*, when they simply want to hint at the fact that the transition from one stop to another, or to any other phone, can be audible, that is ⟨exploded⟩ [[ʰap\_\*t\_\*ɪ, ʰy\_\*t\_\*ɪ]]; but there is certainly no need to mark such things.

By assimilation, in /pf, pv/, we have [p] + /f, v/: [ʔapfal] /'apfal/ *Abfall* (different from [pf] /pf/), [ʔapvɛɾtɪ] /'apvɛɾtɪ/ *abwerten*. In addition, as we have seen for /n/ (§ 5.2.1), even /t, d/ assimilate to a following C: [ˈmɪkɡɪft] /'mitɡɪft/ *Mitgift*, [ˈmɪkˌkɔmm] /'mitkɔmm/ *mitkommen*, [ˈmɪpˌbɪŋɪŋ] /'mitbɪŋɪŋ/ *mitbringen*, [ˈmɪpˌmɛnʃ] /'mitmɛnʃ/ *Mitmensch*, [ˈbrɔːkˌkhaofɪŋ] /'brɔːtkaoɪŋ/ *Brot kaufen*, [ˈbrɔːpˌbɪŋɪŋ] /'brɔːtbɪŋɪŋ/ *Brot bringen*. Note that we have [ʔ] in: [ˈmɛːtʃɪŋ; ˈmɛːʔ] /'mɛːtʃɪŋ/ *Mädchen*.

5.2.2.3. Let us also consider: [ʔaplaot] /'aplaot/ *Ablaut*, [ʔaplatɪf] /'aplatɪf/ *Ab-lativ*, [ʔapɸuɪf] /'apɸuɪf/ *Abruf*, [ʔatvɛɾp] /atvɛɾp/ *Adverb*, [ʔatmi'ʁa:l] /atmi'ra:l/ *Admiral*, [ʔtoːflaen] /'toːflaen/ *Stovlein*, [ˈliːpˌlɔs] /'liːploːs/ *lieblos*, [ˈrɛːkˌlɔs] /'rɛːk-loːs/ *reglos*, [ˈmøːkˌlɪç] /'møːklɪç/ *möglich*, [ˈniːtˌlɪç] /'niːtlɪç/ *niedlich*, [ˈhantˌʊn] /'hant-lʊŋ/ *Handlung*, [ˈyːpˌlɪç] /'yːplɪç/ *üblich*, [ˈvaːknɪs] /'vaːknɪs/ *Wagnis*, but: [ˈlaebnɪts] /'laebnɪts/ *Leibniz*, [ˈrɛːdnɪ] /'rɛːdnɪ/ *Redner*, [ˈgɛːgnɪ] /'gɛːgnɪ/ *Gegner*, [ˈvaːgnɪ] /'vaːgnɪ/ *Wagner*, [ˈʔaːdlɪ] /'aːdlɪ/ *Adler*, [ˈʔaːdlɪç] /'aːdlɪç/ *adlig*, [ˈʔaːdlɪgɪ] /'aːdlɪgɪ/ *Adlige*, [ˈɔɾdnʊŋ] /'ɔɾdnʊŋ/ *Ordnung*, [ˈrɛːglɪ] /'rɛːglɪ/ *Regler*, [zɪgˈna:l] /zɪgˈna:l/ *Signal*, [zɪgˈnaːtuːɾ] /zɪgˈnaːtuːɾ/ *Signatur*, [ˈʔɛːbnɪ] /'ɛːbnɪ/ *ebene*, [ˈyːbrɪç] /'yːbrɪç/ *übrig*.

Actually, in this second group of forms, the consonantal sequences are voiced because they belong to the same lexeme (with a possible diachronic drop of /ə/ -e): *reden, gegen, Wagen, Adel, Regel, Orden, eben, über*. On the contrary, in the first group we have combinations (which may be clear or opaque) with grammemes (ie prefixes or suffixes), so we will consider only three cases: *Ab-(laut)*, (*üb*)-*lich*, from *üben*, and (*Wag*)-*nis*.

Words of lofty or foreign origin generally maintain a voiced stop before sonants: /bl/ *Double, moblieren, Problem, publik, Republik, sublim, Tablett, Variable*; /br/ *Algebra, Fabrik, Kabrio, Kobra, Librettist, Soubrette, Vibration, Zebra*; however /br, pr/ *Abrasion, Abrasit* and /pr, br/ *abrupt*; /dr/ *Adresse, Hydrant, Madrider, Madrigal, Melodrama, Quadrant*.

Other cases: /gm/ *Dagmar, Dogma, Egmont, Fragment, Magma, Paradigma, Phlegma, Pigment, Pragmatik, Pygmäe, Segment, Sigma, Stigma*; /gn/ *Agnostiker, Diagnose, ignorieren, indigniert, kognitiv, Magnat, Magnolie, Magnus, Physiognomie, prägnant, Stagnation*, and /gn, ɲn/ *inkognito, Magnesit, Magnesium, magnetisch, Signal, signikant*; /gl/ *egломisieren, Hieroglyphe, Iglu, Negligé*, and /ŋl/ *englisch, Jüngling, länglich*, and /ŋl/ *Single*; /gr/ *agrарisch, Agronomie, Allegro, Diagramm, Emigrant, Migräne, Regress, Sangria, Telegraf*.

But we have: /tm/ *Admiral, Kadmium*. In addition: /p, b/ *Abort (= Abtritt), aboral, abortieren*, and /kn, gn/ *Ereignis*, in spite of /kn/ *Befugnis, Wagnis, Zeugnis*.

5.2.2.4. From the examples provided, we see that German has a ⟨glottal⟩ stop too (or ⟨glottal catch⟩, but *laryngeal stop* is better) [ʔ]: [ʔyβɪʔal, ʔy-] /y(ː)βɪʔal/ *ü-*



*berall*, [gʰʔɔɹk] /gə'ɔrk/ *Georg* (more frequently, [gʰe:ɔɹk] /'ge:ɔrk/), [bʰʔael̩] /bə'ael̩/ *beeilen*, [the'ʔaɹ] /te'aɹ/ *Theater*, [fʰʔaen] /fʰ'aen/ *Verein*, [vael̩ (ʔ)ɪç'ʔaos-ʔaɹbaet̩] /vael̩ ɪç'aosʔbaet̩/ *weil ich ausarbeite*, [ʔɪs ʔaoχ ʔaen(ŋ)ʔapf̩] /'ɪs 'aoχ aenŋ'apf̩/ *iss auch einen Apfel*.

This phone precedes every V which is syllable-initial (thus with no C before that, always in the same syllable), either in stressed or unstressed position, either in lexemes or grammemes, even in sentences. It is mostly noticeable after pauses and in stressed syllables; if pronunciation becomes more relaxed, [ʔ] may be missing but only in completely unstressed syllables (and we indicate it here as [(ʔ)]), provided composition is not evident.

As can be seen, it also occurs within lexemes, in the context /V'V/ [VʔV], but not if the stress is weak: [ʔaf̩] /'af̩/ *Affe*, [ʔapʔaɹt] /'apʔaɹt/ *Abart*, [fʰʔaχt̩] /fʰ'aχt̩/ *verachten*, [bʰʔaχt̩] /bə'aχt̩/ *beachten*, [desʔavu'ʔi:ʔŋ, -ʔŋ, -ʔŋ, -ʔŋ] /desavu'i:ʔŋ/ *desavouieren*, [de'ʔemfazɪs] /de'emfazɪs/ *Deemphasis*, [ʔantʔa:tsid̩] /ant'a:tsid̩/ *Antacidum*, [ʔant(ʔ)a'tʃɪt̩] /anta'tʃɪt̩/ *Antacid*, [ʔaosʔa'le:ʔŋ] /'aosʔle:ʔŋ/ *auserlesen*, ['muntʔa:ɹt̩] /'munt'a:ɹt̩/ *Mundarten*. Thus we have: [thea'tʰɹa:lɪʃ] /tea'tra:lɪʃ/ *theatralisch*, but [the'ʔa-] only in a kind of... *theatrical* pronunciation.

In addition, we find [ʔ] even if the V is <deep> or assimilated, as in [ʔ] /ʀ/, for //əʀ//, provided it is an initial syllabic nucleus: [(tʃu)ʔʔ'a:ʔŋ, -ʔŋ, -ʔŋ, -ʔŋ] / (tsu)ʔ'a:ʀŋ/ (*zu*) *erfahren*.

But we have: [ʔae'nand̩] /ae'nand̩/ *einander*, with non-morphemic syllabification, which is acknowledged by the new orthography as well.

Further useful examples: [ʔʔaɹbaet̩] /ɛʔ'aɹbaet̩/ *erarbeiten*, [ʔaofʔa'ʃte:ʊŋ] /'aofɛʔ'te:ʊŋ/ *Auferstehung*, ['vi:dʔa'ʔo'bʔŋ, -ʔŋ] /'vi:dʔe:ʔo:bʔŋ/ *wiedererobbern*, [glatʔaes] /'glataes/ *Glätteis*, [laŋ'ne:zʔaes] /laŋ'ne:zʔaes/ *Langneseis*, [gʔaŋ'ʔaɹt] /gʔaŋ'aɹt/ *Gangart*, [tʃolʔa'hø:ʊŋ] /'tʃolʔa'hø:ʊŋ/ *Zollerhöhung*, [khlo'ʔa:k̩] /klo'a:k̩/ *Kloake*, [ʔide'ʔa:l] /ide'a:l/ *ideal*.

5.2.2.5. The existence of pairs such as [fʰʔaez̩] /fʰ'aesz̩/ *vereisen* and [fʰʔaez̩] /fʰ'aesz̩/ *verreisen* could lead one to think that [ʔ] is a phoneme, /ʔ/; but it is not so, even because it can be omitted, as generally happens in Switzerland, South Tyrol/Alto Adige, Austria, and Bavaria.

Even in neutral familiar speech, it is maintained better in fully stressed syllables: [d̩i(ʔ)ʔ'gents̩] /diʔ'gents̩/ *die Ergänzung*, [ʃtʊɹm (ʔ)ʊn'dʔaŋ, (ʔ)ɪn-, -d̩-] /ʃtʊɹm ʊn'dʔaŋ/ *Sturm und Drang*, [ʔɪç(ʔ)ʔ'aɹbaet̩] /ɪç'aɹbaet̩/ *ich erarbeite*. However, normally [ʔ] never occurs before postverbal pronouns: [(ʔɪ)ç'vaesɪs] /ɪç'vaesəs/ *ich weiß es*, [le:zɪç, -z̩] /le:z(ə)ɪç/ *les' ich*. On the other hand, in final half-stressed syllables, after V, it is certainly possible to have: ['mɪça'ʔel, -ʔe'l].

The banal mistake of not considering [ʔ] a <sound>, simply because it does not correspond to any grapheme, is to be avoided completely! For good phonetics, clear ideas are needed, and above all it is necessary to use one's ears, not one's eyes... Therefore, it is wrong to talk about a <vocalic onset> for [ʔV], in opposition to an <aspirated onset> for [hV], as for instance, in: [fʰʔalt̩] /fʰ'alt̩/ *veralten*, [fʰ'halt̩] /fʰ'halt̩/ *verhalten*.

Phonetically, they are not different from [fʰ'fal̩] /fʰ'fal̩/ *verfallen*: they are all

[CV], although the phonemic transcriptions do not use </ʔ/>, but just for the sake of simplicity. Actually, for teaching purposes, it could be more useful to write it, especially if no real phonetic transcription is added to the phonemic one. However, if only one type of transcription is used, it is decidedly more recommendable to also write [ʔ] or /ʔ/, especially for important cases.

A possible variant of [ʔV(:/C), ʔʀ] is [ʏ, ʏ:, ʏÇ, ʏ̤]: [ʀɪçʔʀʔaʀbaetɪ, ʔɪçʔɛʀʔ-], [ɪçʔʀʔaʀbaetɪ, ɪçʔɛʀʔaʀ-] /ɪçʔɛʀ'arbaetə/ *ich erarbeite*, [ʔɪçʔantʏʋɔʀtɪ, [ɪçʔant-] /ɪçʔant-ʋɔʀtə/ *ich antworte*, [ɪde'a:l] /ide'a:l/ *ideal*. Therefore, we have [ʔ] which fuses with the voiced segments of a syllable, and realizes them as creaky. For native speakers, this phonation type sounds similar to the sequences we have seen.

(In Danish, something similar occurs, although in the opposite direction: *stød* [cf § 17.36 of *NPT/HPb*] entails a distinctive use of creaky voice for voiced phonemes, [ʏ, Ç]; however, certain speakers change these phones into [ʋʔ, Cʔ] sequences, with [ʔ] in second place.)

5.2.2.6. It is interesting to note that [ʔ] can also occur mainly as a substitute of /t/ (but of /d, p, k/ as well), when preceded <sup>or</sup> followed by /N, N̥/. Even variants with creaky intense nasal segments occur ([ṁ, ṅ, ṅ̥]), which represent a frequent compromise, as we will see. The cue and most examples are taken from Kohler (1994), with integrations and changes, both for the transcriptions and contexts of occurrence: [ʔaemʃʀʔstandŋ, -nnṅ, -nʔṅ] /'aenʃɛʀʔstandŋ/ *einverstanden*, [ʔɔ:ʀhɑndŋ, -nnṅ, -nʔṅ] /'ɔ:ʀhɑndŋ/ *vorhanden*, [ʔʃtʊndŋ, -nnṅ, -nʔṅ] /'ʃtʊndŋ/ *Stunden*, [ʔɛndŋ, -nnṅ, -nʔṅ] /'ɛndŋ/ *Enden*, [ʔɛntŋ, -nʔṅ, -nnṅ] /'ɛntŋ/ *Enten*, [ʔkhœntŋ, -nʔṅ, -nnṅ] /'khœntŋ/ *könnten*, [ʔdɑŋkŋ, -ŋʔṅ, -ŋṅ̥] /'dɑŋkŋ/ *danken*.

Further examples: [ʔlɔʏçʔpʊŋktŋ, -ŋʔṅ, -ŋʔṅ, -ŋṅ̥] /'lɔʏçʔpʊŋktŋ/ *Leuchtpunkten*, [ʔʃhɛntŋʀ, -nʔṅʀ] /'ʃhɛntŋʀ/ *Zentner*, [ʔkhlɛmpnʀ, -mʔṅʀ] /'khlɛmpnʀ/ *Klempner*, [ʔthaozmp 'mɛ'tʀ, -mʔ 'm-, -ṁ 'm-] /'thaozntmɛ'tʀ/ *tausend Meter*, [bɛʔamtŋ, -mpʔṅ, -mʔṅ, -mmṁ] /bɛ'amtŋ/ *Beamten* (not for [bɛʔamtɪ, -mptɪ] /bɛ'amtə/ *Beamte*).

More: [ʔɪnʔaen'nɔʏəs ʔamt ʔaemʃyʋʃŋ, -ampʔ, -amp, -ʋʃ, -ʀŋ, -ʀŋ] /ɪnaen'nɔʏəs 'amt ʔaenʃy:ʀŋ/ *in ein meues Amt einführen*, [ʔpʊŋktŋ, -ŋʔṅ, -ŋʔṅ, -ŋṅ̥] /'pʊŋktŋ/ *Punkten*, [ʔlɔʏtŋant, -ʔṅ-] /'lɔʏtŋant/ *Leutnant*, [mɪʔ'mɪndɪstŋs, mɪʔ-] /mɪ'tmɪndɪstŋs/ *mit mindestens*, [ʔhɪntŋ, -nʔṅ, -nnṅ] /'hɪntŋ/ *hinten*, [mɪtŋm, -ʔṅm] /mɪtŋm/ *mit 'nem*, [ʔaχtʃhɛntŋ, -ʔṅ, -ṅ̥, -tsɛn-, -tsɛn-, -tsɛn-, -tsɛn-] /'aχtʃɛntŋ/ *achtzehnten*.

5.2.2.7. In addition: [ʔkhɔmt dɑemʃʔɔʏntmɪt, -mpɪmɪt, -mʔmɪ-] /'khɔmt daen'ʔɔʏntmɪt/ *kommt dein Freund mit?*, [ʔɛʀ'khɔmt 'ŋɪçʔ, -mʔ, ʔɛʀ', ʔʀ'] /ɛ:ʀ'khɔmt 'nɪçʔ/ *er kommt nicht*, [zɪntmɑenʃ'ʊ:ʃ 'hɪ:ʀ, -mpm-, -mʔm-] /zɪntmɑenʃ'ʊ:ʃ 'hɪ:ʀ/ *sind meine Schuhe hier?*, [ʋɪʀzɪnt'nu:ʀ 'tʃhβæ, -ŋʔṅ-] /ʋɪʀzɪnt'nu:ʀ 'tʃvæ/ *wir sind nur zwei*.

Therefore, we add the /tŋ/ context, not preceded by /n/, but by another voiced (or even voiceless) phoneme: [ʔhatŋ, -ʔṅ] /'hatŋ/ *hatten*, [ʔbɪtŋ, -ʔṅ] /'bɪtŋ/ *bitten*, [ʔbɪtŋ, -ʔṅ] /'bɪtŋ/ *bieten*, [ʔvɑʀtŋ, -ʀʔṅ] /'vɑʀtŋ/ *warten*, [ʔvɔltŋ, -lʔṅ] /'vɔltŋ/ *wollten*, [ʔvʊstŋ, -ʔṅ] /'vʊstŋ/ *wussten*, [ʔlyftŋ] /'lyftŋ, -ʔṅ/ *lüften*.

When [Ç#ʔ] combine, they can become [ʔ#ʔ]: [ʔʊntʔɪlʊstʃa'tʃhɔ:ŋn, ʔʊnʔʔɪ-] /ʊntɪlʊstʃa'tʃjo:ŋn/ *und Illustrationen*, [ʔʃæ'thɑ:k ʔɑ:bmt, -aʔ ʔɑ:-] /'ʃræta:k 'ɑ:bnt/

*Freitag abend*, [mitʁintʁ'siti, miʁʁin-] /mitintʁ'siti/ *mit Intercity*, [mitʁiʁn'ʔeltʁn, miʁʁ-] /mit'i:ʁn'eltʁn/ *mit ihren Eltern*.

### Stopstrictives

5.2.3.1. German has three voiceless stopstrictives, [pf, ts, tʃ] /pf, ts, tʃ/. From a descriptive and teaching point of view, it is not a good thing to exclude them from the phonemic inventory and consider them as phonemic sequences such as </pf, ts, tʃ/>; also because these sequences do exist in the language (as we will see)! More often, /ts/ is articulated with lowered tip of the tongue, whereas /tʃ/ is with raised tip (but it is not necessary to use a special symbol [tʃ]). The three of them are all < aspirated > after pauses or in stressed syllables, except after a tautomorphemic /s/: [pʰfɛfɾ] /pʰfɛfɾ/ *Pfeffer*, [pʰflantsɛ] /pʰflantsɛ/ *Pflanze*, [ʃimʁfɿ] /ʃimʁfɿ/ *schimpfen*, [kɔpʰf] /kɔpʰf/ *Kopf*; [tʃhaet] /tʃaet/ *Zeit*, [na'tʃjɔ:n] /na'tʃjɔ:n/ *Nation*, [niçts] /niçts/ *nichts*, [stse:nɛ] /stse:nɛ/ *Szene*; [tʃhɛçɛ] /tʃhɛçɛ/ *Tscheche*, [tʃhɛlo; ʃɛ-] /tʃhɛlo; ʃɛ-/ *Cello*, [dɔʏtʃ] /dɔʏtʃ/ *deutsch*, [pʰatʃɛ] /pʰatʃɛ/ *Patsche*.

Let us now see some cases of /pf, tʃ/ [pf, tʃ]: [ʔapʰʁlaŋŋ] /apʰʁlaŋŋ/ *abverlangen*, [ʔentʃpɪnŋ, ʁɪn-] /entʃpɪnŋ/ *entspinnen*, [ʔentʃlʊs, ʁɪn-] /entʃlʊs/ *Entschluss*. However, in fast speech they can become [pf, tʃ]: [ʔapʰʁlaŋŋ, ʔentʃpɪnŋ, ʁɪn-, ʔentʃlʊs, ʁɪn-] (generally without < aspirating > the following stopstrictives or stops, as also in: [ʔentʃuldɪgʊn, -n'tʃʊ-, ʁɪn-] /entʃuldɪgʊn/ *Entschuldigung*, cf § 5.3.2.5 as well).

Instead, German has no </dʒ/>, but /tʒ/, which occurs in loanwords: [tʒi:ns] /tʒi:ns/ *Jeans*, [kʰilimantʒa:ʁo] /kilimantʒa:ʁo/ *Kilimandscharo*, [(ʁim)tʒʊŋ] /ʁim)tʒʊŋ/ (*im*) *Dschungel*; especially in current pronunciation, [tʒ] /tʒ/ can alternate with /tʃ, tʃ/.

### Constrictives

5.2.4.1. There are five diphonic pairs: [f, v; s, z; ʃ, ʒ; ç, ʝ; ʁ, χ]. Generally, /s, z/ are articulated with lowered tip of the tongue, whereas /ʃ, ʒ/ are with raised tip (but it is not necessary to use special symbols as [ʃ, ʒ]). Strictly speaking, [ç] could be considered not to be a phoneme (by < simply > introducing a < juncture phoneme >, as we will see shortly). In addition, [j] is actually a < semi-constrictive > phone (even if it were indicated with [j]). On the other hand, functionally, [ʁ] belongs to the particular category of sonants, and to the < vibrant > group; as a matter of fact, one possible realization is exactly [ʁ] /ʁ/.

Thus it is important to clearly know the relations among the various constrictive elements. Therefore, it is not difficult –in this case, thanks to spelling as well– to see that [ç, χ] are in (almost) complementary distribution. On the other hand, even [j] has close relationships (mostly in northern speech) with [ç] and also [χ, k] (even with [g, ɣ] as well, which in the North realize /g/ together with [j], that belongs to the phoneme /j/ too).

But let us see some examples: [fʏm̩f] /fʏnf/ *fünf*, [ʋas] /ʋas/ *was*, [ʋaes̩n̩] /ʋaes̩n̩/ *reißen*, [ʋaezn̩] /ʋaezn̩/ *reisen*, [zɔ:n] /zɔ:n/ *Sohn*, [ʃø:n] /ʃø:n/ *schön*, [ʃtaen] /ʃtaen/ *Stein*, [ˈtʰɪʃ] /ˈtʰɪʃ/ *Tisch*, [zeˈni:] /zeˈni:/ *Genie*, [eˈta:zɛ] /eˈta:zɛ/ *Etage*, [ˈbu:χ] /ˈbu:χ/ *Buch*, [ˈby:çɾ] /ˈby:çɾ/ *Bücher*, [ˈbax] /ˈbax/ *Bach*, [ˈbɛçɛ] /ˈbɛçɛ/ *Bäche*, [ˈru:ɪç] /ˈru:ɪç/ *ruhig*, [ˈʁaʊɪs] /ˈʁaʊɪs/ *Rauris*.

5.2.4.2. There are three more approximant taxophones for slit constrictives, which occur before /s, ʃ/, and we will notate them with their <committed> variants as well (which are more demanding), because they are not really necessary, although very frequent and <typifying>. It would not be useless to acquire them to obtain a smoother pronunciation: [ʃ, ɸ, ɣ] /f, ç, x/: [ʔaʊfʃɪbm̩, ʔaʊfʃɪbm̩] /aʊfʃɪbm̩/ *aufschieben*, [ˈhø:ɸst, ˈhø:çst, -çst] /ˈhø:çst/ *höchst*, [ˈʁaʊχʃpɛk, ˈʁaʊɰʃpɛk] /ˈʁaʊɰʃpɛk/ *Rauchspeck*.

In preintonemes (ie not in intonemes), forms such as *auf, ich, mich, dich, sich, -ig, -ich, -lich, -zig, euch, auch, doch, noch*, in current speech, often have [ʃ, ɸ, ɣ] /f, ç, x/, irrespective of the context just seen.

Quite rightly, German pronouncing dictionaries clearly indicate both [ç] /ç/ and [χ] /x/ – it is necessary to provide precise indications, not mysterious algebraic formulae. In fact, unless through an appropriate morphological knowledge, there would be no way to tell the difference between [ˈtʰaʊçn̩] /ˈtʰaʊçn̩/ *Tauchen* (-chen) <small rope> and [ˈtʰaʊχn̩] /ˈtʰaʊχn̩/ *tauchen* <to plunge>, or [ˈkʰu:çn̩] /ˈkʰu:çn̩/ *Kuhchen* (-chen) <calf> and [ˈkʰu:χn̩] /ˈkʰu:χn̩/ *Kuchen* <cake>.

5.2.4.3. The suffix *-ig* is [ɪç] /ɪç/, even when followed by C (except for those belonging to suffixes which contain [ç]): [ˈkʰø:nɪç] /ˈkʰø:nɪç/ *König*, [ʔaenɪɸst, -çst, -çst] /aenɪçst/ *einigt*, [fɾʔaenɪçt] /fɾʔaenɪçt/ *vereinigt*, [ˈtʰɪβantʰstɪ, -çstɪ, -çstɪ] /ˈtʰvantsɪçstɛ/ *zwanzigste*; but: [ˈkʰø:nɪkɪç] /ˈkʰø:nɪkɪç/ *königlich*, [ˈkʰø:nɪkʁaɛç] /ˈkʰø:nɪkraɛç/ *Königreich*, [ˈkʰø:nɪgɪn] /ˈkʰø:nɪgɪn/ *Königin*.

However, it is possible to find [ˈkʰø:nɪçʁaɛç], and even –fairly systematically– [ɪk] /ɪk/: [ˈkʰø:nɪk, ʔaenɪkst, fɾʔaenɪkt, ˈtʰɪβantsɪkstɪ], which is the only pronunciation really accepted in southern Germany, Austria, and Switzerland, in initial position too: [ˈçɛ:mɪʃ, ˈk(h)-] *chemisch*, [ˈçɪ:nə, ˈk(h)-] *China*.

The graphic sequence *chs* has two different phonic structures: within lexemes we find [ks] /ks/: [ˈvɛksl̩n] /ˈvɛksl̩n/ *wechseln*, [ˈvaeks̩l̩] /ˈvaeks̩l̩/ *Wechsel*, [ˈʔɔks̩] /ˈʔɔks̩/ *Ochse*, [ˈzɛks̩] /ˈzɛks̩/ *sechs*, [ˈfʊks̩] /ˈfʊks̩/ *Fuchs*, [d̩ɾˈdaks̩] /d̩ɾˈdaks̩/ *der Dachs* <badger>, while we have: [χs] and [ɸs, çs, çs] /xs, çs/, when *s* is a grammeme: [d̩ɾˈdax̩s̩] /d̩ɾˈdax̩s̩/ *des Dachs* <of the roof>, [d̩ɾˈspʰɛɸs̩, -çs, -çs] /d̩ɾˈspʰɛçs̩/ *des Pechs* <(black) pitch>.

/s, z/ are mostly articulated with lowered tip of the tongue; but, for /sç/, we have [ʃç]: [ˈbɪʃçn̩] /ˈbɪʃçn̩/ *bisschen*; and, except in slow speech, for /sʃ, sz/, we have [ʃʃ, ʃʒ]: [ʔaɛʃʃʁaŋk] /aɛʃʃʁaŋk/ *Eisschrank*, [ɪçmʊsʃnɛl ˈvɛk] /ɪçmʊsʃnɛl ˈvɛk/ *ich muss schnell weg*, [d̩ɾˈzɛˈni:] /d̩ɾˈzɛˈni:/ *das Genie*. /ʃ, z/ are with raised tip ([ʃʃ, ʒʒ]).

In addition, in the /kv, tv, ʃv/ sequences, /v/ is more often realized as bilabial, [β]: [ˈkʰβatʃ] /ˈkʰvatʃ/ *Quatsch*, [ˈtʰɪβae] /ˈtʰvae/ *zwei*, [ˈʃβɛstɾ] /ˈʃvɛstɾ/ *Schwester*. In neutral German, /j/ is semi-constrictive, in all contexts: [ˈj̥a:ɾ] /ˈj̥a:ɾ/ *Jahr*, [ˈmaj̥o-

'nɛ:zɪ; -ɛ:] /majo'nɛ:zə/ *Majonäse/Mayonnaise*, [ʔɪn,tona'tshjɔ:n] /ɪntona'tsjɔ:n/ *Intonation*.

5.2.4.4. For /ʀ/, it is necessary to add a few observations, both on our notation and phonemic interpretation. The <generic> phonemic symbol seems to be useful in indicating its normal place of articulation, which is uvular – and the most recommendable, for teaching purposes. As far as its manner (of articulation) is concerned, the voiced constrictive one, [ʀ], is normal (and the most recommendable as well).

For emphasis, or for individual peculiarities, it is certainly possible to have a (voiced) uvular trill: [ʀ]. On the other hand, among native speakers it is not rare to find (voiced) alveolar articulations: a tap, [r], or a trill, [r] (mostly in the South, and Austria and Switzerland). However, before stressed or unstressed V, we will transcribe only [ʀ] /ʀ/: [ʔʀaʊʀɪs] /'ʀaʊʀɪs/ *Rauris*, [ʔbʀɪŋŋ] /'bʀɪŋŋ/ *bringen*.

After tautosyllabic V, instead, we will always transcribe [ʀ] (voiced pharyngealized uvular approximant) for /ʀ/, which is intense after C or diphthongs, [ʀ] /ʀ/: [ʔvi:ʀ] /'vi:ʀ/ *wir*, [ʔvi:ʀ] /'vi:ʀ/ *wirr*, [ʔmaeʀ] /'maeʀ/ *Meir* (like *Meier*, *Meyer*), [ʔbɛsʀ] /'bɛsʀ/ *besser*, [ʔhʀ'fo:ʀ] /hʀ'fo:ʀ/ *hervor*.

Many phonemic traditions have considered //əʀ//, mostly in parallel with //ən, əm, əl//, which we prefer to transcribe and interpret as [ŋ, m, l] /ŋ, m, l/, although we are perfectly aware that, in slower or emphatic speech, [ɛn, ɛm, ɛl] are possible, and [əʀ; əʀ; əʀ] as well – even <[ɛʀ]>, or rather [əʀ, əʀ] (in Switzerland) and [əʀ, əʀ, əʀ] (in Austria).

Contrary to what we do –and Kohler (1977, 1995<sup>2</sup>) and others as well– several authors distinguish between [Vʀ] and [V:ʀ] (ie </Vr/ > and </V:ʀ/ >, above all in teaching textbooks), but we do not think it is the best proposal, also because it is more complex and far from being the most widespread pronunciation (cf § 5.1.1 too).

For the prefixes *er-*, *her-*, *ver-*, *zer-*, we will transcribe [(C)ʀ] /[(C)ʀ]/, since it is the normal and most recommendable pronunciation, although in pronouncing dictionaries (except the GDWA) we still find </[(C)ɛʀ, (C)ɛʀ/ >. A slow, careful, or emphatic, pronunciation –with [(C)ɛʀ] /[(C)ɛʀ/– can be safely inferred from our notation as well. Diaphonemically, though, we might use /[(C)ɛʀ]/.

## Approximants

5.2.5. For this manner of articulation, the most important German phoneme is certainly [h] /h/, which often has the voiced variant, among voiced phones (especially in non-primary-stressed syllables): [ʔhaos] /'haos/ *Haus*, [gʔhaem] /gə'haem/ *geheim*, [ʔda:ha:bŋvi:ʀ, -h-] /'da:ha:bŋvi:ʀ/ *da haben wir...*, [ʔʊn,hael, -h-] /'ʊn,hael/ *Unheil*, [ʔvɪlhɛlm, -h-] /'vɪlhɛlm/ *Wilhelm*. Notice, however, cases like: [gʔe:ŋ] /'ge:ŋ/ *gehen*, [ʔʀu:ɪç] /'ʀu:ɪç/ *ruhig*, [ʔza:] /'za:/ *sah*.

Graphically, *h* is a device often used to indicate that the preceding V is long, mostly before *m*, *n*, *l*, *r* (the so-called <Dehnungs-*h*>): [nɛ:mh] /'nɛ:mh/ *nehmen*.

In addition to the variant of /v/, [β], occurring in the sequences /kv, tsv, ʃv/ (§

5.2.4.3), we will briefly say something about other possible variants for /Cj, yV, uʔV, o'a/: [fɛɪj̥n, -ɪj̥n] /fɛɪj̥n/ *Ferien*, [na'tsh̥jo:n, -'tsh̥jo:n, -tsi'o:n] /na'tsj̥o:n/ *Nation*, [tshya'nozɛ, tsh̥ɥa-] /tsya'nozɛ/ *Zyanose*, [manu'ʔɛl, -u'ɛl, -'nʷɛl, -'nʷɛl] /manu'ɛl/ *manuell*, [thoa'lɛtɛ, thwa-, thwa-] /toa'lɛtə/ *Toilette*.

### Laterals

5.2.6. In German neutral pronunciation we find only [l] /l/ (with the corresponding intense one, [l̥] /l̥/) and the variant [ɫ], before [ç, j] (the last one is heterosyllabic only): [l̥lant] /l̥lant/ *Land*, [fɔl] /fɔl/ *voll*, [fa'milj̥ɛ] /fa'milj̥ə/ *Familie*, [va'nɪl̥j̥ɛ] ([-nɪl̥-j̥ɛ] and [-ɪl̥ɛ]) /va'nɪl(j)ə/ *Vanille*, [mɪl̥ç] /mɪl̥ç/ *Milch*, [hɛlt] /hɛlt/ *Held*, [ʔɛz̥l] /ʔɛz̥l/ *Esel*, [d̥u:dl̥n] /d̥u:dl̥n/ *dudeln*.

### Structures

5.3.0. In this part, we will make the necessary observations for pronouncing words in actual sentences. Thus, we will deal with assimilation, reduction, stress, and intonation.

### Reduced forms

5.3.1.1. In spontaneous speech, grammemes, in addition to gradually reducing their stress, may even attenuate vowel timbres and lose some consonants or syllables. Grammmemes include: articles, personal pronouns, possessive adjectives, particles, affixes, prepositions, short conjunctions and adverbs – and some other similar forms, such as *geworden*, *spazieren*, and greetings.

We will give some examples, mostly taking them from Kohler (1977, 1995<sup>2</sup>, § 6.3.2), by modifying and completing both their inventory and variants, including the transcriptions. In the original publications, these are limited to the segments in question, whereas we will adapt them to our own style. The examples come in useful to show mechanisms and possibilities, rather than absolute necessities.

[mɪ(t)ɔ̃m'hunt] *mit dem Hund*  
 [d̥n'gʊ:t̃n 'gast] *den guten Gast*  
 [ɪñm'gʌrt̃n] *in dem Garten*  
 [ɪst̃ʔvɪɪk̃lɪç] *ist es wirklich?*  
 [has̃t̃s̃g̃ɪ'ze:̃n] *hast du's gesehen?*  
 [ɪhat̃ndɪ'tshaet̃ɔ̃n g̃ɪ'ʃaot] *er hat in die Zeitung geschaut*  
 [ɪz̃ɔld̃n'fat̃ɪ'ʁu:f̃n] *er soll den Vater rufen*  
 [d̃ɪ'man (ʔ)ɪndɪ'f̃ʁao] *der Mann und die Frau*  
 [(ɪ)ç̃l̃as̃n 'ʁe:d̃n] *ich lass ihn reden*  
 [(ɪ)ç̃(h)ab̃m g̃ɪ'ze:̃n, çamç-] *ich hab' ihn gesehen*

- [(ɪ)ç'phakɨm̩ma:l] *ich pack ihn mir mal*  
 [ˈlasŋ̩ ˈjʊŋŋ̩ ˌdoχʰʁe:dŋ̩] *lass den Jungen doch reden*  
 [ˈɡi:pm̩ ˈkɦɪndʁŋ̩doχ̩ vɛstsʊʔɛsŋ̩] *gib den Kindern doch was zu essen*  
 [ˈphakɨ ˈkɦɪndʁŋ̩doχ̩ vɛstsʊʔɛsŋ̩ʔaen] *pack den Kindern doch was zu essen ein*  
 [(ɪ)çkann̩ nɪç(t)'se:n̩, -z̩-] *ich kann ihn nicht sehen*  
 [ʁɪsʔalbʁŋ̩, -ʁŋ̩] *er ist albern*, [ʔʁɪs ʔalbʁŋ̩, -ʁŋ̩] *er ist albern*  
 [ʁɪs,nɪçɪŋ̩ʔa:gɨ] *er ist nicht in der Lage*, [ʁɪs'nɪç(t ʔ)ɪŋ̩ʔa:gɨ] *er ist nicht in der Lage*  
 [vɛs(h)as(t)d̩gɨ'za:kt] *was hast du gesagt?*  
 [hɛ(t)d̩ʁ'le:ʁɨ gɨʔʁɔχŋ̩] *hat der Lehrer gesprochen?*  
 [zɪ'vo:nt ʔɪn(d)ʁ'ʃtat] *sie wohnt in der Stadt*  
 [vɪʁzŋ̩ʔɪn(d)ɪ'ʃtatgɨ'faʋŋ̩, -ʋŋ̩, -ʁŋ̩, -ʁŋ̩] *wir sind in die Stadt gefahren*  
 [vɪʁzŋ̩ʔaof(d̩)ʁ'ʃtʁa:sɨ] *wir sind auf der Straße*  
 [ˈmo:nɪkas ɡɨ'kɦɔmm̩] *Monika ist gekommen*  
 [ˈpɦe:tʁs ɡɨ'kɦɔmm̩] *Peter ist gekommen*  
 [ɛʁsgɨ'kɦɔmm̩] *er ist gekommen*  
 [ˈkɦʊʁtɪs ɡɨ'kɦɔmm̩, -ts̩] *Kurt ist gekommen*  
 [ˈɦaɛŋ̩vɪçɪs ɡɨ'kɦɔmm̩, -çs̩] *Heinrich ist gekommen*  
 [zo'ɦatʁgɨʔʁɔχŋ̩] *so hat er gesprochen*, [zo'ɦatɦɛʁgɨʔʁɔχŋ̩] *so hatte er gesprochen*  
 [zo'ɦaʔʁtʁgɨ'za:kt] *so habt ihr gesagt*, [zo'ɦatʁɪʁgɨ'za:kt] *so hat er ihr gesagt*  
 [ɦaʔʁtʁŋ̩vəsɡɨ'ɦø:ʁt] *habt ihr denn was gehört?*  
 [ɦasd̩ɦɪd̩ŋ̩vəsɡɨ'ge:bŋ̩] *hast du ihr denn was gegeben?*  
 [ɦasd̩d̩ɛŋ̩gɨ'ze:n̩] *hast du ihn denn gesehen?*  
 [ɦasd̩d̩ɛŋ̩vəsɡɨ'ge:bŋ̩] *hast du ihm denn was gegeben?*  
 [ˈvɛ:ʁ ɦɛtŋ̩d̩ɛŋ̩gɨ'ze:n̩] *wer hat ihn denn gesehen?*  
 [vas'ʋɔln̩zɪdɛn, vas'ʋɔln̩zŋ̩] *was wóllen Sie denn?*, [vas'ʋɔln̩ 'zɪdɛn] *was wollen Sie denn?*  
 [vas'ʋɔln̩zɪdɛn,da', vas'ʋɔln̩zŋ̩,da'] *was wóllen Sie denn da?*, [vɛs'ʋɔln̩'zɪd̩ŋ̩,da', vɛs'ʋɔln̩'zɪn̩,da'] *was wollen Sie denn da?*  
 [vɛs'm̩aχd̩ŋ̩ ˈpɦe:tʁ] *was macht denn Peter?*, [vɛs'm̩aχ(p) ˈpɦe:tʁdɛn] *was macht Peter denn?*  
 [vɛs'ʋɔltʁŋ̩ d̩ɛŋ̩'ge:bŋ̩] *was wollt ihr ihm denn geben?*  
 [vɛs'zɔlɪçɪʁ d̩ɛŋ̩'ge:bŋ̩, vɛs'zɔlɪçɪŋ̩ 'ge:bŋ̩, -s'z̩-, '-s-] *was soll ich ihr denn geben?*  
 [ɛʁɦad̩ɛsgɨ'maχt] *er hat das gemacht*  
 [zɪɦad̩ɛsgɨ'maχt] *sie hat das gemacht*  
 [ɦatʁ,d̩asɡɨ'maχt] *hat er das gemacht?*  
 [ɦatsɨ,d̩asɡɨ'maχt] *hat sie das gemacht?*
- [d̩ʁ'le:ʁɨ ɦatŋ̩'sɦɔʏtɨ 'nɪçts ʔaofɡɨ'ge'bŋ̩] *der Lehrer hat uns heute nichts aufgegeben*  
 [d̩ŋ̩'tɦɪʃ ʃ'tɛlŋ̩vɪʁ ʔɪndɪʔɛkɨ d̩ŋ̩'ʃʁaŋkɨ dɪʔandəʋɨ...] *den Tisch stellen wir in die Ecke, den Schrank in die andere*  
 [d̩ʁ'tɦɪʃ ˈd̩ɛʁʔŋ̩dɪʔɛkɨ'tɛtɨ] *der Tisch, der in die Ecke steht...*  
 [d̩ŋ̩'tɦɪʃ ˈd̩ɦɪŋ̩vɪʁdɪʔɛkɨ ɡɨʃ'tɛlt,ɦaŋ̩] *den Tisch, den wir in die Ecke gestellt haben...*

- [vɐs'maxn̩diden,da] *was machen die denn da?*  
 [dɐs'mʊsdɛrɪzaen, dɐsmʊs'dɛrɪzaen] *das muss der sein*  
 [ʔɪrɪhaptʃo:n ɡɪ'than] *ihr habt schon getan*  
 [haptɪ, dasɡɪ'maxt] *habt ihr das gemacht?*  
 [(ɪ)ʃapɪrɪdɐsɡɪ'ge:bɪn, (ɪ)ʃapɪrɪ-] *ich hab' ihr das gegeben*  
 [(ɪ)ʃabɪrɪ'fo:ɪdʒɪ'tɛlt] *ich hab' ihn ihr vorgestellt*  
 [zɪhatɪrɪ'khlɔetɡɪ'vaʃn̩] *sie hat ihr Kleid gewaschen*  
 [hø:ʁn̩vɪrɪs 'mɔrɪɡɪ 'fɛy, 'hø:ʁn̩v-, -ns] *hören wir uns morgen früh*  
 ['vɔln̩zi (ɪ)zɪ'thɛfɛm̩] *wollen Sie sich treffen?*  
 [vi'ge:ts, -ts] *wie geht's? (-t es?)*  
 [ʔɛrɪ(ʔ)ɪstɪndɪ'khlɛɪrɪ'pɛnɡɪdʁʊn̩, ʔɛrɪs(ʔ)ɪn̩ɪ-] *er ist in den Keller eingedrungen*  
 [ʔɛrɪ(ʔ)ɪstɪnɪ'khlɛɪrɪ'pɛnɡɪdʁʊn̩, ʔɛrɪs(ʔ)ɪn̩ɪ-, -n̩ɪ-] *er ist in einen Keller eingedrungen*  
 [ʔɛrɪhadɪrɪ'ja'ɡɪ'zakt. dɐsɪ'kɦɔmt] *er hat dir ja gesagt, dass er kommt*  
 [dɐs'hatɪrɪ'ɡɪ'thɔɔym̩t] *das hat er geträumt*  
 [dɪ'hɛdɪrɪ'papa'vɔt'ɡɪ'tɛaekt] *da hat der Apparat gestreikt*  
 [dɪ'haptɪrɪ'vasɪrɪ'zɔym̩t] *da habt ihr was versäumt*  
 ['tɥɪrɪs 'tho:ɪ] *Tür und Tor*  
 ['lɛ:bɪn̩ 'tho:t, -n̩] *Leben und Tod*  
 ['vaen̩ɪ ɡɪ'zɔn̩] *Wein und Gesang*  
 [dɐs'hapɪn̩ 'ɡʊt] *das Hab und Gut*  
 [ʔɛpfl̩ 'bɪrɪn̩] *Äpfel und Birnen*  
 [ʔɛn'tɥɪʃn̩ (ʔ)ɛem'bɛt, -ɔn̩] *ein Tisch und ein Bett*  
 ['fɪn̩fɪn̩ 'tʃɪʔantsɪç, -n̩v̩n̩, -mm̩] *fünfundzwanzig*  
 ['nɔv̩n̩n̩ 'tʃɪʔantsɪç, -n̩] *neunundzwanzig*  
 ['zɪ:bɪn̩m̩ 'tʃɪʔantsɪç, -mm̩] *siebenundzwanzig*  
 ['tʃɪʔɛ hʊn̩rɪ'tʃɪʔantsɪç, n̩-] *zweihundertzwanzig*  
 [vɛn̩s-ʔɛ:ɡn̩t' d̩n̩'fak̩n̩vɪrɪ. mɪd̩rɪ'bɔn̩..] [vɪns-] *wenn es regnet, dann fahren wir mit der Bahn.*

5.3.1.2. Here is a list of reduced forms; it is fairly complete, which could even seem to be too analytical. However, it is of paramount importance to carefully examine all the modifications given, in order to grasp the mechanism.

It is obvious that the most <normal> forms, in this list, are not the first given, but some of the succeeding ones, in suitable conditions.

<i>aber</i> [ʔa:bɪrɪ, ʔa'bɪrɪ, ʔabɪrɪ, abɪrɪ, aβɪrɪ]	ʔann̩, ʔann̩, ann̩, an̩, an:, en:]
<i>also</i> [ʔalzo, ʔalzo, alzo, azo]	<i>an'r, an der</i> [ʔandɪrɪ, ʔandɪrɪ, andɪrɪ, ʔanɪrɪ, ʔanɪrɪ, anɪrɪ]
<i>an</i> [ʔan, ʔan, an, en], [-m, -n̩, -p, -n̩, -n]	<i>an die</i> [ʔandi, ʔa-, a-, -ani, -ɪ, -ɪ]
<i>am, an dem</i> [ʔandm̩, ʔandm̩, adm̩, ʔam̩, ʔam, ʔam, am, em]	<i>auf</i> [ʔaof, ʔaof, aof, aof, eof]
<i>ans, an's, an das</i> [ʔandɐs, ʔandɐs, andɐs, ʔans, ʔans, ʔans, ans, ens]	<i>aufs, -f's, -f das</i> [ʔaofd̩as, ʔaofd̩ɐs, ʔaofɪs, ʔaofɪs, ʔaofs, aofs, ʔaofs, aofs, eofs]
<i>an'n, an den</i> [ʔandn̩, ʔandn̩, andn̩,	<i>aufm, auf'm, -f dem</i> [ʔaofd̩m̩, ʔaofm̩,



- ʔaofm, aofm]  
*aufn, auf'n, -f den* [ʔaofd̥n, ʔaofm̥,  
 ʔaofm̥, aofm̥]  
*auf der, -f'r* [ʔaofd̥r̥, ʔaofr̥, ʔaofr̥,  
 aofr̥]  
*auf die, -f'ie* [ʔaofd̥i, -fi, ʔao-, aο-, -i,  
 -ɪ]  
*auf Wiedersehen!* [ʔaofvi:d̥r̥ze:n̥,  
 -zen, -zen, ʔeof-, f̥vi:d̥r̥-, 'vi:d̥r̥-, 'vi:ɪ-]  
*aus* [ʔaos, ʔaos, aos, aos, eos]  
*ausm, -s'm, -s dem* [ʔaosd̥m, ʔaosm̥,  
 ʔaosm̥, aosm̥]  
*ausn, -s'n, -s den* [ʔaosd̥n, ʔaosn̥, ʔao-  
 sn̥, aosn̥]  
*aus der, -s'r* [ʔaosd̥r̥, ʔaosr̥, ʔaosr̥, aο-  
 sr̥]  
*bei* [ʔbae, ʔbae, ʔbae, ʔbae], [b-]  
*beim, -i dem* [ʔbaed̥m, ʔbaed̥m, ʔbaem̥,  
 ʔbaem̥, ʔbaem̥, ʔbaem̥, ʔbaem̥, ʔbaem̥,  
 ʔbaem̥], [b-]  
*bei'n, -i den* [ʔbaed̥n, ʔbaed̥n, ʔbaen̥,  
 ʔbaen̥, ʔbaen̥, ʔbaen̥, ʔbaen̥, ʔbaen̥], [b-,  
 -m, -m̥, -n, -n̥, -N]  
*bei'r, -i der* [ʔbaed̥r̥, ʔbaed̥r̥, ʔbaer̥,  
 ʔbaer̥, ʔbaer̥, ʔbaer̥, ʔbaer̥], [b-]  
*bin* [ʔbɪn, ʔbɪn, ʔbɪn, ʔbɪn, ʔbɪn], [b-]  
*bist* [ʔbɪst, ʔbɪst, ʔbɪs, ʔbɪs, ʔbɪs, ʔbɪs,  
 ʔbɪs], [b-]  
*da* [ʔda:, ʔda:, ʔda:, ʔda:, ʔd̥e], [d-]  
*da-* [ʔda-, ʔd̥e-, ʔd̥ɪ-], [ʔda:ɪ-, ʔda:ɪ-], [d-]  
 (-*bei*, -*nach*, -*von*, -*vor*, -*zu*, ...)  
 [ʔda:ɪ-, ʔd̥e:ɪ-, ʔd̥ɪ:ɪ-], [ʔda:ɪ-, ʔda:ɪ-], [d-]  
 (-*ran*, -*rauf*, -*raus*, -*rin*, -*rum*, ...)  
*dann* [ʔdan, ʔdan, ʔdan, ʔd̥en, ʔd̥ɪn], [d-,  
 -m, -m̥, -n, -n̥, -N]  
*das, 's* [ʔdas, ʔdas, ʔdas, ʔd̥es, ʔd̥ɪs, ɪs, s̥, s],  
 [d-], [ɪ-] (only after V)  
*das* (rel.) [ʔdas, ʔdas, ʔdas, ʔd̥es, ʔd̥ɪs], [d-]  
*das* (dim.) [ʔdas, ʔdas, ʔdas], [d-]  
*dass* [ʔdas, ʔdas, ʔdas, ʔd̥es], [d-]  
*dein* [ʔdaen, ʔdaen, ʔdaen, ʔd̥e:n], [d-,  
 -m, -m̥, -n, -n̥, -N]  
*deine* [ʔdaenɪ, ʔdaenɪ, ʔd̥e:nɪ, ʔd̥e:nɪ],  
 [d-]  
*deinem, dei'm* [ʔdaenm̥, ʔdaenm̥, ʔdae-  
 mm̥, ʔd̥e:nm̥, ʔd̥e:mm̥, ʔd̥e:nm̥, ʔd̥e-
- mm̥, ʔdae:m̥, ʔd̥e:m̥], [d-]  
*deinen, dei'n* [ʔdaenn̥, ʔdaenn̥, ʔdaenɪ,  
 ʔdaen, ʔd̥e:n], [d-; -m, -m̥, -n, -n̥, -N]  
*deiner* [ʔdaenr̥, ʔdaenr̥, ʔd̥aenr̥, ʔd̥e:nr̥,  
 ʔd̥ɪnr̥, ʔd̥ɪnr̥], [d-]  
*deines* [ʔdaenɪs, ʔdaenɪs, ʔd̥e:nɪs, ʔd̥e:nɪs,  
 ʔd̥ɪnɪs, ʔd̥ɪnɪs], [d-]  
*dem, 'm* [ʔd̥e:m, ʔd̥e:m, ʔd̥em, ʔd̥em,  
 ʔd̥em, ʔd̥ɪm, ʔd̥m, ʔm, m̥], [d-], [ɪ-]  
 (only after V)  
*dem* (rel.) [ʔd̥e:m, ʔd̥e:m, ʔd̥em, ʔd̥em,  
 ʔd̥em, ʔd̥ɪm, ʔd̥m], [d-]  
*dem* (dim.) [ʔd̥e:m, ʔd̥e:m, ʔd̥em, ʔd̥em],  
 [d-]  
*den, 'n* [ʔd̥e:n, ʔd̥e:n, ʔd̥en, ʔd̥en, ʔd̥en,  
 ʔd̥ɪn, ʔd̥n, ʔn, n̥], [d-, -m, -m̥, -n, -n̥,  
 -N], [ɪ-] (only after V)  
*den* (rel.) [ʔd̥e:n, ʔd̥e:n, ʔd̥en, ʔd̥en, ʔd̥en,  
 ʔd̥ɪn, ʔd̥n], [d-, -m, -m̥, -n, -n̥, -N]  
*den* (dim.) [ʔd̥e:n, ʔd̥e:n, ʔd̥en, ʔd̥en],  
 [d-, -m, -m̥, -n, -n̥, -N]  
*denen* [ʔd̥e:n̥n̥, ʔd̥e:n̥n̥, ʔd̥enn̥, ʔdenɪ,  
 ʔden, ʔd̥en, ʔd̥ɪn], [d-; -m, -m̥, -n, -n̥, -N]  
*denn* [ʔd̥en, ʔd̥en, ʔd̥en, ʔd̥ɪn, ʔd̥n, n, n̥],  
 [d-; m, m̥, n, n̥, N] (the most reduced  
 forms are *not* used when preceded by  
 words in N; whereas, in *final*  
*position*, they are used when they  
 occur after unstressed pronouns;  
 instead, in *non-final position*, they  
 occur after stressed pronouns too)  
*der, 'r* [ʔd̥e:r̥, ʔd̥e:r̥, ʔd̥er̥, ʔd̥er̥, ʔd̥er̥, ʔd̥r̥],  
 [d-], [ɪ-] (only after V)  
*der* (rel.) [ʔd̥e:r̥, ʔd̥e:r̥, ʔd̥er̥, ʔd̥er̥, ʔd̥er̥],  
 [d-]  
*der* (dim.) [ʔd̥e:r̥, ʔd̥e:r̥, ʔd̥er̥, ʔd̥er̥], [d-]  
*deren* [ʔd̥e:r̥n̥, ʔd̥e:r̥n̥, ʔd̥ern̥, -r̥n̥, ʔd̥er̥n̥,  
 ʔd̥er̥n̥, -r̥n̥, ʔr̥n̥, ʔr̥n̥], [d-, -m, -m̥, -n,  
 -n̥, -n̥]  
*des, 's* [ʔd̥es, ʔd̥es, ʔd̥es, ʔd̥ɪs, ʔs̥, ʔs̥, s̥, s],  
 [d-], [ɪ-] (only after V)  
*des* (rel.) [ʔd̥es, ʔd̥es, ʔd̥es, ʔd̥ɪs], [d-]  
*des* (dim.) [ʔd̥es, ʔd̥es, ʔd̥es], [d-]  
*dessen* [ʔd̥es̥n̥, ʔd̥es̥n̥, ʔd̥ɪs̥n̥], [d-]  
*desto* [ʔd̥esto, ʔd̥esto, ʔd̥eso], [d-]  
*dich* [ʔd̥ɪç, ʔd̥ɪç, ʔd̥ɪç, ʔd̥ɪç], [d-], [ɪ-] (on-



- n<sup>h</sup>th-, <sup>h</sup>th-, -ak, -a<sup>2</sup>], [g-]  
*habe*, -b' [h<sup>h</sup>a:bɛ, h<sup>h</sup>a'bɛ, h<sup>h</sup>abɛ, h<sup>h</sup>aβɛ,  
 hab, hɛb, aβɛ, ab, ɛb] (forms with  
 /h/ → [∅] do not occur in rhythm-  
 group initial position)  
*haben* [h<sup>h</sup>a:bɪm, h<sup>h</sup>a'bɪm, h<sup>h</sup>abɪm, ham,  
 ham, am, ɛm, m, m] (forms with  
 /h/ → [∅] do not occur in rhythm-  
 group initial position; the last,  
 more reduced, forms occur after  
*wir*)  
*habt* [h<sup>h</sup>a:pt, h<sup>h</sup>a'pt, h<sup>h</sup>apt, h<sup>h</sup>apt, hɛpt,  
 apt, ɛpt] (forms with /h/ → [∅] do  
 not occur in rhythm-group initial  
 position)  
*hast* [h<sup>h</sup>ast, h<sup>h</sup>ast, hast, has, ast, as, ɛst,  
 ɛs] (forms with /h/ → [∅] do not oc-  
 cur in rhythm-group initial position)  
*hat* [h<sup>h</sup>at, h<sup>h</sup>at, hat, hɛt, at, ɛt, t]  
 (forms with /h/ → [∅] do not occur  
 in rhythm-group initial position;  
 the last, more reduced, form occurs  
 after *er*)  
*her*- [hɛ'ɐ-, hɛ'ɐ-] (-an, -auf, -aus, -ein,  
 -über, -unter, ...)  
 [hɛɐ', hɐ'] (-bei, -nach, -vor, -zu, ...)  
*Herren, meine Damen und* [maenɪ-  
 'da:mɪ ʔunt'hɛɐn, -ɐn, mɛnɪ-, mɪ-  
 nɪ-, ɪn'hɛɐn, -ɐn]  
*hin*- [hɪ'n-, hɪ'n-] (-an, -auf, -aus, -ein,  
 -über, -unter, ...)  
 [hɪnɪʔ-] (-arbeiten, ...)  
 [hɪn', hɪn'] (-zu, ...), [-ɪn'] (-weg, ...)  
 [hɪnɪ-] (-reichen, ...), [-mɪ-] (-passen,  
 ...), [-ɪnɪ-] (-kommen, ...)  
*hier*- [hi'ɐ-], [hi'ɐ-] (-an, -auf, -aus,  
 -in, -über, -unter, ...)  
 [hiɐ'], [hiɐɪ-] (-bei, -durch, -her, -mit,  
 -vor, -zu, ...)  
*hier* [hi:ɐ, hi:ɐ, hiɐ, hiɐ, hiɐ, hiɐ]  
*hinter* [hɪntɐ, hɪntɐ]  
*hinterm*, -r dem [hɪntɐdm, hɪntɐm,  
 hɪntɐm, hɪntɐm]  
*hintern*, -r den [hɪntɐdn, hɪntɐn,  
 hɪntɐn, hɪntɐn], [-m, -ɪ, -n, -ɪ]  
*hinters*, -r das [hɪntɐdɐs, hɪntɐdɛs,  
 hɪntɐdɔs, hɪntɐs, hɪntɐs]  
*hinter die* [hɪntɐdi, -ɪ, -ɪ]  
*-hundert* [-hʊndɐt, -hʊnɐt, -hʊnɐt,  
 -hʊnɐt, -ʊnɐt]  
*-hundert-* [-hʊndɐt-, -hʊnɐt-, -hʊnɐt-,  
 -hʊnɐ-, -ʊnɐ-, -ɪnɐ-, -nɐ-, -nɪ-]  
*ich* [ʔiç, ʔiç, ɪç, ç] ([ç] + verb: *ich*  
*weiß*; verb + [ɪç]: *weiß ich*)  
*ihm* [ʔi:m, ʔi'm, ʔim, im, im, ɪm, m]  
 (the most reduced forms do *not*  
 occur in final position)  
*ihn* [ʔi:n, ʔi'n, ʔin, in, in, ɪn, n], [-m,  
 -ɪ, -ɪ, -n] (the most reduced  
 forms do *not* occur in final position)  
*ihnen*, I- [ʔi:nɪ, ʔi'nɪ, ʔinɪ, ɪnɪ, ɪnɪ,  
 in, in], [-m, -ɪ, -ɪ, -n]  
*ihr* [ʔi:ɐ, ʔi'ɐ, ʔiɐ, ɪɐ, ɐ] ([ɐ] only  
 when not preceded by [ɪ, ɐ, ɐ] /ə, ɐ,  
 ɐ; in addition, [ɐ] only when encli-  
 tic, immediately after verbs; the  
 most reduced forms do *not* occur in  
 rhythm groups which are in into-  
 nemes, in neutral pronunciation)  
*ihr* (poss.) [ʔi:ɐ, ʔi'ɐ, ʔiɐ, ɪɐ]  
*ihre* [ʔi:ɐɪ, ʔi'ɐɪ, ʔiɐɪ, ɪɐɪ]  
*ihrem* [ʔi:ɐm, ʔi'ɐm, ʔiɐm, ɪɐm,  
 ʔiɐm, ɪɐm]  
*ihren* [ʔi:ɐn, ʔi'ɐn, ʔiɐn, ɪɐn, -ɐn,  
 ʔiɐn, ɪɐn, ɪɐn, -ɐn], [-m, -ɪ, -ɪ, -n]  
*ihrer*, I- [ʔi:ɐɪ, ʔi'ɐɪ, ʔiɐɪ, ɪɐɪ]  
*ihres* [ʔi:ɐɪs, ʔi'ɐɪs, ʔiɐɪs, ɪɐɪs]  
*in* [ʔin, ʔin, in, ɪn, n], [-m, -ɪ, -ɪ, -n]  
*im*, *in dem* [ʔindm, ʔindm, ʔinm,  
 ʔimɪ, ʔim, ʔim, ʔim, im, ɪm, m]  
*ins*, *in das* [ʔindɛs, ʔindɛs, ʔinɛs,  
 ʔinɛs, ʔinɔs, ʔinɔs, ʔinɔs, ins, ɪns, nɔs]  
*in den*, *in'n* [ʔindn, ʔindn, ɪndn,  
 ʔinɪ, ʔinɪ, ɪnɪ, nɪ, inɪ, ɪn, n], [-m,  
 -ɪ, -ɪ, -n]  
*in der*, *in'r* [ʔindɐ, ʔindɐ, ɪndɐ, ʔi-  
 nɐ, ʔinɐ, ɪnɐ, ɪɐ, ɪɐ]  
*in die* [ʔindi, ʔi-, ɪ-, ɪnni, ɪni, -ɪ, -ɪ,  
 ni]  
*ist* [ʔist, ʔist, ʔist, ɪst, ɪs, ɪs, s, s] (only  
 V or intense C + [s])  
*ja* [ja, ja, ja, ja, je]



*so* [ʰzɔ:, zɔʰ, zɔ, zɔ, zɔ, zɪ]
   
*soll* [ʰzɔl, zɔl, zɔl, zɔ]
   
*sonst* [ʰzɔnst, zɔnst, zɔns, zɪns]
   
*-tägigen* [-tʰe:ɡɪɡɪŋ, -teɡ-, -ɡɪɡ-, -ɡɪɡɪ, -ɡɪŋ] (*zwei-, drei-, ...*)
   
*über* (unstressed) [ʰyʊbɐ-, ʰy-, -β-]
   
*überm, -r'm, -r dem* [ʰy:ʊbɛdm̩, ʰyʊbɛ-  
dm̩, ʰy:ʊbɛm̩, ʰy:ʊbɛm̩, ʰyʊbɛm̩, ʰy-  
bɛm̩, ʊbɛm̩, -βɛm̩]
   
*übern, -r'n, -r den* [ʰy:ʊbɛdn̩, ʰyʊbɛdn̩,  
ʰy:ʊbɛn̩, ʰy:ʊbɛn̩, ʰyʊbɛn̩, ʊ-  
bɛn̩, -βɛn̩], [-m, -m̩, -n, -n̩, -ŋ]
   
*übers, -r's, -r das* [ʰy:ʊbɛdɐs, ʰy:ʊbɛdɪs,  
ʰy:ʊbɛdɪs, ʰy:ʊbɛs, ʰyʊbɛs, ʊ-  
bɛs, -βɛs]
   
*über die* [ʰy:ʊbɛdi, -ɪ, -ɪ, ʰy-, ʰy-, ʊ-,  
-βɛ-]
   
*um* [ʰʊm, ʰʊm, ʊm]
   
*ums, um's, um das* [ʰʊmdɐs, ʰʊmdɪs,  
ʰʊmdɪs, ʰʊms, ʰʊms, ʊms]
   
*um'n, um den* [ʰʊmdn̩, ʰʊmm̩, ʰʊ-  
mm̩, ʊm̩, ʊm̩, ʊm̩]
   
*um die* [ʰʊmdi, ʰʊ-, ʊ-, -ɪ, -ɪ]
   
*und* [ʰʊnt, ʰʊnt, ʰʊn, ʊn, ɪn, ɪn], [-m,  
-m̩, -n, -n̩, -N]
   
*-und-* [-ʰʊnt-, -ʰʊn-, -ʊnt-, -ʊn-, -ɪn-,  
-ɪn-], [-m-, -m̩-, -n-, -n̩-, -N-]
   
*uns* [ʰʊns, ʰʊns, ʊns, ɪns, ɪs, ns] (the  
most reduced forms do *not* occur in  
rhythm groups which are in into-  
nemes, in neutral pronunciation)
   
*unser* [ʰʊnzɛr, ʰʊ-, ʊ-]
   
*unsere* [ʰʊnzɛʁɪ, ʰʊ-, ʊ-, -zɛʁɪ]
   
*unserem* [ʰʊnzɛʁm̩, ʰʊ-, ʊ-, -zɛʁ-, -ɛm̩,  
-zm̩]
   
*unseren* [ʰʊnzɛʁn̩, -ɛʁn̩, ʰʊ-, ʊ-, -zɛʁ-,  
-ɛn̩, -zn̩]
   
*unserer* [ʰʊnzɛʁɛr, ʰʊ-, ʊ-, -zɛʁɛr, -ɛrɛ]
   
*unseres* [ʰʊnzɛʁɪs, ʰʊ-, ʊ-, -zɛʁɪs, -zɪs]
   
*unter* [ʰʊntɛr, ʰʊntɛr, ʊntɛr]
   
*intern, -r den* [ʰʊntɛrdn̩, ʰʊntɛrn̩,  
ʰʊntɛrn̩, ʊntɛrn̩], [-m, -m̩, -n, -n̩, -ŋ]
   
*interm, -r'm, -r dem* [ʰʊntɛrdm̩, ʰʊntɛ-  
tm̩, ʰʊntɛm̩, ʊntɛm̩]
   
*inters, -r's, -r das* [ʰʊntɛrdɐs, ʰʊntɛr-  
dɪs, ʰʊntɛrdɪs, ʰʊntɛrs, ʰʊntɛrs, ʊntɛrs]

*ver-* [fɛʁʰ-, fɛʁʰ-] (*-eisen, -arbeiten, ...*)
   
 [fɛʁʰ-, fɛʁʰ-] (*-reisen, -lassen, ...*)
   
*von* [fɔn, fɔn, fɔn, fɪn, fɪn], [-m, -m̩,  
-n, -n̩, -N]
   
*vom, -n dem* [fɔndm̩, fɔnm̩, fɔmm̩,  
fɔm, fɔm, fɔm, fɪm, fɪm]
   
*von'n, -n den* [fɔndn̩, fɔnn̩, fɔnn̩,  
fɔn, fɔn:, ], [-m, -m̩, -n, -n̩, -N]
   
*von'r, -n der* [fɔndɛr, fɔnɛr, fɔnɛr]
   
*vor* [fɔrɛ, fɔrɛ, fɔrɛ, fɔrɛ, fɔrɛ, fɛr]
   
*vorn, -r den* [fɔrdn̩, fɔrn̩, fɔrn̩,  
fɔrn̩, fɔrn̩, fɔrn̩, fɛrn̩], [-m, -m̩, -n,  
-n̩, -ŋ] (cf adv. [fɔrɛn, fɔrɛn])
   
*vors, -r das* [fɔrdɐs, fɔrdɪs, fɔrdɪs,  
fɔrɛs, fɔrɛs, fɔrɛs, fɔrɛs, fɔrɛs, fɛrs]
   
*vor'm, -r'm, -r dem* [fɔrdm̩, fɔrn̩m̩,  
fɔrn̩m̩, fɔrɛm̩, fɔrɛm̩, fɔrɛm̩, fɔrɛm̩,  
fɔrɛm̩, fɔrɛm̩, fɛrm̩]
   
*vor'r, -r der* [fɔrdɛr, fɔrɛr, fɔrɛr, fɔrɛr,  
fɔrɛr, fɔrɛr]
   
*vor die* [fɔrdi, fɔ-, fɔ-, -ɪ, -ɪ]
   
*vor-* [fɔʁ-] (*-an, -auf, -aus, -in, -über,*  
...)
   
 [fɔʁʰ-] (*-ab, -einst; -arbeiten, -eilig,*  
...)
   
 [fɔʁʰ-] (*-bei, -weg, ...*)
   
 [fɔʁʰ-], [fɔʁɛ-] (*-her, -hin, -zu, ...*)
   
*während* [fɛʁɛnt, fɛʁ-, -ɛʁt, fɛʁɛnt,  
-ɛʁt, fɛʁ-, fɛʁ-; fɛʁ-]
   
*was* (non-interrogative) [fɛs, fɛs,  
fɛs, fɛs]
   
*wegen* [fɛ:ɡɪŋ, fɛ:ɡɪŋ, fɛ:ɡɪŋ, fɛŋ]
   
*weil* [fɛ:ɪl, fɛ:ɪl, fɛ:ɪl, fɛ:ɪl, fɛl]
   
*wem* [fɛ:m, fɛ:m, fɛ:m, fɛ:m, fɛm]
   
*wen* [fɛ:n, fɛ:n, fɛ:n, fɛ:n, fɛn], [-m,  
-m̩, -n, -n̩, -N]
   
*wenn* [fɛn, fɛn, fɛn, fɛn], [-m, -m̩,  
-n, -n̩, -N]
   
*wer* [fɛ:ʁ, fɛ:ʁ, fɛ:ʁ, fɛ:ʁ, fɛr]
   
*werden* [fɛ:rdn̩, fɛ:rdn̩, fɛ:rdn̩,  
fɛ:ʁn̩, fɛ:ʁn̩, fɛ:ʁn̩, -ɛn̩], [-m, -m̩, -n,  
-n̩, -ŋ]
   
*werde* [fɛ:rdɪ, fɛ:ʁ-, fɛ:ʁ-, fɛrɪ]
   
*werdet* [fɛ:rdɪt, fɛ:ʁ-, fɛ:ʁ-]
   
*wider* [fɛ:rdɛr, fɛ:rdɛr, fɛ:rdɛr, fɛ:rdɛr]
   
*wider-* (unstressed) [fɛ:rdɛr-, fɛ:rdɛr-]

<i>wie</i> [ˈvi:, ˌvi, ˌvi, ˌvi, ˌvi]	<i>würde</i> [ˈvʏr̩d̩ɛ, ˌvʏ-, ˌvʏr̩t, ˌvʏr̩t]
<i>wie viel</i> [ˈvi:fɪl, ˌvi:fɪl, ˌvi:fɪl, ˌvi:fɪl, ˌvi:fɪl]	<i>würdest</i> [ˈvʏr̩d̩ɛst, ˌvʏ-, -s]
<i>wieder</i> [ˈvi:d̩r̩, ˌvi:d̩r̩, ˌvi:d̩r̩, ˌvi:d̩r̩]	<i>würdet</i> [ˈvʏr̩d̩ɛt, ˌvʏ-]
<i>wieder-</i> (unstressed) [ˌvi:d̩r̩-, ˌvi:d̩r̩-]	<i>-zehn</i> [-tse:n, -tse'n, -tse:n, -tse:n, -tse:n, -tse:n], [-m, -n], [-n, -n]
<i>will</i> [ˈvɪl, ˌvɪl, ˌvɪl, ˌvɪl]	<i>-zehnte</i> [-tse:ntɛ, -tse'n-, -tse:n-, -tse:n-, -tse:n-, -tse:n-]
<i>wir</i> [ˈvɪr̩, ˌvɪr̩, ˌvɪr̩, ˌvɪr̩, ˌvɪr̩, ˌvɪr̩, ˌvɪr̩]	<i>zer-</i> [tse:r̩-, tse:r̩-] ( <i>-fahren, -rinnen, ...</i> )
(the most reduced forms do <i>not</i> occur in rhythm groups which are in intonemes, in neutral pronunciation, not even when they are enclitic after verbs)	<i>zu</i> [ˈtʃu:, ˌtʃu, ˌtʃu, ˌtʃu, ˌtʃu, ˌtʃu]
<i>wird</i> [ˈvɪr̩t, ˌvɪr̩t, ˌvɪr̩t, ˌvɪr̩t, ˌvɪr̩t, ˌvɪr̩t]	<i>zum, zu dem</i> [ˈtʃu:d̩m, ˌtʃu:d̩m, ˌtʃu:d̩m, ˌtʃu:d̩m, ˌtʃu:d̩m, ˌtʃu:d̩m]
<i>wirst</i> [ˈvɪr̩st, ˌvɪr̩st, ˌvɪr̩st, ˌvɪr̩st, ˌvɪr̩st, ˌvɪr̩st, ˌvɪr̩st, -s]	<i>zur, zu der</i> [ˈtʃu:d̩r̩, ˌtʃu:d̩r̩, ˌtʃu:d̩r̩, ˌtʃu:d̩r̩, ˌtʃu:d̩r̩, ˌtʃu:d̩r̩, ˌtʃu:d̩r̩, -s]
<i>wo</i> [ˈvo:, ˌvo, ˌvo, ˌvo, ˌvo]	<i>zu'n, zu den</i> [ˈtʃu:d̩n, ˌtʃu:d̩n, ˌtʃu:d̩n, ˌtʃu:d̩n, ˌtʃu:d̩n, ˌtʃu:d̩n]
<i>wo-</i> [ˌvoː-, ˌvoː-, ˌvoː-] ( <i>-bei, -her, -hin, -vor, -zu, ...</i> )	<i>tsun, tsɪn, tsɪn</i> , [-m, -n], [-n, -n]
[ˌvoːʁ-, ˌvoːʁ-, ˌvoːʁ-], [ˌvoːʁ-] ( <i>-ran, -rauf, -raus, -rüber, -runter, ...</i> )	<i>-zu</i> [-tʃu-, -tʃu-, -tʃu-] ( <i>ab...holen, ...</i> )
<i>worden</i> [ˈvɔr̩d̩n, ˌvɔr̩d̩n, ˌvɔr̩d̩n, -ɪn], [-m, -n], [-n, -n]	<i>zusammen</i> [tʃuˈzamm̩, tʃu-, tʃu-, tʃu-]
<i>wurden</i> [ˈvʊr̩d̩n, ˌvʊr̩d̩n, ˌvʊr̩d̩n, -ɪn], [-m, -n], [-n, -n]	<i>zwar</i> [tʃhʷa:r̩, tʃhʷa:r̩, tʃhʷa:r̩, tʃhʷa:r̩, tʃhʷa:r̩, tʃhʷa:r̩]
<i>wurde</i> [ˈvʊr̩d̩ɛ, ˌvʊr̩-, ˌvʊr̩-]	<i>-ren, -r'n</i> (after –short or long–stressed V, where /r̩n/ [ʁn, ʁn] becomes /rn/ [ɪn], through </r̩n/>)
<i>wurdest</i> [ˈvʊr̩d̩ɛst, ˌvʊr̩-, ˌvʊr̩-, -s]	[ˌV(ː)ʁn, ˌV(ː)ʁn, ˌV(ː)ɪn, ˌV(ː)ɪn], [-m, -n], [-n, -n].
<i>wurdet</i> [ˈvʊr̩d̩ɛt, ˌvʊr̩-, ˌvʊr̩-]	
<i>würden</i> [ˈvʏr̩d̩n, ˌvʏr̩d̩n, ˌvʏr̩d̩n, ˌvʏr̩d̩n, -ɪn], [-m, -n], [-n, -n]	

## Taxophonics

5.3.2.1. There are various other ways of simplifying words –and above all sentences– which make speech easier and more fluent, but less <clear> to foreigners. It is important, thus, to know the mechanisms implied, both to understand better and move closer to the native speakers' genuine pronunciation, and to be understood better. Following Kohler (1977, 1995<sup>2</sup>, § 6.3.1), we will give several cases, by appropriately integrating and completing them.

We have already seen that sequences of [N̩N̩] /N̩N̩/, in fast speech, are possible only in preintonemes: [d̩r̩ʔap̩g̩ɪ̩n̩ɪt̩n̩ ˈʁo:z̩n̩] *die abgeschnittenen Rosen*, but: [ˈnim d̩r̩ʔap̩g̩ɪ̩n̩ɪt̩n̩] *nimm die abgeschnittenen*.

5.3.2.2. Often *-e* [ɛ] /ə/ of the present-tense first person singular is dropped, provided this does not produce any [N̩] (ie intense nasal): [(r̩)ç̩ˈmax̩] /ɪç̩ˈmax(ə)/ *ich mach'*, [ˈmax̩ɪç̩] /ˈmax(ə)ɪç̩/ *mach' ich*, [(r̩)ç̩ˈhab̩ɪs̩ ɡ̩ˈze:ɪ̩, -b̩] /ɪç̩ˈhab(ə) əsgəˈze:ɪ̩/ *ich*

*hab' es gesehen*, [ˈha:bɪç, -bɪç] /ˈha:b(ə)ɪç/ *hab' ich*, [ˈle:zɪç, -zɪç] /ˈle:z(ə)ɪç/ *les' ich*, and [ˈʔœfnɪç] /ˈœfn(ə)ɪç/ *öffn' ich*, [ˈʔa:tmɪç] /ˈa:tm(ə)ɪç/ *atm' ich*, but: [(ʔɪ)çʔœfnɪ] /ɪçʔœfnə/ *ich öffne*, [(ʔɪ)çʔa:tmɪ] /ɪçʔa:tmə/ *ich atme*; in the past tense, *-e* [ɪ] /ə/ may be dropped, before an enclitic *ich*, provided the verb does not end in *-ete* [ɪtɪ] /ətə/: [ˈmaxtɪç] /ˈmaxt(ə)ɪç/ *macht' ich*, [ˈdʊʁftɪç] /ˈdʊʁft(ə)ɪç/ *durft' ich*, but: [ˈʔœfnɪtɪç] /ˈœfnətəɪç/ *öffnete ich*, [ˈʔa:ɪbaetɪtɪç] /ˈa:ɪbaetətəɪç/ *arbeitete ich*. Even *-e* [ɪ] /ə/ belonging to nouns may often be dropped while maintaining the C voiced or half-voiced: [ˈli:bʊn ˈlaet, -b-] /ˈli:b(ə) ʊntˈlaet/ *Lieb' und Leid*.

We have already dealt with the assimilation of place of articulation to a following C for /t, d, n, ɲ, s/ (§ 5.2.1-2 & 5.2.4). We have also mentioned some alternations, especially for approximants and /ʀ/ (§ 5.2.4-5).

5.3.2.3. As already seen, /ɲ/ assimilates to a preceding C; but /n/ remains unchanged when *-e* /ə/ [ɪ] is dropped (and a voiced syllable-final –but lexeme-internal– C does *not* become voiceless): [ˈkʰɔmm] /ˈkɔmm/ *kommen*, [ˈle:bmt] /ˈle:bnt/ *lebend*, [ˈʔe:bmt] /ˈe:bnt/ *eben* (but: [ˈʔe:bntɪ] /ˈe:bnə/ *ebne*, unchanged); [ˈfaŋŋ] /ˈfaŋŋ/ *fangen*, [ˈju:ɡnt] /ˈju:ɡnt/ *Jugend*, [ˈfʁːlo:ɡnt] /ˈfʁːlo:ɡnt/ *verlogen* (but: [ˈfʁːlo:ɡntɪ] /ˈfʁːlo:ɡnə/ *verlogne*, unchanged). Even double assimilation occurs (but not in intonemes): [ˈʔaofʔe:bmtt ˈʃtʁa:snt] /aofˈe:bntən ˈʃtra:snt/ *auf ebenen Straßen*, [ˈdɪʔaenɡɪʃˌla:ɡnt] /diˈaenɡeʃˌla:ɡntən/ *die eingeschlagenen Wege*.

Even after nasals (which may be intense or not), /t, d/ can assimilate, if they are unexploded: [ˈhɛmt, -mp] /ˈhɛmt/ *Hemd*, [ˈhɛmdn, -mbmt] /ˈhɛmdn/ *Hemden*, [ˈdɪˈju:ɡnt ˈʔamfɔʁnt, dɪˈju:ɡntk] /diˈju:ɡnt ˈanfɔʁnt/ *die Jugend anfeuern*, [ˈdɪˈɡe:ɡnt ˈʔanze:n, dɪˈɡe:ɡntk] /diˈɡe:ɡnt ˈanze:n/ *die Gegend ansehen*, [ˈdɪˈɡe:ɡntd ˈʔanze:n, dɪˈɡe:ɡntg] /diˈɡe:ɡntdən ˈanze:n/ *die Gegenden ansehen*, [ˈbɛʔamt, -mpmt] /beˈamt/ *Beamten*, [ˈbɛʔhaopt, -ppmt, -pmt] /bəˈhaopt/ *behaupten*, [ˈdɪˈle:bntd ˈlaedn, -bmbmt] /diˈle:bntdən ˈlaedn/ *die Lebenden leiden*.

5.3.2.4. Frequently, the sequence /gn/ assimilates as well (and also /bn, dn/, even if preceded by *N*, with a subsequent reduction): [ˈʃʁe:ɡnt, ʃʁe:ɡnt] /əsˈre:ɡnət/ *es regnet*, [ˈʔaɡnes, ʔaŋnes] /ˈaɡnes/ *Agnes*, [ˈmagˌnifiˈtʃents, maŋn-, -ift] /magˌnifiˈtʃents/ *Magnifizenz*, [ˈzɪɡˌna:l, zɪŋˌna:l] /zɪɡˌna:l/ *Signal*, [ˈva:ɡnɪ, ˈva:ŋnɪ] /ˈva:ɡnɪ/ *Wagner*; [ˈʔe:bnt, ʔe:mnɪ] /ˈe:bnə/ *ebne*, [ˈle:bnt, -mmt] /ˈle:bnt/ *lebend*, [ˈʁe:dnɪ, ˈʁe:nnɪ] /ˈʁe:dnɪ/ *Redner*, [ˈve:rdn, -nn] /ˈve:rdn/ *werden*, [ˈfɪndn, ˈfɪnn] /ˈfɪndn/ *finden*, [ˈhɛmdn, -mbmt, -mmt] /ˈhɛmdn/ *Hemden* (cf above).

Even sequences of *N* + a voiced stop can undergo nasal assimilation: [noˈvɛmbɪ, -mmɪ] /noˈvɛmbɪ/ *November*, [ˈʔʊmbɪhalt, ʔʊmmɪ] /ˈʊmbəhalt/ *umbekommen*, [ˈtʃʊmˈbaeʃpɪl, -m'm-] /tʃʊmˈbaeʃpɪl/ *zum Beispiel*, [ˈbʊndɪsbʌŋk, ˈbʊnnɪs] /ˈbʊndɪsbʌŋk/ *Bundesbank*, [ˈvʌndɛʁ, ˈvʌnnə] /ˈvʌndɛʁ/ *Wanderer*, [ˈvʊndɪbʌʁ, ˈvʊnnɪ] /ˈvʊndɪbʌʁ/ *wunderbar*, [tʃʊˈmɪndɪst, -ɪnnɪst] /tʃʊˈmɪndɪst/ *zumindest*, [ˈʔʊŋɡɪvɪs, ʔʊŋŋɪ] /ˈʊŋɡəvɪs/ *ungewiss*, [ˈʔaŋɡɛˈbmt, ʔaŋŋɪ] /ˈaŋɡəˈbnt/ *angegeben*, [ˈʔaŋɡɛˈbmt, ʔaŋŋɪ] /ˈaŋɡəˈbnt/ *angeben*, [ˈʔʊŋɡaʁ, ʔʊŋŋaʁ] /ˈʔʊŋɡaʁ/ *Ungar*.

5.3.2.5. A /t/ occurring between C, in non-slow speech, is generally dropped: [ˈʁɛstlɪç] /ˈʁɛstlɪç/ *restlich*, [ˈʃʁɪftlɪç] /ˈʃʁɪftlɪç/ *schriftlich*, [ˈʁɛçlɪç] /ˈʁɛçlɪç/ *rechtlich*,

[bʰɛʔaxlɪç] /bə'axtlɪç/ *beachtlich*, [ʔɛnlɪç] /'ɛntlɪç/ *endlich*, [ˈvɛlˌkhuːgəl] /ˈvɛltkʊgəl/ *Weltkugel* (but: [ˈhalpˌkhuːgəl] /ˈhalpkʊgəl/ *Halbkugel*, [ˈhalpˌtʃaɛt] /ˈhalptsaɛt/ *Halbzeit*), [ˈvɪʁtʃaf ʔɛŋfi'nantsɪŋ] /ˈvɪrtʃaft ʊntfi'nantsɪŋ/ *Wirtschaft und Finanzen*, [ʔɛŋˌvʊʁf] /'ɛntvʊʁf/ *Entwurf*, [ʔaens ʃtʁɪtŋ, -nʃ ʃ-, -n ʃ-] /'aɛnst ʃtʁɪtŋ/ *einst stritten*, [tʃʊ'mɪndɪs ˈtʃβaɛ] /tsʊ'mɪndəst ˈtʃvæ/ *zumindest zwei*, [ˈjɛts tsʊ'haozɛ] /ˈjɛtst tsʊ'haozə/ *jetzt zu Hause*, [bʰɛʔɛçtɪçtɛ, -çɪçɛ] /bʰɛʔɛçtɪçtə/ *berechtigte*. In unstressed positions, we frequently find reduced forms (cf § 5.3.1.2) without /tʰ/ for *ist*, *nicht*, *und*.

Even /ts/, after C, can become [s]: [ˈglants, -ns] /ˈglants/ *Glanz*, [ɹ'hɛltst, -lst] /ɹ'hɛltst/ *erhältst*, [ˈstse:nɛ, 'sse:-, s'se:-] /ˈstse:nə/ *Szene*, [tʃʊ'mɪndɪs ˈβaɛ] /tsʊ'mɪndəst ˈtʃvæ/ *zumindest zwei*, [ˈjɛts tsʊ'haozɛ] /ˈjɛtst tsʊ'haozə/ *jetzt zu Hause*, [ˌdastʊʃtɛndɪgɛ, ˌdassʊ-] /dastʊʃtɛndɪgə/ *das zuständige*, [ˈhø:çst tsʊ'fʁi:dŋ, -çs sʊ-] /ˈhø:çst tsʊ'fri:dŋ/ *höchst zufrieden*.

The most frequent case occurs after /N/, for stops and stopstricatives: [ɹ'hɛltst, -lst, -lst] /ɹ'hɛltst/ *erhältst*; in addition: [ˈkʰampf, -ŋpf, -ŋf] /ˈkʰampf/ *Kampf*, [ˈglants, -nts, -ns] /ˈglants/ *Glanz*, [ˈgants, -nts, -ns] /ˈgants/ *ganz*, [ʔɛŋˌpʃhaŋŋ, ʔɛŋpʃa-, ʔɛŋˌfa-, ʔɛŋˌfa-] /ɛŋˌpʃaŋŋ/ *empfangen*, [ˈtʰɛŋtʃ, -ŋʃ] /ˈtʰrɛntʃ/ *Trench*; more: [ˈmʊmp, -ms] /ˈmʊmp/ *Mumps*, [ˈpʰɔmpt, -mt] /ˈpʰrɔmpt/ *prompt*, [ʔɛntʃʊldɪgŋ, ʔɛntʃ-] /ɛntʃʊldɪgŋ/ *entschuldigen* (cf § 5.2.3.1, too), [ˈsfɪŋks, -ŋs] /ˈsfɪŋks/ *Sphinx*, [ˈpʰʊŋkt, -ŋt] /ˈpʰʊŋkt/ *Punkt*.

5.3.2.6. In fast speech, between vowels and in unstressed syllables, /b, g/ can be realized as [β, γ]: [ˈha:bɛ, -βɛ] /ˈha:βə/ *habe*, [ˈle:γɛ, -γɛ] /ˈle:γə/ *lege*; /t/ can become [ɹ]: [ˈbɪtɛ, ˈbɪɹɛ] /ˈbɪtə/ *bitte*. Under the same conditions, voiceless stops and constrictives may become half-voiced or totally voiced: [ˌdɛsˌhatɹˈdɔx ɡɹˈmaxt, -d-, -d-] /dashatɹˈdɔx ɡəˈmaxt/ *das hat er doch gemacht*, [ˌdɛʃˌʃa:ɹɪç ˈdɔxˌnɪçt, -v-, -v-, dɛʃ-] /dasˌʃa:ɹɪç ˈdɔxnɪçt/ *das schaff' ich doch nicht*, [ˌdɛsˌmʊsɪçˈmaxŋ, -z-, -z-] /dasmʊsɪçˈmaxŋ/ *das muss ich machen*, [ˌdɛsˈmaxɪç ˈdɔxˌnɪçt, -ɣ-, -ɣ-] /dasˈmaxɪç ˈdɔxnɪçt/ *das mach' ich doch nicht* (obviously, because of ambiguity for native speakers –which, however, does not coincide with foreigners' ambiguity!– this typical fast-speech neutralization is avoided).

After pauses, voiced constrictive phonemes remain unchanged; whereas, after voiceless C they become half-voiced (but more often /z/ becomes voiceless): [ˈvi:n] /ˈvi:n/ *Wien*, [ˌdɛsˈvasɹ] /dasˈvasɹ/ *das Wasser*, [ˈtʃβantsɪç] /ˈtʃvantsɪç/ *zwanzig*, [ˈzi:bŋ] /ˈzi:bŋ/ *sieben*, [ˈʁa:tʃa:m, -tʃ-] /ˈra:tʃa:m/ *ratsam*, [ˌʒʊʁnəlɪst] /ʒʊʁnəlɪst/ *Journalist*, [ˈtʃʊŋəl] /ˈtʃʊŋəl/ *Dschungel*, [ˈja:] /ˈja:/ *ja*, [ˌdɛsˈja:ɹ] /dasˈja:ɹ/ *das Jahr*, [ˈʁo:t] /ˈʁo:t/ *rot*, [ˈʃʁaŋk] /ˈʃʁaŋk/ *Schrank*. After voiceless stops, /ɹ/ may become [χ] (while phonotactically remaining /Kɹ/): [ˈpʰɹaɛs, ˈpʰχaɛs] /ˈpʰraɛs/ *Preis*, [ˈtʰɹɛtŋ, ˈtʰχɛtŋ] /ˈtʰrɛtŋ/ *treten*, [ˈkʰɹaɛs, ˈkʰχaɛs] /ˈkʰraɛs/ *Kreis*.

Voiced stops are realized as half-voiced, both after pauses and after voiceless C: [ˈbʊʁk] /ˈbʊrk/ *Burg*, [ˈmɛsˌbʰa:ɹ] /ˈmɛsba:ɹ/ *messbar*, [ˌdɛ:nʊŋ] /ˌdɛ:nʊŋ/ *Dehnung*, [ˌdasdʊʔɛt] /dasdʊʔɛt/ *das Duett*, [ˈɡʊ:t] /ˈɡʊ:t/ *gut*, [ˌʔaosˌɡe:ŋ] /ˌʔaosge:ŋ/ *ausgehen*.

5.3.2.7. *Geminates*, whether normal or with an intense element, can be simplified. Thus, *N* in final position: [ˈkʰɔmˌm, -mɪ, -m] /ˈkɔmˌn/ *kommen*, [ʔɛ:bˌm, -mˌm, -mˌm]



-m:, -m] /'e:bn/ *eben*, [ˈnɛnn, -n:, -n] /'nɛnn/ *nennen*, [ˈhɛŋŋ, -ŋ:, -ŋ] /'hɛŋŋ/ *hängen*, [ˈle:ɡŋ, -ŋŋ, -ŋ:, -ŋ] /'le:ɡŋ/ *legen*. Please, note that *kommen* and *nennen* can become identical with *komm!* and *nenn!* – however, in case of ambiguity, obviously, distinct forms are used.

Geminates derived by assimilation can be reduced when they occur between stressed and unstressed syllables: [ˈli:bŋsʏvɛʁt, -mŋ-, -ŋ-, -m-] /ˈli:bŋsʏvɛʁt/ *liebenswert*, [ˈbʊndʁ̩smɪnɪstɛʁjʊm, -nn-, -n-, -mɪ-] /ˈbʊndʁ̩smɪnɪstɛʁjʊm/ *Bundesministerium*, [ˈʔandʁ̩s, -nn-, -n-] /'andʁ̩s/ *anders*, [ˈʔaŋgɛbŋ, -ŋŋ-, -ŋ-] /'aŋgɛbŋ/ *angegeben*. In addition to [ˈʃtʁo:mɛŋɪ] /'ʃtʁo:mɛŋə/ *Strohmenge*, we can also have [ˈʃtʁo:m,mɛŋɪ, -m-] /'ʃtʁo:m,mɛŋə/ *Strommenge*, with possible reduction; however, in case of ambiguity, no reduction occurs.

Geminate stops can be reduced to their second element, when they are very similar: [ˈʔap,bʊilt, ʔa,bʊilt] /'apbʊilt/ *Abbild*, [ˈʁa:t,dampfɐ, ʁa:t,d-] /'ʁa:t,dampfɐ/ *Raddampfer*, [ˈmɪt,thaelŋ, ˈmɪ,tsh-] /'mittaelŋ/ *mitteilen*, [ˈmɪt,tshɛ'lŋ, ˈmɪ,tsh-] /'mittsɛ:lŋ/ *mitzählen*, [ˈvɛk,khɔmm, ˈvɛ,kh-] /'vɛkkɔmm/ *wegkommen*, [ˈvɛk,gɛ:ŋ, ˈvɛ,g-] /'vɛkge:ŋ/ *weggehen*. The same holds for grooved constrictives: [dʁ̩sˈsɛlbɪ, dʁ̩sʔ-, dʁ̩s-] /dasˈzɛlbə/ *dasselbe*, [dʁ̩sˈʃɪf, dʁ̩sʃ-, dʁ̩sʃ-] /dasˈʃɪf/ *das Schiff*, [ˈʔaes,ʃʁaŋk, -ʃʃ-, -ʃ-] /'aesʃʁaŋk/ *Eisschrank*. Instead, the /çs/ sequence, as we have already seen, has a couple of possible variants: [ˈhø:çst, -hst, -çst] /'hø:çst/ *höchst*, whereas /sç/ is only slightly modified: [ˈbɪsçŋ] /'bɪsçŋ/ *bisschen*.

5.3.2.8. From the above, a phonation-type difference can become almost functional in three ways: [ˈʔap,bʊilt, ʔa,bʊilt] /'apbʊilt/ *Abbild*, in comparison with [ˈʔa:p] /'a:p/ *Apel* and [ˈʔa:b] /'a:b/ *Abel*. Let us also consider: [ˈmɛndl̩zo:n] /'mɛndl̩zo:n/ *Mendelsohn*, [ˈmɛndl̩sso:n, -l̩sʔ-, -l̩s-] /'mɛndl̩szo:n/ *Mendelssohn*.

If the geminates are produced by assimilation of place (of articulation), they can be reduced (provided the syllable of the first element is unstressed): [ɪm̩muːzɛ:ŋ, ɪmu-] /ɪm̩muːzɛ:ŋ/ *in Museen*, [mɪkˈkhaɪl, mɪˈkh-] /mɪtˈkaɪl/ *mit Karl*, [ˌmagnɪˈtʃɛnts, maŋn-, maŋŋ-, maŋ-, -ɪfɪ-] /magnɪˈtʃɛnts/ *Magnifizenz*, [tʃʊmˈbaeʃpɪl, -mˈm-, -m-] /tʃʊmˈbaeʃpɪl/ *zum Beispiel*, [tʃuˌmɪndʁ̩sˈdasˌda, -ɪnn-, -ɪn-] /tʃuˌmɪndəstˈdasda/ *zumindest das da*.

We have, though: [ˈʔam,mɛldŋ] /'anmɛldŋ/ *anmelden*, [ˈmɪk,khɔmm] /'mɪtkɔmm/ *mitkommen*, [ˈbrɔ:kkaofŋ] /'brɔ:tkaofŋ/ *Brot kaufen*, [ˈʁa:kɡɪfa:ʁŋ, -ʁʁ-, -fa:ʁŋ, -ʁʁ] /'ʁa:tɡɔfa:ʁŋ/ *Rad gefahren*, [ˈʔam,bɪndŋ, ʔam,m-] /'anbɪndŋ/ *anbinden*, [ˈʔagnɛs, -ŋn-, -ŋŋ-] /'agnɛs/ *Agnès*, [ˈʔaŋgɛbŋ, ʔaŋŋ-, -ɛmm-, -ɛŋ-, -ɛm-] /'aŋgɛbŋ/ *angegeben*, [ˈbʊndʁ̩s, -nn-] /'bʊndʁ̩s/ *Bundes*, [ˈvandɔʁɐ, -nn-] /'vandɔʁɐ/ *Wanderer*.

5.3.2.9. In sequences of /n, l/ + voiceless constrictives, homorganic (and homophonous) stops can be inserted (although this characteristic denotes a less careful pronunciation which it is better not to follow): [ˈʔamt, -mpt] /'amt/ *Amt*, [ˈgams, -mps] /'gams/ *Gams*, [ˈʁamʃ, -mpʃ] /'ʁamʃ/ *Ramsch*, [ˈzɛŋf, -ŋpf] /'zɛŋf/ *Senf*, [ˈgans, -nts, -ntʃ] /'gans/ *Gans*, [ˈdɪnst, -ntst, -ntʃ] /'dɪnst/ *Dienst*, [ˈmɛnʃ, -ntʃ, -ntʃ] /'mɛnʃ/ *Mensch*, [ˈmanç, -ŋtç, -ŋktç] /'manç/ *manch*, [ˈhɛŋt, -ŋkt] /'hɛŋt/ *hängt*, [ˈhɛŋst, -ŋkst] /'hɛŋst/ *Hengst*, [ˈʁhɛlst, -ltst, -ltst] /'ʁhɛlst/ *erhellst*. This frequently occurs for /nz, lz/ as well: [ˈʔʊnzɐ, -ndzɐ, -ndzɐ] /'ʊnzɐ/ *unser*, [ˈʔalzo, -dzo, -dzo] /'alzo/ *also*.

5.3.2.10. Certainly, the transcriptions seen thus far are useful to conveniently separate German spelling from its phonic structure, which might seem rather strange to foreigners. But this is reality. Here are some examples for reflection: [ʔap,ʔaezɪ] *Abreise*, [ˈtɛ:kliç; ˈtɛ:k-] *täglich*, [ˈmunt,ʔaɪtɪ] *Mundarten*, [ʔun,ʔaof-ʔiçtiç, -f,ʔiç-] *unaufrichtig*, [fɪʔap,ʔeˈdʊn] *Verabredung*, [bɪʔa:pɪm, -tɪm] *beatmen*...

It is obvious then that German has very complex consonant sequences; here we will give just one example: [ˈhɛɪps(t),blɛtɪ] *Herbstblätter*. Please, note carefully even the spelling *sh* /sʰh/: [ˈlandɪs,haʊshalt] /ˈlandəshaʊshalt/ *Landeshaushalt*.

## Stress

5.3.3.1. In long words and in sentences, there are unstressed syllables that alternate with stressed or half-stressed ones. Even rhythm groups follow the same principle; and all this is already clear from the transcriptions we have given.

German compounds have particular patterns. The most normal and widespread one shows a primary stress on the prominent syllable of the first lexeme and reduced stresses on the ex-prominent syllables of succeeding lexemes.

Here are some examples of two-lexeme compounds: [ˈʃif,faɪt] *Schiffahrt*, [ˈdampf-ʃif] *Dampfschiff*, [ˈba:n,hoːf] *Bahnhof*, [ˈʔaezn̩,ba:n] *Eisenbahn*, [ˈho:χ,dɔʏtʃ] *Hochdeutsch*, [ˈfr̩y:ʃtʏk] *Frühstück*, [ˈʔaoto,ba:n] *Autobahn*, [faˈmi:l̩j̩n,naːmɪ] *Familienna-me*, [ˈmunt-haɪ,moːni,ka] *Mundharmonika*, [ˈʃu:məχɪ] *Schumacher*.

It is useful to note that phonemic transcriptions, which do not mark secondary stresses, naturally imply such a reality. Therefore, pronunciations as the following for four of the compounds just seen are typically foreign-like (in this case Italian): < [ˈʃif:fart, ˈdam:ʃif, ˈba:nof, ˈɔ:kɔitʃ] >. We cannot help ending with an observation on the compound *Schuhmacher* and its derived family name *Schumacher*, which is generally pronounced by Spanish-, Portuguese-, and Italian-speaking people with peculiar stress patterns that we will illustrate here using the Italian ones: currently < [ˈʃuːmarker], up to an ugly hybrid, which is neither German nor Romance: < [ˈʃu:maxer] >.

5.3.3.2. Let us also consider: [çɛˈmi:fazɪ] *Chemiefaser*, [çɛˈmi:vɛɪk] *Chemiewerk*, [ˈgø:ti:ʔinsti,tʰuɪt] *Goetheinstitut*, [ˈfa:ɪ,phl̩a:n] *Fahrplan*, [ʔan,ʃtalt] *Anstalt*, [ˈmit,tʰa:k] *Mittag*, [ˈfa:tɪ,lant] *Vaterland*, [ˈfelt,m̩aʃal] *Feldmarschall* (and often [ˈfeltm̩aʃal, feltm̩aʃal] for rhythmic reasons).

With three lexemes (paying attention that the kind of stress we mark here as [ˌ] is weaker than [ˈ] and is not normally written, even because it can be completely reduced, although its syllable maintains the original characteristics of length, vowel timbre, and consonant consistency, including possible <aspiration>): [çɛˈmi:fazɪ,vɛɪk] *Chemiefaserwerk*, [ˈmit,tʰa:ks,tʃaet] *Mittagszeit*, [ˈfa:tɪ,lantsl̩iːbɪ, -nts-] *Vaterlandsliebe*.

More: [ˈviltʃβaenʃ,khøpf] *Wildschweinskopf*, [ˈʃβim,ʔan,ʃtalt] *Schwimmanstalt*, [ˈna:χ,mit,tʰa:k] *Nachmittag*, [ˈʔalt,ho:χ,dɔʏtʃ] *Althochdeutsch*, [ˈhaopt,ʔaof,ɡaːbɪ]

*Hauptaufgabe*, [ʰtɔʏ̯ʀ̥ʔaen̩n̩e̯m̩ʏ̯] *Steuereinnnehmer*, [ʰvɛlt̩ʔan̩ʃaou̯n̩] *Weltanschauung*, [ʰgɛlt̩ʔan̩la̯g̩ʏ̯] *Geldanlage*, [ʰnaːχ̩ʔa̯a̯bae̯t̩n̩] *nacharbeiten*.

5.3.3.3. However, rhythm often produces changes, especially in intonemes. Thus, stress patterns as the following are actually more frequent, although they are not always fully perceived (or accepted): [ʰʃβ̩im̩ʔan̩ʃtalt̩, ʰnaːχ̩m̩it̩thaːk̩, ʔalt̩hoːχ̩d̩ɔʏ̯t̩ʃ̩, ʰaopt̩ʔaof̩g̩aːb̩ɛ̯, ʰtɔʏ̯ʀ̥ʔaen̩n̩e̯m̩ʏ̯, ʰvɛlt̩ʔan̩ʃaou̯n̩, ʰgɛlt̩ʔan̩la̯g̩ʏ̯, ʰnaːχ̩ʔa̯a̯bae̯t̩n̩], and [vilt̩ʃ̩β̩aen̩khɔ̯pf̩], too.

With four lexemes we can have: [ʔaetz̩n̩baːm̩ʃaːp̩h̩laːn̩] *Eisenbahnfahrplan*, [ʰnaːχ̩m̩it̩thaːks̩t̩shaet̩] *Nachmittagszeit*; but rhythm often makes [ʰnaːχ̩m̩it̩thaːks̩t̩shaet̩], or even [naːχ̩m̩it̩thaːks̩t̩shaet̩] preferable.

With five or six (lexemes): [ʰkh̩ʃaft̩ʃaːʃt̩hɔ̯k̩ ʰhaft̩pf̩h̩l̩t̩ʃ̩ʔa̯z̩t̩ʃ̩β̩ɔ̯β̩ɔ̯n̩] *Kraftfahrzeughaftpflichtversicherung*, [ʰʃpiːl̩vaːʁ̩n̩ ʔaos̩n̩hand̩l̩ʃg̩z̩el̩ʃaft̩] *Spielwarenaußenhandels-gesellschaft*, [ʰhoːχ̩v̩akuu̯m̩ ʰl̩t̩ʃ̩t̩b̩o̯g̩h̩ʃ̩m̩el̩ts̩ʔo̯f̩m̩] *Hochvakuum-Lichtbogen-Schmelzofen*. They generally attenuate the beginning, becoming: [kh̩ʃaft̩ʃaːʃt̩hɔ̯k̩-, ʃpiːl̩vaːʁ̩n̩-, hoːχ̩v̩akuu̯m̩-].

5.3.3.4. There are even cases where secondary stresses actually determine the meaning of certain compounds: [ʰd̩am̩pf̩ʃ̩f̩ʃaːʁ̩t̩] *Dampfschiffahrt* ‹steamboat voyage›, [d̩am̩pf̩ʃ̩f̩ʃaːʁ̩t̩] *Dampfschiffahrt* ‹steam navigation›. In cases such as these, of course, rhythmic fluctuations are less frequent, although context must (and can) help very much.

We also find some compounds which do not bear primary stress on their first lexeme, as: [j̩aːʁ̩t̩ʃeːnt̩] *Jahrzehnt*, [ʔoːst̩ʁ̩moːn̩taːk̩] *Ostermontag*, [ʃ̩β̩aːʁ̩t̩ʃ̩v̩aes̩] *schwarzweiß*, [ʁoːt̩kh̩ʃɔ̯ʏ̯t̩ʃ̩β̩est̩ʁ̩] *Rotkreuzschwester*, [zaːʁ̩b̩v̩y̯k̩h̩] *Saarbrücken*. Others have more than one primary stress: [ʰbl̩ao ʰg̩v̩y̯:n̩] *blau-grün*, [d̩um̩ ʰʃt̩o̯l̩ts̩] *dumm-stolz*, [ʃ̩l̩eːʃ̩β̩ɪç̩ ʰh̩ɔ̯l̩ʃtaen̩] *Schleswig-Holstein*; however, they can become [ʰbl̩aoʰg̩v̩y̯:n̩, d̩um̩ʰʃt̩o̯l̩ts̩, ʃ̩l̩eːʃ̩β̩ɪç̩ʰh̩ɔ̯l̩ʃtaen̩], mostly in preintonemes.

Let us observe: [ʰbl̩ao ʰg̩v̩y̯:n̩] *blau-grün* ‹blue and green (ie two colors put alongside, as in a flag or sports T-shirt)› and [ʰbl̩aoʰg̩v̩y̯:n̩] *blaugrün* ‹bluish green, water green (ie two colors blended together, as painters do)›.

5.3.3.5. The faster speech becomes, the more non-primary stresses can be reduced <sup>or</sup> dropped, mostly in preintonemes. On the contrary, if speech becomes slower, the stresses can be restored. In particular in intonemes, the last non-strong stress can often be strengthened (we will mark it only here with [̩]): [ʔaoto̩baːn̩; ʔan̩ʃtalt̩; ʔalt̩hoːχ̩d̩ɔʏ̯t̩ʃ̩; ʰaopt̩ʔaof̩g̩aːb̩ɛ̯]; besides, [ʔaetz̩n̩baːm̩ʃaːp̩h̩laːn̩, -ʃaːp̩h̩laːn̩; ʃ̩piːl̩vaːʁ̩n̩ʔaos̩n̩hand̩l̩ʃg̩z̩el̩ʃaft̩, -g̩z̩el̩ʃaft̩; ʰhoːχ̩v̩akuu̯m̩ʰl̩t̩ʃ̩t̩b̩o̯g̩h̩ʃ̩m̩el̩ts̩ʔo̯f̩m̩, -ʃ̩m̩el̩ts̩ʔo̯f̩m̩].

There are frequent cases of (homographic) compounds with (stressed or unstressed) prefix grammemes, which (in their unitary –non-inflected– forms) is the most important element of semantic differentiation: *übersetzen* <sup>1</sup>[ʔyːb̩ʁ̩z̩ets̩n̩] ‹to pass over›, <sup>2</sup>[ʔyːb̩ʁ̩z̩ets̩n̩, ʔyː-] ‹to translate›, *umfahren* <sup>1</sup>[ʔum̩ʃaːʁ̩n̩, -ʁ̩n̩, -aːʁ̩n̩, -aːʁ̩n̩] ‹to run down›, <sup>2</sup>[ʔum̩ʃaːʁ̩n̩, -ʁ̩n̩, -aːʁ̩n̩, -aːʁ̩n̩] ‹to drive/sail round›.

Generally, compounds with unstressed monosyllabic suffixes have /ɪ, ə, ŋ, m̩, l̩,

ʀ/, even without secondary stresses (except for rhythmic reasons, when several unstressed syllables are arranged in sequence, as happens for [-laen] *-lein*, [-ʊŋ] *-ung* as well): [ˈvœçntliç] *wöchentlich* ([ˈvœçntliçŋ, -liçŋ] *wöchentlichen*).

5.3.3.6. Other unstressed monosyllabic suffixes always bear a secondary stress: ([-baʀ] *-bar*, [-haft] *-haft*, [-haet] *-heit*, [-kaet] *-keit*, [-laŋ] *-lang*, [-liŋ] *-ling*, [-loʰs] *-los*, [-maʀl] *-mal*, [-zaʀl] *-sal*, [-zaʀm] *-sam*, [-ʃaft] *-schaft*, [-tuʰm] *-tum*, [-fɔʀl] *-voll*, [-vɛʀts] *-wärts*); for example: [ˈʁaen,haet] *Reinheit*, [ˈʔent,loʰs] *endlos*.

Let us further consider (and notice that not fully stressed grammemes have no aspiration): [-içkaet] *-igkeit*, [-haftiçkaet] *-haftigkeit*, [-loʰziçkaet] *-losigkeit*. There are further rhythmic oscillations: [ˈʔam,mɛʀkʊŋŋ, ˈʔammɛʀkʊŋŋ] *Anmerkungen*, [ˈʔaʀ,baetəʁiŋŋ, ˈʔaʀbaetəʁ] *Arbeiterinnen*; mostly with *un-*: [ˈʔʊn,ʔanʃtɛndiç, ˈʔʊn,ʔanʃtɛndiç] *unanständig*, [ˈʔʊn,foʀziçtiç, ˈʔʊn,foʀziçtiç] *unvorsichtig*, as for *unaufrichtig* (at the end of § 3.2), for which emphasis or emotion often produce: [ˈʔʊn,ʔanʃtɛndiç, ˈʔʊn,ʔaofʁiçtiç, ˈʔʊn,foʀziçtiç].

Let us finally recall that German words are not all stressed on their first syllable (as too hastily certain textbooks describe or prescribe), mostly for prefixed forms or (even old) loanwords: [zoʰfɔʀt] *sofort*, [g̊ɛnao] *genau*, [g̊ɛfʊndŋ] *gefunden*, [moʰmɛnt] *Moment*, [maʰʃiŋ] *Maschine*; [pʁɔʰfɛsoʀ] *Professor* (with its troublesome) [pʁɔʰfɛsoʀŋ, -ʁŋ, -ʀŋ, -ʁŋ] *Professoren*). In addition, we find forms such as: [d̊aʰbae] *dabei*, [hiʰnaos] *hinaus*, [voʰheʀ] *woher*, which for emphasis become: [d̊aʰbae, hiʰnaos, voʰheʀ].

5.3.3.7. Another characteristic of German stressing is final destressing of verbal forms, mainly auxiliaries and modals (and suchlike), infinitives and past participles. As a matter of fact, instead of an expectable stress pattern, which can normally be found –in various languages– at the end of intonemes, we find this kind of destressing which corresponds to the following typology.

With *compound verbal forms* (thus including: future, conditional, passive, modals with dependent infinitives): *das* ˈdʏrftɛ ˈrichtig ʃein; *sie* ˈmag ˈRecht ˈhaben; *sie* ˈsoll ˈsehr ˈtüchtig ʃein; *ich* ˈhabe ˈCola ˈbestellt; *er* ˈist ˈschlafen ˈgegangen; *ich* ˈhabe ˈes ˈnicht ˈgewollt; *ich* ˈbin ˈnach ˈRom ˈgefahren; *er* ˈwird ˈwohl ˈzu ˈHause ʃein; *er* ˈist ˈverhaftet ˈworden.

Also: *er* ˈhat ˈihn ˈfahren ˈlassen; *sie* ˈhatten ˈmir ˈden ˈBrief ˈschreiben ˈhelfen; *das* ˈAuto ˈwird ˈbis ˈmorgen ˈrepa,riert; *ich* ˈmuss ˈjetzt ˈnach ˈHause ˈgehen; *ich* ˈwürde ˈgern ˈRot,wein ˈtrinken; *ich* ˈhabe ˈihn ˈfahren ˈgelehrt; ˈwillst ˈdu ˈins ˈKino ˈgehen?

Naturally, the strange effect of destressing increases when there is more than one infinitive form: *Karin* ˈhat ˈden ˈBrief ˈschreiben ˈmüssen; *sie* ˈhätten ˈnicht ˈkommen ˈsollen; *ich* ˈhabe ˈum ʒ ˈUhr ˈschlafen ˈgehen ˈmüssen.

5.3.3.8. Cases such as the following are interesting too: *ˈmachen* *Sie* *die* ˈRechnung ˈfertig, ˈhalten *sie* *die* ˈPässe ˈbereit, where the non-conjugated form of the verb is an indeclined adjective; the old orthography used to give: *fertigmachen*, *bereithalten*, instead of: *fertig machen*, *bereit halten*.

For *subordinate clauses*, we have conjugated forms in the last position, infinitive

ones with *um ... zu*: *sie 'kann 'nicht ,kommen, ,weil sie 'morgen ,sehr 'früh 'aufstehen ,muss* (except when dependent infinitives are more than two: *sie ist ,sehr 'müde, ,weil sie, 'heute 'Morgen, 'sehr 'früh hat 'aufstehen ,müssen*; *ich 'hoffe, ,dass er die 'Rechnung ,hat bezahlen ,können*; *ich 'hoffe, ,dass sie ,eine 'neue 'Wohnung hat 'finden ,können*); *ich 'fürchte, ,dass er 'Recht hat*; *der 'Arzt ,wollte 'wissen, ,ob er 'Fieber gehabt ,habe*; *sie 'sagt, ,dass ihre 'Kinder im 'Garten ,spielten*; *ich 'glaube, ,dass sie 'nicht 'hier ,ist*; *ich 'weiß, ,dass er vor zwei 'Jahren ,operiert ,worden ,ist*; *ich 'brauche 'nicht zu ,antworten*; *es ist 'immer 'besser, 'pünktlich ,anzu,kommen*; *um 'pünktlich ,anzu,kommen, ,müssen wir die 'U-,Bahn ,nehmen*. The constructions with modals and infinitives in the last position are to be noticed too: *du 'solltest zum 'Arzt gehen*.

With inflected separable verbs, postponed particles generally bear primary stresses ([<sup>1</sup>]); however, it is often weaker (up to a secondary degree), thus we will indicate it here with [<sub>1</sub>]: *sie 'kommt 'morgen „an, ich 'lege es „bei, du 'rufst „an, er 'gab den 'Kampf „auf, das 'Dach 'springt „über*.

Let us add some typical examples, since the concepts expressed by some words can (or must) come out: *Anna darf 'nicht ,mitkommen*; *der 'Brief ,wurde von 'mir ,geschrieben*. More: *‘kann man 'hier 'schwimmen?* (two concepts), however: *‘können Sie Klav'ier ,spielen?* something like... <to piano>; *‘morgen, ,muss ich 'fliegen*; *ich muss 'morgen ,fliegen* (ie *fliegen* is already known).

When no complement or predicate is present, destressing certainly does not occur, as in the following sentences, where verbs are preceded only by words (and concepts) with very low information power: *‘kann ich 'mal telefo'nieren?*; *er 'fuhr in die 'Ferien, um ,sich zu ,erholen*; *er 'ließ das Restau'rant, 'ohne zu ,bezahlen*; *‘bitte, 'bleiben Sie ,doch 'sitzen*. Let us further consider the following examples: *das ist be-'stimmt 'unab'sichtlich ,geschehen*; *er hat ge'sagt, ,dass es 'unab'sichtlich ,geschehen ,ist*; *er hat ge'sagt, ,dass es 'unab'sichtlich ge,macht ,worden ,ist*; *er hat ge'sagt, ,dass es 'unab-sichtlich ge,macht ,worden sein ,kann*; *er hat ge'sagt, ,dass es 'unab'sichtlich ge,macht ,worden sein ,könnte*. Here, the particular syntactic structure of German subordinate clauses, with verb phrases at the end of sentences, makes it possible for the last primary stress to be followed by a considerable number of syllables.

## Intonation

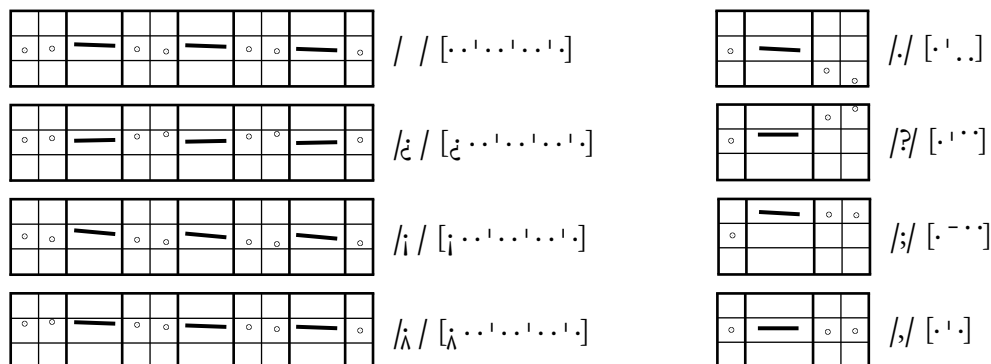
5.3.4. fig 5.4 shows neutral German intonation. Each tonogram must be analyzed very carefully. Here we will simply provide examples for the three marked intonemes. In § 5.3.1.1, the third and fourth utterance (of the second group of examples, before the reduced-form list) show mid-pitch parentheses (cf § 13.24 of NPT/HP<sub>h</sub>), which is also typical of German and French. Here is another example: ... *und, ,wenn es 'möglich zu 'machen ,wäre, ...* Others may be found in the transcriptions of the text (§ 5.5):

./: [ʔɪç'su:χɪ ʔaem'mø:b|gɪ|ɛft..] /ɪç'zu:xə aen'mø:b|gə|ɛft./ *Ich suche ein Möbelge-schäft.*

/?/: [ç'khɔmɪzi ʔaos'ʔø:stɪʔæç?] /ç'kɔmɪzi aos'ø:stɪʔæç?/ *Kommen Sie aus Öster-reich?*

/ɜ:/ [ç'fa:ʁn̩zi naχ'dʏsɪ'dɔʁf'ɪ] (ʔo'dʁ'makdɛbʊʁk..) /ç'fa:ʁn̩zi naχ'dʏsɪ'dɔʁf; (o:dʁ-'makdɛbʊʁk.)/ *Fahren Sie nach Düsseldorf oder Magdeburg?*

fig 5.4. German preintonemes and intonemes.



### Other accents

5.4.0. As we have already said, we think it important to present, in addition to neutral pronunciation, at least some accents, not only for useful comparisons, but also to be ready to grasp the pronunciation characteristics of German outside the former ‹West Germany›. We will start from former ‹East Germany› (ex DDR, ie the present-day north-eastern part of reunified Germany), to Austria, Switzerland, and South Tyrol (or Alto Adige), to understand different accents better and more quickly.

These observations could even be useful in order to acquire a more typical accent among the last three, mainly if somebody wanted (or had) to be in preferential contact with those inhabitants, more than with those of Germany. It could also be interesting to see –in *NPT/HPb*– the phonosyntheses of *Pennsylvania German*, or ‹*Pennsylvania Dutch*› (as it is called, § 21.12) and various Germanic dialects spoken in Germany (*NPT/HPb* § 17.27), Austria (*NPT/HPb* § 17.28), Switzerland (*NPT/HPb* § 17.20), Luxembourg (*NPT/HPb* § 17.22), France (*NPT/HPb* § 17.21), and Italy (*NPT/HPb* § 16.2, 16.12, 16.15-6, 16.18).

### North-eastern-Germany German

5.4.1.1. The first vocogram shows the vowels of the ex-DDR mediatic (and neutral) accent. It is not the local pronunciation of Berlin or of Saxony. As will be seen shortly, by comparing this vocogram with that of fig 5.1, long stressed *V* are actually monotimbric diphthongs, or vocalic doublings, with a slight upward movement. Besides, /ɛ, ɛ:, œ, ɔ/ are slightly closer (sufficiently so to use different phonetic symbols: [ɛ, ɛɛ, œ, ɔ]).

We just give some examples to directly show the difference, thanks to phonetic transcriptions: [fi:il] /'fi:il/ *viel*, [zɛ:ɛn] /'zɛ:ɛn/ *sehen*, [ʃpɛ:ɛt] /'ʃpɛ:ɛt/ *spät*, and: [b̥a:an] /'ba:n/ *Bahn*, [zo'o] /'zo:/ *so*, [g̥u:ut] /'gu:t/ *gut*, [thy:ʏʁ] /'ty:ʁ/ *Tür*, [ʃø:ɔn] /'ʃø:n/ *schön*.



## Austrian German

5.4.2.1. This accent is the <mediatic> one, which prevails in radio and television broadcastings and is half-way between the slightest and broadest accents. These observations are drawn from our (growing) sound archives.

<Long> monophthongs are realized as geminate or doubled vocoids and have a shorter duration although gemination gives an impression of greater fullness, which almost equalizes true length: not [V:], but [VV].

It is at once clear even that the articulations corresponding to /ɪ, ʏ, u; ε(ɜ), œ, ɔ/ are closer than in neutral German, so much so that they are represented as [i, y, u; ɛ(ɛ), ø, σ] (in less broad accents we find [ɪ<sup>+</sup>, ʏ<sup>+</sup>, u<sup>+</sup>; ε(ε)<sup>+</sup>, œ<sup>+</sup>, ɔ<sup>+</sup>], with the unstressed variants [ɛ, ø, σ], slightly closer than in neutral pronunciation): [ˈfi:] /ˈfi:/ *Fisch*, [ˈfʏm̩f] /ˈfʏn̩f/ *fünf*, [ˈhʊnt] /ˈhʊnt/ *Hund*, [ˈɛlf] /ˈɛlf/ *elf*, [ˈʃpɛ:t] /ˈʃpɛ:t/ *spät*, [ˈtsβɔlf] /ˈtsvœlf/ *zwölf*, [ˈɔft] /ˈɔft/ *oft*. Certain words have /e:/ [ee] for /ɛ:/.

5.4.2.2. Both /a/ and /a:/ are back-central: [ˈʃtat] /ˈʃtat/ *Stadt*, [ˈʃta:t] /ˈʃtat/ *Staat* (in less broad accents we find [a, a:] (and [ʌ, ʌ:] in refined, or affected, ones), whereas in broader ones we have: [ɑ, ɑ:] and [ɒ, ɒ:] as well (which will certainly be noted at once).

Austrian traditional dialects generally present phonemic opposition between a back *a* and a fronter one, both short and long. It is possible to find this timbre distinction in language too, where the back timbre is used in traditional words, whereas the fronter one is used in loanwords and neologisms, as happens for instance in *Bank*: /ˈbɑŋk/ [ˈbɑŋk] <bench>, /ˈbɑŋk/ [ˈbɑŋk] <bank, gambling table>.

A very broad accent has /e:, ø:, o:/ [eə, øø, σσ]: [ˈvee, ↓ˈveə] /ˈve:/ *weh*, [ˈbøø, ↓ˈbøø] /ˈbø:/ *Bö*, [ˈsoo, ↓ˈsoo] /ˈzo:/ *so*.

5.4.2.3. /ə/ is realized as [ə, ə], with the possible vocalization of /ʀ, ʀ/ [ɐ] (with consonantal accompaniments too); thus we have: [ˈʊnsəʁə] /ˈʊnzəʁə/ *unsere* and [ˈvasɐ, -ɐʀ, -ɐʀ, -ɐʀ, -ɐ] /ˈvasɐ/ *Wasser*. The symbol [ɐ] corresponds to the one currently used, though less rigorously, in neutral German as well, for [ʌ], which on the contrary is appropriate for less broad Austrian accents that have [ʌ>] (and even [ʌ>]); whereas the broadest accents have [a(ɨ)]. It is to be noted that [ə] /ə/ is front-central, i.e. considerably fronter than in neutral German. The most refined or affected accents may reach [əʁ, əʌ] for /əʀ, ʀ/ (cf the last vocogram but one).

Moving to diphthongs, we can see that /ɔʏ/ has just a higher first element, while /æ, aɔ/ are decidedly different, [aə, ɑσ]: [ˈaəs] /ˈaes/ *Eis*, [ˈblɑσ] /ˈblao/ *blau*, [ˈnoʏ] /ˈnoʏ/ *neu*. Less broad accents have, [ʌə, ɑσ, ɔø], respectively, while the broadest ones have [εə, øσ, ʌʏ] (as in Vienna, where even [æʌ, ɒσ, sθ] occur, and even [ɔə], as a compromise, and [əø, œø] as well). Xenophonemes are slightly closer than in neutral German: /eɪ, oʊ/ [ee, ei; oo, ou].

5.4.2.4. In the second vocogram, two further typical diphthongs are evident (although marked in grey, since they only occur in local family and place names), [iə, uə] /iə, uə/: [ˈdiəks, ˈdiiks] *Diex*, [ˈʁuəts, ˈʁuuetz] *Ruetz*. No variant of /æ, aɔ, ɔʏ/ in





The last two vocograms show both less broad ([↑]) vowel realizations (up to some affected ones, [↑↑]), and –on the contrary– some of the broadest realizations ([↓]).

5.4.2.5. Moving to C, we find that often /ŋ<sup>#</sup>, ŋC/ become /ŋk<sup>#</sup>, ŋkC/ (but they are not recommendable): [ʼtsætuŋ, -ŋk] /ʼtsaetuŋ/ *Zeitung* (however, even without [k], the nasal is always velar, not uvular, in /Rŋ/ as well: [ʃpɔʼtsiiʋŋ, -iiŋ, -iiŋ]).

/t, d/ are more dental than denti-alveolar: [d̥eʼtektɔɹ] /deʼtektor/ *Detektor*; often /k<sup>#</sup>, kl, gl/ can be prevelar or retracted palatal (and /k<sup>#</sup>/ may even become stop-strictive, but these variants are best avoided): [ʼtaak, -k, -kx, -c, -kç] /ʼta:k/ *Tag*, [d̥uŋklɹ, -ŋkl-, -ŋc-] /ʼduŋklɹ/ *dunkler*, [ʁeeɔ̯lɹ, -ɔ̯l-, -j̯l-] /ʁe:ɔ̯lɹ/ *Regler*.

Voiceless stops and stopstrictives are not < aspirated > (except in less broad pronunciations), as we have just seen for /ts/: [ʼpoo] /ʼpo:l/ *Pol*, [ʼtoon] /ʼto:n/ *Ton*, [ʁkint] /ʁkint/ *Kind*, [ʁpfunt] /ʁpfunt/ *Pfund*, [ʁtʃako] /ʁtʃako/ *Tschako*.

Voiced stops are half-voiced, [b̥, d̥, ɡ̥]; but they can also be [b, d, ɡ], between voiced phones, again in less broad accents; however, in the broadest ones, we generally find [p, t, k]: [ʁbuubə, -βə] /ʁbu:βə/ *Bube* (often we have [VβV] /VbV/), [d̥uud̥n̥] /ʁdu:d̥n̥/ *Duden*, [ʁgeeg̥ŋ] /ʁge:ɔ̯ŋ/ *gegen*.

On the other hand, within words, *b, d, g* followed by heterosyllabic /n, l/ can become /b, d, ɡ/ (instead of /p, t, k/, as in neutral German pronunciation, which has neutralization): [ʁɔɹdn̥uŋ] /ʁɔɹdn̥uŋ/ *Ordnung*, [ʁmøøɔ̯gliç] /ʁmø:kliç/ *möglich*. No glottal stop is used, except in less broad accents: [içʼesə] /içʼesə/ *ich esse*, [teʼaɑ̯tɹ] /teʼaɑ̯tɹ/ *Theater*.

5.4.2.6. Among constrictives, we find a greater variation (than in neutral German) for *v*, mostly when initial: [ʁvɛɹs, ʁv-] /ʁvɛɹs/ *Vers*, [ʁviipɹ, ʁv-] /ʁvi:ipɹ/ *Viper*. Normally, /z/ is /s/ [s] (while we find [z̥, z] only in less broad accents, and more easily after C): [ʁsɑɑ̯ɔ̯ŋ] /ʁza:ɔ̯ŋ/ *sagen*, [ʁalso] /ʁalzo/ *also*, [ʁvæɹsŋ] /ʁraeɹzŋ/ *reisen* (then identical to [ʁvæɹsŋ] /ʁraesŋ/ *reißen*). In words such as *Stil, Strategie*, unlike neutral German, /st/ is preferred to /ʃt/: [ʁstiil] /ʁʃti:l/, [ʁstʁateʁgii] /ʁʃtrateʁgi:/ (although they are both used, in both accents).

In addition, /j/ is an approximant, [j]: [ʁjaɑ̯] /ʁja:/ *ja*; generally, /x/ is velar, [x]: [ʁnaɑ̯x] /ʁna:x/ *nach*. For /Rç/ we have /Rχ/: [d̥uɹx] /ʁd̥uɹç/ *durch*; for /-iç/ we have /-ɪk/: [ʁtsβantsik] /ʁtsvantsiç/ *zwanzig*, for /<sup>#</sup>ç/ we find /k/: [ʁkiina] /ʁçi:na/ *China*, but: [me,laŋçoʁlii] /me,laŋkoʁli:/ *Melancholie*. Often /ç/ is realized as a postpalatal, [ç̥], mostly in Vienna.

The most widely used articulation for /R/ is a uvular constrictive, [ʁ], with the possibility of postnuclear vocalization (as seen in the first part of this section), which coexists with a fairly widespread alveolar trill or tap, [r, r] (even velarized, [ʁ, ʁ]). This is mainly a non-urban characteristic (but also widespread in Vienna, although alternating with [ʁ, R]), which is best avoided, even if it does not sound peculiar: [ʁvɑɑ̯ɹ, ʁvɑɑ̯ɹ, ʁvɑɑ̯ɹ, -ɑɑ̯v] /ʁvɑɑ̯ɹ/ *rar*.

Although, of course, it is certainly not recommendable, we want to mention that the typical broad Viennese *l* is a velarized alveolar unilateral, [l̥], which may occur in every position, although it normally alternates with [l], even in the broad-

est and most typical speakers. In the broadest accents (as in the traditional local dialect – see the Viennese phonosynthesis, § 17.28 of *NPT/HPb*), we find velar [L, l], in the sequences /kl, gl; k|, g|/. In Viennese pronunciation again, in addition to [ɣ] (and [l̥]), we often find it vocalized in [ə] (as in the dialect): [ʃpi:gl̥, -g̥ə, 'eɛsɣ, -sə] /ʃpi:gl̥, 'e:zl/ *Spiegel, Esel*.

5.4.2.7. In non-neutral pronunciation, simple word-internal voiceless intersyllabic /C/, after (short) stressed V, are realized as restrained (but evident) geminates, which we indicate with superscript symbols of the first element, in the variant form notated only here, [C<sup>C</sup>]: [ʃtɔp<sup>m</sup>; ʃtɔp<sup>pp</sup>m] /ʃtɔp<sup>n</sup>/ *stoppen*, [ʋet<sup>r</sup>; ʋet<sup>tt</sup>r] /ʋet<sup>r</sup>/ *Wetter*, [tɔp<sup>f</sup>r; tɔp<sup>ff</sup>r] /tɔp<sup>f</sup>r/ *tapfer*, [sɪt<sup>n</sup>; sɪt<sup>ts</sup>n] /zɪt<sup>n</sup>/ *sitzen*, [ʋas<sup>r</sup>; ʋas<sup>ss</sup>r] /ʋas<sup>r</sup>/ *Wasser*, [ʋaʃ<sup>n</sup>; ʋaʃ<sup>nn</sup>] /ʋaʃ<sup>n</sup>/ *waschen*, [sɪç<sup>r</sup>; sɪç<sup>ç</sup>r] /zɪç<sup>r</sup>/ *sicher*, [mɔx<sup>h</sup>; mɔx<sup>hh</sup>] /mɔx<sup>n</sup>/ *machen*.

The insertion of a homorganic stop between /n, l/ and voiceless constrictives or /z/ (cf § 5.3.2) is possible, although not particularly widespread.

There are some differences in stressing: [kɔfee] /'kafe; kɔfe:/ *Kaffee*, [ˈlaʊbɔʁ, laˈbɔʊʁ] /laˈbɔ:ʁ/ *Labor*, [tɔˈbɔk] /tɔ(ː)bak; taˈbak/ *Tabak*, [pɔʁˈtɪiʁ, pɔʁˈtʃee] /pɔrˈtje:/ *Portier; Motor* [moˈtoʁ, moˈto:ʁ] /'mo:to:ʁ, moˈto:ʁ/.

Austrian intonation is easily recognized because of its (slightly rising) half-low stressed syllables and (falling) mid unstressed syllables, occurring between them in preintonemes; mostly the interrogative intoneme (and the suspensive one too) have particular movements, which can be seen in the tonogram.

## Swiss German

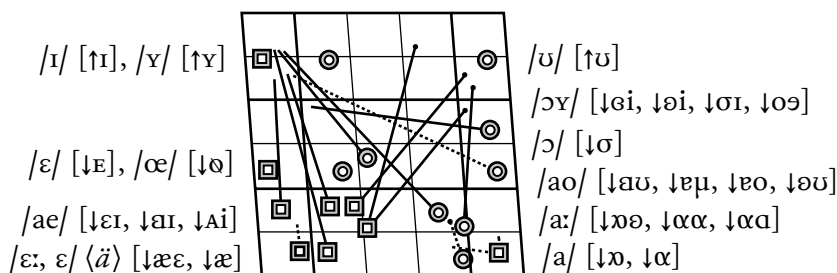
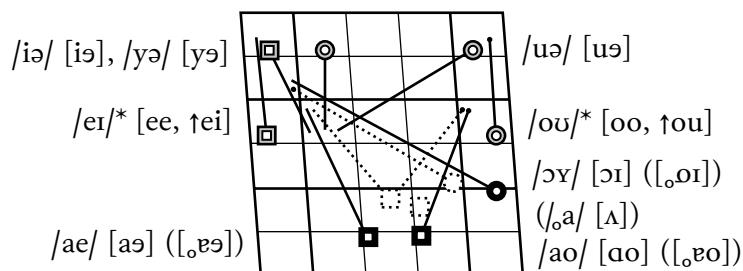
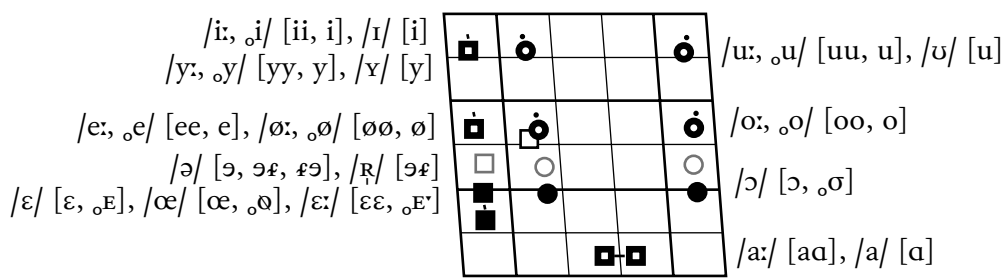
5.4.3.1. Even for this accent we will add, when relevant but without further figures, some more non-neutral characteristics, taken from our sound archives. The main accent illustrated is the mediatic one – something in between the broadest & most local ones and a neutralized, unmarked, accent – expressly acquired.

The first vocogram shows the short and long <monophthongs>; actually, in this accent <long> vowels are diphthongs with narrow movements: [fiil] /'fi:l/ *viel*, [fryy] /'fry:/ *früh*, [gʊut] /'gʊ:t/ *gut*, [b̥eet] /'b̥e:t/ *Beet*, [ø̥l] /'ø̥:l/ *Öl*, [ʋoo] /'ʋo:/ *wo*, [ʃp̥eet] /'ʃp̥e:t/ *spät* (which is very stable and typical) [ʃtaat] /'ʃtɑ:t/ *Staat*. The last two have non-neutral broad variants: [æ̃] and [ɑ̃] (or [ɑ̃] as well, which is typical of Bern, and [ɔ̃], typical of Zurich). (The phonosynthesis in § 17.20 of *NPT/HPb* shows the characteristics of Zurich *Schwyzertütsch* [which is Alemannic], with still more different realizations.)

Among short V, /ɪ, ʏ, u/ have closer realizations [i, y, u]: [fiʃ] /'fiʃ/ *Fisch*, [fymf] /'fymf/ *fünf*, [hʊnt] /'hʊnt/ *Hund*; /ɛ, œ, ɔ/ are relatively open: [ɛlf] /'ɛlf/ *elf*, [tsβœlf] /'tsβœlf/ *zwölf*, [ɔft] /'ɔft/ *oft* (with unstressed taxophones [ɛ, ø, ɔ]). For the spelling *ä*, we can also find a broad non-neutral realization [æ̃]: [fɛlt] /'fɛlt/ *fällt*; /a/ is back-central [ɑ̃] (which, in broad marked pronunciation, is rounded too, [ɔ̃], or fully back, [ɑ̃]): [ʃtat] /'ʃtat/ *Stadt*.

5.4.3.2. For /ə/ we have [ə], in every context, since /r/ is not uvular: [gə'ra:ədə] /gə'ra:ədə/ *gerade*, [ˈunsəʔə] /ˈunzəʔə/ *unsere*, [ˈunsəʔ] /ˈunzəʔ/ *unsere*. Besides, we generally find [-ən, -əm, -əl] for /n, m, l/: [ˈfaʔən] /ˈfa:ʔn/ *fahren*, [ˈlooʔəm] /ˈlo:ʔm/ *losen*, [ˈeezəl] /ˈe:zəl/ *Esel*. Only in very careful pronunciation, can we find [ŋ, ɱ, ʎ], and [ʀ, ʌʀ, ʌʁ, ʌʁ] as well, even for speakers lacking /r/ [ʀ].

Neutral Swiss diphthongs are /ae, ao, ɔʏ/ [aə, əo, ɔɪ]: [ˈaəz] /ˈaes/ *Eis*, [ˈblao] /ˈblao/ *blau*, [ˈnoɪ] /ˈnoɪ/ *neu*; in the broadest accents we find: /ae/ [ɛɪ, aɪ], /ao/ [əʊ, oʊ], /ɔʏ/ [ɔɪ, oɪ]. Xenophonemes are decidedly closer than in neutral German: /ei, ou/ [ee, ei; oo, ou].



In the second vocogram again, three further typical diphthongs are evident (although marked in grey, since they only occur in local family and place names), [iə, yə, uə] /iə, yə, uə/: [ˈdiəʔ] *Dieth*, [ˈʔyɛəʔ] *Rüegg*, [ˈhuəʔ] *Huep*. Except in less marked

–or affected– accents, often /y:, y, yə/ become /i:, i, iə/. In the same figure, possible realizations of reduced forms of /ae, ao, ɔy, a/ are given: [ɐə, ao, ɔt, ʌ].

In comparison with neutral German, there are some words with short V, as in: [ˈɑrt] /ˈa:rt/ *Art*, [ˈflɔs] /ˈflo:s/ *Floß* (*Floss*: in Switzerland *ß* is not used), [ˈja:ɡd] /ˈjakt/ *Jagd*, [ˈnʊn] /ˈnu:n/ *nun*, [ˈpʰɛ:ʁt] /ˈpʰe:rt/ *Pferd*, [ˈʋɔ:ʁ] /ˈʋo:ʁ/ *vor*, [ˈʋɛ:ʁdən] /ˈve:ʁdɐ/ *werden*, [ˈɛ:ʁdə] /ˈe:ʁdə/ *Erde*, [ˈʋʊks] /ˈvu:ks/ *Wuchs*, [ˈtsɛ:ʁtliç, -ɔ] /ˈtsʰɛ:ʁtliç/ *zärtlich*.

The last vocogram shows broad realizations of /ɛ, ɛ:, a, a:, ae, ao, ɔy/ (and less broad ones of /ɪ, ʏ, u/).

5.4.3.3. Moving to C, we have to say that /t, d/ are decidedly dental: [d̪ɛˈtɛktoʁ] /d̪ɛˈtɛktor/ *Detektor*; whereas, /k/ is [k, kx, kχ, kɣ]: [ˈkɪnd̪, ˈkx, ˈkχ-, ˈkɣ-] /ˈkɪnt/ *Kind*, [ˈsɑk, -kx, -kχ, -kɣ] /ˈzak/ *Sack*; please, note that in the transcription of § 5.5.2.4 (and § 5.5.1.2), we write [kχ], to insist on this typical realization (although it tends to be avoided in neutral-like pronunciations, perhaps resorting to a velar stop-semi-(con)strictive, [kɣ], which is half-way between [k] and the other stopstrictives indicated).

/p, t, k; pʰ, tʰ, kʰ/ are not < aspirated > (unless < aspiration > is voluntarily used): [ˈpo:l] /ˈpo:l/ *Pol*, [ˈto:n] /ˈto:n/ *Ton*, [ˈkuu, ˈkx, ˈkχ-, ˈkɣ-] /ˈku:/ *Kuh*, [ˈpʰʊnt] /ˈpʰʊnt/ *Pfund*, [ˈtʰɛ:n] /ˈtʰɛ:n/ *zehn*, [ˈtʰakʰo] /ˈtʰako/ *Tschako*.

Furthermore, [ʀ] is lacking, except in less marked and less typical accents: [teˈa:təʁ] /teˈa:tʁ/ *Theater*, [iχˈɛsʰə, iɣ-] /içˈɛsə/ *ich esse*; as can be seen, though, lexeme and grammeme boundaries are respected; only in very broad pronunciations resyllabification is possible: [iχˈɛsʰə, iɣ-].

Voiced C of diphonic pairs are actually half-voiced, [b̥, d̥, ɡ̥; v̥, z̥, ʒ̥], even before pauses or when syllable-final (where, in neutral German, they are neutralized and change to /p, t, k; f, s, ʃ/). Therefore, we generally find /s/ for /z/, after pauses or C: [ˈb̥uub̥ə] /ˈbu:ʁə/ *Bube*, [ˈb̥uub̥] /ˈbu:ʁ/ *Bub*, [ˈd̥uu] /ˈdu:/ *du*, [ˈund̥] /ˈʊnt/ *und*, [ˈʀe:ð̥n] /ˈre:d̥n/ *reden*, [ˈb̥ooɡ̥ən] /ˈbo:ɡ̥n/ *Bogen*, [ˈta:ɡ̥] /ˈta:k/ *Tag*, [ɡ̥əˈvɪn] /ɡ̥əˈvɪn/ *Gewinn*, [ˈle:z̥ən] /ˈle:z̥n/ *lesen*, [ˈsa:ɡ̥ən] /ˈza:ɡ̥n/ *sagen*, [ˈb̥ɪnsə] /ˈbɪnzə/ *Binse*, [ˈpa:ʒ̥ə] /ˈpa:ʒə/ *Page*.

5.4.3.4. Often, /f/ occurs instead of (neutral) /v/: [noˈfɛmbəʁ] /noˈvɛmbɐ/ *November*, [fɛnˈti:l] /vɛnˈti:l/ *Ventil*, [fulˈka:n, -kx, -kχ-, -kɣ-] /vʊlˈka:n/ *Vulkan*.

For *sp, st*, internal or final we have /sp, st/, but in broad accents we find /ʃp, ʃt/: [kˈnɔspə, ↓-ʃpə] /kˈnɔspə/ *Knospe*, [bɪst, ↓-iʃt] /bɪst/ *bist*, [ɡ̊ɛstəʁn, ↓-ʃt-] /ɡ̊ɛstʁn/ *gestern*. Generally, for internal /ʃ/ (after stressed short V, like for the other C) we have [ʃ]: [ˈmuʃʃəl] /ˈmʊʃ/ *Muschel*; for *chs* /ks/, in marked pronunciation it is fairly possible to have < /xs/ >: [ˈfuks, ↓-χs, ↓-ɣs] /ˈfuks/ *Fuchs*.

Only in less broad speech, can we find /ç/ (but articulated as postpalatal [ç̥], or prevelar [x]); whereas, normally, we have /x/ [χ, ɣ]: [ˈmɪlχ, -ɣ; ↑-ç, -↑-x] /ˈmɪlç/ *Milch*, [ˈaɔχ, -ɣ] /ˈaɔx/ *auch*. *-ig* is regularly /ɪk/ (ie < /ɪg/ >); while /ɪç/ is decidedly rare and only voluntarily used): [ˈtʰʌntsiç] /ˈtʰvantsɪç/ *zwanzig*; and /#ç/ is normally /k/: [ˈki:na, ˈkx, ˈkχ-, ˈkɣ-] /ˈçi:na/ *China*; /j/ is an approximant, /j/: [ˈja:] /ˈja/ *ja*.

5.4.3.5. The typical articulation of /r/ is uvularized alveolar, a trill in stressed syllables [ʀ], and a tap in unstressed syllables [ɾ], in every context, even after V: [ʀaɑʀ] /'Ra:R/ *rar*, [ʀe'akto(o)ʀ] /Re'akto:R/ *Reaktor*. In regional pronunciation (or, on the contrary, intentional pronunciation, under the influence of neutral German pronunciation), uvular realizations are possible: [ʁ, R, ʁ].

In neutral pronunciation /l/ is always alveolar (whereas in non-neutral pronunciation we often find [ɫ, ɮ], before pauses or C): [ˈalʎ] /'alə/ *alle*, [ˈleebən] /'le:bən/ *leben*, [ˈvɔlf] /'vɔlf/ *Wolf*, [ˈhɛl] /'hɛl/ *hell*.

5.4.3.6. In word-internal position, in neutral Swiss pronunciation, simple inter-syllabic /C/, after short stressed V (both voiceless and voiced, and spelled as geminates ⟨pp, bb; tt, dd; gg; ff; ss; mm, nn; rr; ll⟩, or represented with digraphs ⟨ck; pf; tz; ch; ng⟩ or tri-/quadri-graphs ⟨sch, tsch⟩), are realized as restrained (but perceptible) geminates, which we indicate with superscript symbols of the second element, [CC], thus: [ˈim<sup>m</sup>əʀ] /'imR/ *immer*, [ˈin<sup>n</sup>ən] /'inŋ/ *innen*, [ˈhuŋgəʀ] /'huŋŋR/ *Hunger*; and [ˈʃtɔppən] /'ʃtɔpŋ/ *stoppen*, [ˈkrabə] /'krabə/ *Krabbe*, [ˈvɛtəʀ] /'vɛtR/ *Wetter*, [ˈviddəʀ] /'vidR/ *Widder*, [ˈrɔggən] /'rɔgŋ/ *Roggen*, [ˈsɔk<sup>k</sup>ən, -k<sup>k</sup>ɪ<sup>k</sup>ɪ-, -k<sup>k</sup>ɪ<sup>k</sup>ɪ-, -k<sup>k</sup>ɪ<sup>k</sup>ɪ-] /'zɔkŋ/ *Socken*; [ˈtapf<sup>f</sup>əʀ] /'tapfR/ *tapfer*, [ˈsits<sup>s</sup>ən] /'zitsŋ/ *sitzen*, [ˈgrɛtʃən] /'grɛtʃŋ/ *grätschen*; [ˈafə] /'afə/ *Affe*, [ˈvas<sup>s</sup>əʀ] /'vasR/ *Wasser*, [ˈvasʃən] /'vasʃŋ/ *waschen*, [ˈsiç<sup>ç</sup>əʀ] /'ziçR/ *sicher*, [ˈmaç<sup>ç</sup>ən] /'maxŋ/ *machen*; [ˈha<sup>r</sup>əʀ] /'harŋ/ *harren*; [ˈkβɛlʎ] /'kβɛlə/ *Quelle*.

For stressing, we have cases such as: [ˈaotooʀ, aotooʀ] /'aoto:R/ *Autor*, [ˈlaboora, laboora] /la'bo:R/ *Labor*, [ˈmootoʀ, mootoʀ] /'mo:to:R, mo'to:R/ *Motor*, [ˈbʊffɛt, bʊffɛt] /by'fɛ:/ *Buffet*, [ˈhɔttɛl, hɔttɛl] /ho'tɛl/ *Hotel*, [ˈnoɪjaaʀ] /'noɪja:R/ *Neujahr*. In addition, there are interesting words such as: [aβɔnənə'mɛnt] /abɔnənə'maŋ, -ã:/ *Abonnement*.

Swiss intonation is easily recognized because of its (slightly rising) low stressed syllables and mid unstressed syllables, which continue the pitch movement at least in normal preintonemes; even the marked intonemes have particular movements – a close examination of the tonogram is highly recommended.

### South-Tyrol/Alto-Adige German

5.4.4.1. The first vocogram shows the short and long monophthongs of South-Tyrolese mediatic pronunciation. Even for this accent it is immediately clear that the articulations corresponding to /i, y, u; ε(ɨ), œ, ɔ/ are closer than in neutral German – so they are represented with [i, y, u; ε(ɨ), œ, σ] (in less broad accents we find [i<sup>+</sup>, y<sup>+</sup>, u<sup>+</sup>; ε(ɨ)<sup>+</sup>, œ<sup>+</sup>, ɔ<sup>+</sup>], and unstressed [ɛ, œ, σ] only slightly closer than in neutral pronunciation): [ˈfi] /'fi/ *Fisch*, [ˈfɪnɪf] /'fɪnɪf/ *fünf*, [ˈhʊnt] /'hʊnt/ *Hund*, [ˈɛlf] /'ɛlf/ *elf*, [ˈʃpɛ:t] /'ʃpɛ:t/ *spät*, [ˈtsuɔlf] /'tsvœlf/ *zwölf*, [ˈɔft] /'ɔft/ *oft*.

5.4.4.2. /a:/ is diphthongized: [ˈʃtat] /'ʃtat/ *Stadt*, [ˈʃtaat] /'ʃtat/ *Staat* (in less broad accents /a, a:/ are more similar to one another: [a, a:]; whereas, in the broadest accents, near the dialects, we can also have [ɔ, ɔ:] (which will certainly be noted at once; cf § 16.15 of *NPT/HPb*, where the phonosynthesis of the South-Tyrolese

*dialect* koiné is given).

Generally, Tyrolese traditional dialects have phonemic opposition between a non-back *a* and a back rounded one, both short and long. It is possible to find this timbre distinction in the language too, where the back timbre is used in traditional words, whereas the non-back one is used in loanwords and neologisms, as happens for instance in *Ball*: /'pɔl/ [pɔl, 'pal] <ball>, /'pal/ [p'al] <dance>.

Very broad accents have /e:, o:/ [ei, ou] (as in the dialect): [v'e:, ↓v'eɪ] /v'e:/ *weh*, [s'oo, ↓s'ou] /z'o:/ *so* (to these /ø:/ [øɣ] is added: [p'øø, ↓p'øɣ] /b'ø:/ *Bö*, which does not belong to the genuine dialect that has historically merged the front-central rounded series with the front one). On the other hand, the bourgeois dialect of Bolzano (Bozen) has restored /y:, ɣ, ø:, œ, ɔɣ/ [y:, ɣ, ø:, œ, σɣ], under the influence of neutral German pronunciation, including /yə/ [yə, iə], by structural analogy.

5.4.4.3. /ə/ is realized as [ə, ɛ], with the vocalization of /R, ʀ/ [ʌ] (with consonantal accompaniments too), and in the most broad pronunciations even [ɛ], as in the dialects (cf the phonosynthesis); thus we have: [ʰunsɛʌə] /ʰunzəɾə/ *unsere* and [v'asɛ, -ʌɛ, -ʌɛ, -ʌɛ, -ʌ; v'ɔsɛ, -ʌɛ, -ʌɛ, -ʌɛ] /v'asɾ/ *Wasser*. It is important to note that [ə, ɛ] /ə/, in less broad accents, given in the last vocogram, are realized slightly differently (as other *V* are too) although they are represented by the same symbols. Final *-e* (not only of verbs) and the first one in *-ere(C)#* tend to be dropped (except in Val Pusteria, or Pustertal), especially in non-controlled pronunciation: [tʰy:pə, tʰy:p] /tʰy:pə/ *Type* (which can coincide thus with [tʰy:p] /tʰy:p/ *Typ*).

The second vocogram shows the diphthongs of South Tyrolese German. While /ɔɣ/, in comparison with neutral German, differs mostly in its second element that is unrounded, [ɔɪ]; /ae, ao/ are decidedly less wide, [aə, aɔ]: [ʰaəs] /ʰaes/ *Eis*, [p'lao] /b'laɔ/ *blau*, [n'ɔɪ] /n'ɔɣ/ *neu*. In the dialect, for /ae, ao/, we have [aə, aɔ], but also [aɔ], which are even less wide; only in Bolzano the same is true for /ɔɣ/ [σɪ], since in traditional dialects it has merged into /ae/ [aə], or it is represented by /ui, oi/: [nui] /nui/ *nui* [= *neu*], [f'oir] /f'oir/ *foir* [= *Feuer*]. The xenophonemes are quite rarely used (and, if they are, it is in a completely intentional way): /eɪ, ou/ [e:, t'eɪ; o:, t'ou].

5.4.4.4. In the second vocogram, two further typical diphthongs are evident (although marked in grey, since they only occur in local family and place names), [iə, uɤ] /iə, uə/: [t'iətl, t'diitl] *Dietl*, [kxuɤns, t'ku:ns] *Kuens*. In the same diagram, the possible realizations of /ae, ao, ɔɣ, a/ [əə, əɔ, oɪ, ə], in reduced forms, have been marked.

As already said, the last vocogram shows less broad vowel realizations ([t]), which are rather similar to the neutral German ones; however, this pronunciation is still recognizable, since the prosodic characteristics have typical differences. There are different distributions too, as for instance /ɛ/ in [ʰɛɾst, 'ɛ-; ↓ʰɛɾst] /ʰɛ:rst/ *erst*, [pʰɛɾt, 'ɛ-; ↓pʰɛɾt] /pʰɛ:rt/ *Pferd* (which in neutral German have /e:/: [ʰɛ:ɾst, pʰɛ:ɾt]).

/i:, ɔi/ [i:, i], /I/ [i]		/u:, ɔu/ [u:, u], /U/ [u]
/y:, ɔy/ [y:, y], /Y/ [y]		
/e:, ɔe/ [e:, e], /ø:, ɔø/ [ø:, ø]		/o:, ɔo/ [o:, o]
/ɛ:/ [ɛ:, ɔɛ], /œ:/ [ø:, ɔø], /ɛ:/ [ɛ:, ɔɛ]		/ɔ/ [ɔ, ɔ]
/ə:/ [ə, ɐʁ#, ɛɛ-, ɛɛ-]		/ʀ/ [ʀ] (//əʀ// & [ʌ])
		/a/ [a], /a:/ [a:]

/iə/* [iə]		/uə/* [uə]
/eɪ/* [e; ↑ei]		/ou/* [o; ↑ou]
(/əa/ [ə])		/ɔɪ/ [ɔɪ] ([əɔɪ])
/ae/ [ae] ([əə])		/aɔ/ [aɔ] ([əɔ])

	/i/ [i...i...i]		/ɪ/ [ɪ...ɪ...ɪ]
	/e/ [e...e...e]		/ɛ/ [ɛ...ɛ...ɛ]
	/i/ [i...i...i]		/ɪ/ [ɪ...ɪ...ɪ]
	/ɪ/ [ɪ...ɪ...ɪ]		/ɪ/ [ɪ...ɪ...ɪ]

/i:, ɔi/ [↑i:, ↑i], /y:, ɔy/ [↑y:, ↑y]		/u:, ɔu/ [↑u:, ↑u]
/I/ [↑I], /Y/ [↑Y]		/U/ [↑U]
/e:, ɔe/ [↑e:, ↑e], /ø:, ɔø/ [↑ø:, ↑ø]		/o:, ɔo/ [↑o:, ↑o]
/ɛ:/ [↑ɛ, ↑ɔɛ], /œ:/ [↑œ, ↑ɔœ]		/ə/ [ə, ɐʁ#, ↑ɛɛ-, ↑ɛɛ-]
/ɛ:/ [↑ɛ:, ↑ɔɛ]		/ɔ/ [↑ɔ, ↑ɔ]
/a/ [↑a]; /a:/ [↑a:]		/ʀ/ [ʀ] (& [↑ɛɛ, ↑ʌ])

5.4.4.5. Moving to C, we find that generally internal /ŋ/ becomes /ŋg/ (but it is not so in less broad accents): [pʁɪŋgən, ↑bʁɪŋg] /'bʁɪŋg/ *bringen* (however, even without [g], as in less broad accents, the nasal is always velar, not uvular). Especially in checked syllables with N (above all in stressed positions), V are nasalized in broad accents: ['vi:n, 'vĩ:n] /'vi:n/ *Wien*, [fɑŋ, fãŋ] /'fɑŋ/ *Fang*.

/t, d/ are dental: [tɛ'tɛktɔɹ] /dɛ'tɛktɔɹ/ *Detektor*; often /<sup>#</sup>k, k<sup>#</sup>, kŋ/ are stopstrictives, or even stop-semi(con)strictives, velar (or postpalatal, near front V): [kɔmm, 'kx-, 'kŋ-] /kɔmm/ *kommen*, [sɔkŋ, 'sɔkxən, -kŋ-] /'zɔkŋ/ *Socken*, [tik, -kx, -kŋ, -kç] /'dik/ *dick*.

Voiceless stops and stopstrictives are not < aspirated > (generally even in less broad accents) as we have just seen for /k/: [po:l] /'po:l/ *Pol*, [to:n] /'to:n/ *Ton*, [kint, 'kx-, 'kç-] /'kint/ *Kind*, [pfunt] /'pfunt/ *Pfund*, [tʃako] /'tʃako/ *Tschako*.

Phonemic voiced stops are voiceless in typical pronunciation, but half-voiced,



[b̥, d̥, ɡ̊] in less broad accents. However, between voiced phones, they are half-voiced, [b̥, d̥, ɡ̊] (except, usually, in the dialects which –mostly– have [p, t, k/kx], as in the broadest accents. Instead, in less broad accents they are voiced, [b, d, ɡ]): [ˈpu:bə, ↑bə] /ˈbu:bə/ *Bube*. Half-voiced realizations are possible before internal /n, l/, too: [ˈɔʁdnʊŋ, ˈmø:ɡliç] /ˈɔʁdnʊŋ, ˈmø:klɪç/ *Ordnung, möglich*. (In Bolzano, we can find [VβV, VδV, VχV] /VbV, VdV, VgV/: [ˈbu:βə].)

There is no [ʀ], except in less broad accents, where however it is less evident than in neutral German (and, in this case, we could mark it with a special symbol, [ʀ]): [içˈESə, ↑ʀiçˈESə] /içˈESə/ *ich esse*, [teˈaːtʀ, ↑teˈʀaː] /teˈaːtʀ/ *Theater*.

5.4.4.6. For constrictives, it is to be noted that /z/ is normally /s/ [s] (generally, even in less broad accents, in Bolzano as well): [ˈsaːɡŋ] /ˈza:ɡŋ/ *sagen*, [ˈalso] /ˈalzo/ *also*, [ˈʁaəsŋ] /ˈraezŋ/ *reisen* (which becomes identical to [ˈʁaəsŋ] /ˈraesŋ/ *reiben*). In initial position, before C, /s/ practically never occurs (substituted by /ʃ/); and, as far as internal and final /st/ is concerned, in broad accents, as in the dialects, we typically find /ʃt/: [ˈli:pstŋ, ↓ʃtŋ] /ˈli:pstŋ/ *lieben*, [ˈsɔnst, ↓nʃt] /ˈzɔnst/ *sonst*. However, in case they are heterolexic, we have /st/: [ˈsamstakx] /ˈzamsatak/ *Samstag* (as in the dialects: [ˈsamstikx, ˈsɔmstikç] /ˈsamstik/ *samstig*).

For (tautosyllabic) /<sup>#</sup>Cv/, we have [Cv]: [ˈʃvɛstʀ] /ˈʃvɛstʀ/ *Schwester*, [ˈtʃvə] /ˈtʃvə/ *zwei*, [ˈkvɛl] /ˈkvɛl/ *Quelle*; for /f/, it is possible to have /v/, besides in forms such as *Vize* (which, even in neutral German, may have the variant with /v/, although not prevailing), even for *v<sup>h</sup>*, against neutral phonemic rules, in cases such as *positiv*: [ˈvi:tʃə, ˈpositiv]. In addition, /j/ is approximant [j]: [ˈjaː] /ˈjaː/ *ja*; generally, /x/ is velar [x]: [ˈnaːx] /ˈnaːx/ *nach*; /ç/ is maintained (even before /r/, contrary to what happens in Austria): [ˈtʉrç] /ˈdʉrç/ *durch*; but, for /-iç/ we have /-ik/ (except in less broad accents) [ˈtʃvantsik, -kx, -kç] /ˈtʃvantsiç/ *zwanzig*; for /<sup>#</sup>ç/ we systematically find /k/: [ˈkiːna, ˈkx-, ˈkç-] /ˈçiːna/ *China*. However, in the dialects, except in Bolzano, [ç] /ç/ does not exist at all.

The most widely used articulation for /r/ is a uvular constrictive, [ʁ], which coexists with a fairly widespread uvular trill, [ʀ], with the possibility of postnuclear vocalization (that, as we have already seen, is back-central [ʌ] (or back, [ɤ], in the dialects and in the broadest accents). In absolute final position, after stressed V, in the dialects and in the broadest accents we have [r]: [ˈʁaːr; -aːr; ↓-aːr; ↓-ɔːr] /ˈraːr/ *rar*, [ˈhiːr; ˈhiːr; ↓hiːr] /ˈhiːr/ *hier*.

5.4.4.7. In non-neutral South-Tyrolese pronunciation, simple word-internal intersyllabic (voiceless, nasal and lateral) /C/, after (short) stressed V, are realized as restrained (but fairly evident) geminates, which we indicate with superscript symbols of the first element, in the variant form notated only here, [ˈCC]: [ˈimʀ; ˈimʀ] /ˈimʀ/ *immer*, [ˈʃtɔʀpʀ; ˈʃtɔʀpʀ] /ˈʃtɔʀpʀ/ *stoppen*, [ˈvɛtʀ; ˈvɛtʀ] /ˈvɛtʀ/ *Wetter*, [ˈtapfʀ; ˈtapfʀ] /ˈtapfʀ/ *tapfer*, [ˈsitsŋ; ˈsiːtsŋ] /ˈzitsŋ/ *sitzen*, [ˈvasʀ; ˈvasʀ] /ˈvasʀ/ *Wasser*, [ˈvaʃŋ; ˈvaʃŋ] /ˈvaʃŋ/ *waschen*, [ˈsiçʀ; ˈsiçʀ] /ˈziçʀ/ *sicher*, [ˈmaxŋ; ˈmaxŋ] /ˈmaxŋ/ *machen*, [ˈkvɛlə; ˈkvɛlə] /ˈkvɛlə/ *Quelle*.

The insertion of a homorganic stop between /n, l/ and voiceless constrictives or /z/ (cf § 5.3.2) is possible, although not particularly widespread.

In lofty or foreign words, there is a frequent use of Italian –or Italian-like– structures: /gn/ → /nj/: [pʁoŋ'jo:sə] /pʁog'nozə/ *Prognose*, [siŋ'ja:dl] /ziŋ'nal/ *Signal*, [ʁe-siŋ'ji:vʃ], -ʁŋ, -'ji:ʁŋ, -ʁŋ] /ʁeziŋ'ni:ʁŋ/ *resignieren*; /t/ → /tʃ/: [tiploma'tsi:] /diploma'ti:/ *Diplomatie*, [kaʁan'tsi:] /gاران'ti:/ *Garantie*; /ts/ → /tʃ/: [mɛʁ'tʃe:dɛs] /mɛʁ'tse:dɛs/ *Mercedes*, [pʁaʃ'e'lɔ:na] /bartse'lɔ:na/ *Barcelona*; /ʃ/ → /sk/: ['ske:ma] /'ʃe:ma/ *Schema*, [skitso'fʁe:n] /ʃitso'fʁe:n, sʃi-/ *Schizophren*; /ʒ/ → /dʒ/: [tʒʊʁnə'lɪst] /ʒʊʁnə'lɪst/ *Journalist*; /kv/ → /kw/ [kʷ] (in addition to [kv]): [kʷaʁ'tɛt] /kʷaʁ'tɛt/ *Quartett*. For V, we find: /y/ → /u/: [pʁʊkʁa'tsi:] /byʁokʁa'ti:/ *Bürokratie*; /ɔy/ → /eu/: [eu'ʁo:pɑ] /ɔy'ʁo:pɑ/ *Europa*, [neu'tʁa:dl] /nɔy'tʁa:dl/ *neutral*.

South-Tyrolese intonation is easily recognized because of its half-low stressed syllables, except the first one which is half-high; mostly the interrogative intoneme (and the suspensive one too) have particular movements, which can be seen in the tonogram.

### Text

5.5.0. The story *The North Wind and the Sun* follows, given in some different (◁normalized▷) versions. We start with the (neutral) German pronunciation of (neutral British) English – this is the first step of the phonetic method (the written text is given in § 2.5.2.0). The German translation follows, in its neutral version; then the north-eastern accent, followed by the Austrian, Swiss, and South-Tyrolese ones. These transcriptions would have been (visually) more different, if we had used the ◁special▷ (denti-alveolar) symbols [ʈ, ɖ, ɖ̥], and instead of [ʁ, ʀ] (for /R, R/) respectively the following possible variants: [ʌ] (neutral), [ʁ] (north-eastern), [v, a] (Austrian), [ʃ, ʒ] (Swiss), [ʌ, ʌ] (South Tyrolese).

At the end, as always, there is the version which gives the English pronunciation of German, by neutral British speakers, fluent in German (after prolonged contact with native speakers, but with no help from the phonetic method), who have adequately learned the relative prominences, but who substantially use segmental and intonation elements which are typical of neutral British English (for reference purposes, although, of course, a neutral accent is not so common). Obviously, the same principle is valid for the foreign pronunciation of English, given first.

Speakers of American English could prepare their own version both of the German pronunciation of English and of their pronunciation of German, as an excellent exercise, by listening to native speakers, best of all after recording them. Of course, speakers of *other languages* could do the same thing. The author would be happy to receive their transcriptions and recordings, both in case of help –should they need it– and to make their contribution known to others (possibly in our website on *canIPA Natural Phonetics* – cf § 0.12).

### German pronunciation (of English)

5.5.1. [zʰnɔʁs 'vɪnt. ʔentzʰzan. vɔʁdɪ'spɪ:ʁtɪŋ 'vɪʃ vɔszʰʃtɔŋdʁ. | 'vɛn ʔe'thɛfɪlɹ. 'khe:m ʔe'lɔŋ. | 'ʁɛpt ʔɪnʔe'vɔʁm 'khlo:k. | zɛʔe'gʁi:t. | zɛtʃʰvan hu'fɔɛʁst zək'si:dɪt.

ʔim'me:kiŋ zʰtʰʁɛfɪlɹ̩: 'the:k his'khlo:k ʔɔf' | ʃʊtʰbikɔn'zi:dɹ̩d̩ | ʃtʰɔŋgɹ̩ zɛnziʔazɹ̩. ||  
 'zɛn· zʰnɔɹs 'yɪnt· 'blu: ʔɛz'hɑɹt· ʔɛshi'khʊt. | ʔatʰzʰmɔɹ hi'blu:' | zʰmɔɹ 'khlo:sli·  
 dɪtʰzʰtʰʁɛfɪlɹ̩: 'fo:l't his'khlo:k ʔɛ'ʁaonthɪm. | ʔɛntʔɛt'la(ɔ)st·: zʰnɔɹs 'yɪnt· 'gɛ:f ʔap zɪ·  
 ʔɛ'thɛmpt. || ʔɛn· zʰzʰan 'ʃɔn ʔaot. | ʔɔɹmli. || ʔɛntʔɛt'la(ɔ)st·: zʰtʰʁɛfɪlɹ̩ 'tʰʊk ʔɔf.·  
 ʔhis'khlo:k. || ʔɛnt'zɔ: zʰnɔɹs 'yɪnt· ʋɔsʔo'blaetʃ tʊkɔŋ'fɛs | zɛtʰzʰan.· ʋɔsʰzʰʃtʰɔŋgɹ̩.·  
 ʔɔfzʰtʰu: ||  
 ɛdɪtʃu'laek' ɛzʰʃtʰɔɪ | ɛdʒu'vɔn tu'hixɪt ʔɛ'gɛ:n' ||]

### German text

5.5.2. *Einst stritten sich Nordwind und Sonne, wer von ihnen beiden wohl der Stärkere wäre, als ein Wanderer, der in einen warmen Mantel gehüllt war, des Weges daherkam. Sie wurden einig, dass derjenige für den Stärkeren gelten sollte, der den Wanderer zwingen würde, seinen Mantel abzunehmen.*

*Der Nordwind blies mit aller Macht, aber je mehr er blies, desto fester hüllte sich der Wanderer in seinen Mantel ein. Endlich gab der Nordwind den Kampf auf. Nun erwärmte die Sonne die Luft mit ihren freundlichen Strahlen, und schon nach wenigen Augenblicken zog der Wanderer seinen Mantel aus. Da musste der Nordwind zugeben, dass die Sonne von ihnen beiden der Stärkere war.*

*Hat dir die Geschichte gefallen? Wollen wir sie wiederholen?*

### Neutral German pronunciation

5.5.3. [ʔaɛŋ· ʃtʰɔɪtʰɪzɪç 'nɔɹtʰyɪnt· ʔʊn'zɔnɪ | ʋɛɹfɛnʔɪn'baedn̩vo:l dɹ̩ʃtɛɹkəʋɪvɛ·  
 ʋɛ. | ʔalsɛm̩'vandəʋɹ̩· ʔdɛɹʔɪnʔaɛn̩'ʋaɹɪmm̩ 'mantl̩ gɛ'hɪltʰɹ̩ɹ̩· d̩s'ʋɛ:gɪs d̩ɛ'hɛɹ·  
 kʰa:m. || zɪ'ʋɔɹd̩n̩ʔaɛnɪç | d̩as'd̩ɛ:ɹ̩jɛ'nɪgɪ ʔfʏ(ɹ)d̩n̩ʃtɛɹkəʋɪ 'gɛlt̩n̩zɔltɪ· ʔdɛɹd̩n̩'van·  
 dəʋɹ̩ 'tʰʃɔɪŋf̩'ʋɹɹdɪ· zɛɛn̩'mantl̩ ʔaptsɪnɛ'mm̩. ||

d̩ɹ̩'nɔɹtʰyɪmp 'blɪs: mɪtʔalɹ̩ 'maɣt. || ʔabɹ̩jɛ'mɛɹ ʔɛɹ'blɪs' | d̩ɛstɔfɛstɹ̩ 'hɪltɪzɪç  
 dɹ̩'vandəʋɹ̩ ʔɪn̩zɛɛn̩'mantl̩ ʔaɛn. || ʔɛntlɪç· 'g̩a:p d̩ɹ̩'nɔɹtʰyɪn· d̩ɹ̩'kʰaɪmpf ʔaof. ||  
 'nu:n: ɹ̩'ʋɛɹɪmtɪ dɪ'zɔnɪ dɪ'lʊft | mɪtɪɹ̩ŋf̩'ɛɔvntlɪçn̩· ʃtʰɹ̩:l̩n̩. || ʔʊn'ʃɔ:n ʔnɑ'χʋɛ:nɪgɪ  
 ʔaog̩n̩'blɪkɪ· ʔ'tʰɔ:k. d̩ɹ̩'vandəʋɹ̩ ʔzɛɛn̩'mantl̩ ʔaos. || 'd̩a:· mʊstɛd̩ɹ̩'nɔɹtʰyɪn·  
 'tʰʊ:gɛ'bɪn̩: d̩as'dɪ'zɔnɪ ʔfɔnʔɪn'baedn̩· d̩ɹ̩ʃtɛɹkəʋɪ'ʋa:ɹ. ||

ɛhatd̩ɹ̩d̩gɛ'ʃɪçɪ ɛgɪ'fal̩n̩' | ɛ'vɔln̩vɪɹ zɪ'vɪ:d̩ɹ̩ho'ln̩' ||]

### Neutral north-eastern German pronunciation

5.5.4. [ʔaɛŋ· ʃtʰɔɪtʰɪzɪç 'nɔɹtʰyɪnt· ʔʊn'zɔnə | ʋɛɹfɛnʔɪn'baedn̩vo:l dɹ̩ʃtɛɹkəʋə·  
 ʋɛɛkə. | ʔalsɛm̩'vandəʋɹ̩· ʔdɛɹʔɪnʔaɛn̩'ʋaɹɪmm̩ 'mantl̩ gɛ'hɪltʰɹ̩ɹ̩· d̩s'ʋɛ:ɛgəs d̩ɛ·  
 'hɛ:ɹ̩kʰaam. || zɪ'ʋɔɹd̩n̩ʔaɛnɪç | d̩as'd̩ɛ:ɹ̩jɛnɪgə ʔfʏ(ɹ)d̩n̩ʃtɛɹkəʋɪ 'gɛlt̩n̩zɔltə·

deɑdɪ'vandzɤɑ 'tʂβiŋɪʃvʏɑdə ʒaənɪ'mantl̩ ʔaptsəneemm̩.∥

դճոսյտվիմփ ʔbliis: mitʔalɤ 'maxt.∥ ʔabɤʒe'me'eɤ ʔeɤ'bliis: | d̩estofestɤ 'hɪltə-  
zɪç dɤ'vandzɤɑ ʔɪnʒaənɪ'mantl̩ ʔaən.∥ ʔentl̩ɪç ʔg̩aap d̩ɤ'nosjɪvɪn d̩ɤ'kɥampf  
ʔaof.∥ 'nu:un: ɤ'vɤɤmtə d̩ɪzɔnə d̩ɪ'lʏft | mitɪɤɤɤ'fɤsɔntl̩ɪçɤ ʔtɤɑ'alɤ.∥ ʔun'ʃo:ɔn  
'naax'ʏe:enɪçɤ ʔaɔɤɤɤ'blɪkɤ | ʔ'tʂo:ok. d̩ɤ'vandzɤɑ ʔaənɪ'mantl̩ ʔaɔs.∥ 'd̩ɑɑ:  
'mʏstəd̩ɤ'nosjɪvɪn 'tʂu:u:geebɤ: | d̩asd̩ɪzɔnə | ʔfɔnɪɤ'ɔb̩æd̩ɤ | d̩ɤ'ʃtɤɤkzɤvɑɑɤ.∥  
çhatd̩ɪɤd̩ɪçə'ʃɪçtə çg̩ə'falɤ | ç'vɔlɪvɪɤ zɪ'vi:ɪd̩ɤ'ho:olɤ.∥∥∥

### Neutral Austrian pronunciation

5.5.5. [ʔaənʃ ʔtʁɪtɪnsɪç 'nosjɪvɪnt un'sɔnə | vɤɤfəɤnɪɤ'ɔb̩æd̩ɪ'vool d̩ɤ'ʃtɤɤkzɤvɤe-  
vɤə | 'alsəɤɤ'vandəvɤɤ ʔd̩eɤɪnaənɪ'vɑɤmm̩ \_mantl̩ ɤə'hɪltvɑɑɤ ʔə'sveeçəçs d̩l-  
'heɤɤkɑɑm.∥ sɪ'vʏɤd̩ɤ'ænɪk | d̩as'd̩eɤɤjeenɪçə ʔfʏ(ɤ)d̩ɤ'ʃtɤɤkzɤɤ 'çeltɪɤsɔltə | d̩eɤ-  
d̩ɤ'vandəvɤɤ 'tʂβiŋɪʃvʏɤdə ʔsəənɪ\_mantl̩ 'aptsəneemm̩.∥

դճոսյտվիմփ ʔbliis: mit'alɤ 'maxt.∥ ab̩ɤʒe\_meeɤ eɤ'bliis: | d̩estofestɤ \_hɪltəsɪç  
d̩ɤ'vandəvɤɤ ʔɪn'səənɪ'mantl̩ 'aən.∥ 'entl̩ɪç \_çg̩aap d̩ɤ'nosjɪvɪn d̩ɤ'kɥampf 'aof.∥ 'nu-  
un: ɤ'vɤɤmtə d̩ɪ'sɔnə d̩ɪ'lʏft | mitɪɤɤɤ'fɤsɔntl̩ɪçɤ ʔtɤɑ'alɤ.∥ un'ʃoon 'naax\_veenɪçɤ  
'aɔçɤɤ'blɪkɤ | ʔ'tsook. d̩ɤ'vandəvɤɤ ʔsəənɪ'mantl̩ 'aɔs.∥ 'd̩ɑɑ: 'mʏstəd̩ɤ'nosjɪvɪn  
'tsu:u:geebɤ: | d̩asd̩ɪ'sɔnə | ʔfɔnɪɤ'ɔb̩æd̩ɤ | d̩ɤ'ʃtɤɤkzɤvɑɑɤ.∥

çhatd̩ɪɤd̩ɪçə'ʃɪçtə ççə'\_falɤ | ç\_vɔlɪvɪɤ sɪ'\_vi:ɪd̩ɤ'ho:olɤ.∥∥∥

### Neutral Swiss pronunciation

5.5.6. [ʔaənʃ ʔtʁɪtɪnsɪx 'nɔɤtɪvɪnt un'sɔnə | vɤɤfəɤnɪɤ'ɔb̩æd̩ɪ'vool d̩əɤ'ʃtɤɤkxəɤə-  
vɤeɤə | 'alsɤɤɤ'vandəɤəɤ ʔd̩eɤɤinaənɪ'vɑɤmm̩ \_mantl̩ ɤə'hɪltvɑɑɤ ʔə'sveeçəçs d̩l-  
'heɤɤkxɑɑm.∥ sɪ'vʏɤd̩ɤ'ænɪkx | d̩as'd̩eɤɤjeenɪçə ʔfʏɤd̩ɤ'ʃtɤɤkxəɤɤ 'çeltɪɤsɔltə | d̩eɤ-  
d̩ɤ'vandəɤəɤ 'tʂβiŋɪʃvʏɤdə ʔzəənɪ\_mantl̩ \_aptsəneemm̩.∥

դճոսյտվիմփ ʔbliis: mit'al'əɤ \_maxt.∥ ab̩əɤje\_meeɤ eɤ'bliis: | d̩estofestəɤ \_hɪl-  
təzɪx d̩ə'vandəɤəɤ ʔɪn'səənɪ\_mantl̩ 'aən.∥ 'entlɪx \_çg̩aap d̩ə'nɔɤtɪvɪn d̩ɤ'\_kxampf  
'aof.∥ 'nun: əɤ'vɤɤmtə d̩ɪ'zɔnə d̩ɪ'lʏft | mitɪɤɤɤ'fɤsɔntlɪxɤ ʔtɤɑ'alɤ.∥ un'ʃoon 'naax-  
veenɪçɤ 'aɔçɤɤ'blɪkx'kxɤ | ʔ\_tsookx. d̩ə'vandəɤəɤ ʔsəənɪ\_mantl̩ 'aɔs.∥ 'd̩ɑɑ: 'mʏstə-  
d̩ə'nɔɤtɪvɪn 'tsu:u:geebɤ: | d̩asd̩ɪ'zɔnə | ʔfɔnɪɤ'ɔb̩æd̩ɤ | d̩ə'ʃtɤɤkxəɤvɑɑɤ.∥

çhatd̩ɪɤd̩ɪçə'ʃɪçtə ççə'fallɤ | ç\_vɔlɪvɪɤ sɪ'\_vi:ɪd̩ə'ho:olɤ.∥∥∥

### Neutral South Tyrolese pronunciation

5.5.7. [ˈaənʃ · ʃtʁɪtʃnɪç ˈnɔʁtvɪnt · unˈsɔnə | ˌvɛʁfəniŋˈbʰædŋvoːl dʁʰʃtɛʁkxɛʁvɛ-  
vɛ. | ˌalsəʁmˈvɑndʰɛʁ · ˌdɛʁɪnəʁnɪˈvɑʁmm̩ ˈmantl̩ ɡʰəˈhʏltvɑdʁ · təsˈvɛ:ɡʰəs · tɐˈhɛ:ʁ-  
kxɑɑm. || siˌvʏʁdŋˈaɛnikç | tastɛ:ʁjɛˈniɡʰə · ˌfy(ʁ)dŋʃtɛʁkxɛʁh̩ ˈɡɛltŋsɔltə · ˌdɛʁdŋˈvɑn-  
dʰɛʁ ˈtsʏiŋʃvʏʁdʰə · sɑɛnɪˈmantl̩ ˈaptsənɛˈmm̩. ||

tʁˈnɔʁtvɪmp ˈplɪs: mitˈalʁ · ˈmaxt. || ˌabʁjɛˈmɛʁ ɛʁˈblɪsː | ˌtɛstɔˈfɛstʁ · ˈhʏltɛsɪç dʁ-  
ˈvɑndʰɛʁ · ʎɪnsɑɛnɪˈmantl̩ ˈaɛn. || ˈɛntlɪç · ˈkxɑɑp tʁˈnɔʁtvɪn · tʰkxɑmpf ˈaɔf. || ˈnu:n:  
ʁˈvɛʁm̩tə dɪˈsɔnə · dɪˈlʏft | mitɪʁm̩ˈfʰɔʏntlɪç · ʃtʰɑˈɑlŋ. || unˈʃɔ:n · ˈnɑxˈvɛ:nɪɡʰə ˈaɔ-  
ɡʰŋb̩lɪk̩h̩ · ʎˈtso:kx. · tʁˈvɑndʰɛʁ · ʎsɑɛnɪˈmantl̩ ˈaɔs. || ˈtɑː · ˌmʏstədʰʁˈnɔʁtvɪn · ˈtsu:ɡʰe-  
b̩m̩: ˌdɑstɪˈsɔnə | ˌfɔniŋˈbʰædŋ · tʁʰʃtɛʁkxɛʁvɑdʁ. ||

çhat, tɪʁdɪɡʰəʃɪçtə · çɡʰəˈfalŋː | çˈvɔlŋvɪʁ siˈvi:dʁhɔˈlŋː ||]

### English pronunciation of German

5.5.8. [ˈaɛnsʃ · ˌstɹɪtʃənʒɪʃ ˈnɔːdʒvɪnd · ɔndʒɔnə | ˌvɛːz fɔn,ɪnəmbʰædŋvoːl dʰɛz-  
ˈʃtɛzkwɪʁvɛz. | ˌɑːtsəʁmˈvɑːndʰɛʁ · ˌdʰɛzɪnəʁnɪˈvɑːməm ˈmɛnʃt̩ ɡwɪˈhɜːtʃvɑː · dʰəs-  
ˈvɛɪɡwɪs · dʰəˈhɛːz, kxɑɑm. || zɪ, vɔədʰənˈaɛnɪʃ | dʰɛsˌdʰɛːzjɛɪnɪɡwɪ · ˌfɜːdʰən ˌʃtɛzkwɪʁh̩ ˈɡɛtʃŋ-  
zɔtʃɛ · ˌdʰɛzɔŋˈvɑːndʰɛʁ ˈhʌsvɪŋwɪ, vɜːdʰə · zɑɛnəm ˌmɛnʃt̩ ˈɛb̩tsɪ, nɛɪmən. ||

dʰɛz ˌnɔːdʒvɪmb ˈblɪs: mɪˈɛlɛ · ˈmɑːxt. || ˌɑːbʰɛʁ ˌmɛːzɪ ɛzˈblɪs: | ˌdʰɛstʰɔˈfɛstʰə ˌhɜːtʃɪʒɪʃ  
dʰɛzˈvɑːndʰɛʁ · ʎɪnzɑɛnəmˈmɛnʃt̩ ˈaːn. || ˈɛndlɪʃ · ˈɡɑːb dʰɛzˈnɔːdʒvɪn(d) · dʰwɪˌkxɑɑmpf  
ˈaɔf. || ˈnɪːun: ɛzˈvɛzɪmʃə dʰɪˈzɔnə · dʰɪˌlɔft | mɪˌtʃɛtʃɔɛnʃlɪʃŋ ˈstɹɑːlən. || ɔnˈʃɜːɔn · ˈnɑːx-  
ˌvɛɪnɪɡwɪn ˈaɔɡwɪm, blɪkɪn · ʎˈtʃhɜːk. · dʰɛzˈvɑːndʰɛʁ · ʎzɑɛnəm ˌmɛnʃt̩ ˈaɔs. || ˈdɑː:  
ˌmɔʃtə dʰɛzˈnɔːdʒvɪnd · ˈtsɪu, ɡɛɪbən: ˌdʰɛsdʰɪˈzɔnə | ˌfɔnɪnəmbʰædŋ · dʰɛzˈʃtɛzkwɪʁ-  
vɑː. ||

çhɛtʃdɪədɪɡwɪʃɪʃwɪ · çɡwɪˈɛlənː | çˌvɔlɛŋvɪə zɪˈvi:dʰɛhɜːlənː ||]