

Austrian listeners' perceptions of style-shifting: an experimental approach and socio-phonetic analysis

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The paper we present today is located within so-called 'speaker-design' approaches to sociolinguistic variation, where the focus is on the pro-active *agency* of speakers, or, the ways in which speakers strategically deploy the different linguistic variables and varieties available to them, to achieve certain communicative outcomes. Such outcomes include the projection of personas and identities, structuring discourse, or creating conversational participant alignments and meta-messages. Examples of research on speaker agency include Eckert's work on 'jock' and 'burnout' identities in a Detroit area high school, Schilling-Estes's work on the conversational negotiation of friendship and ethnic identities in a Lumbee Native American community, and Coupland's study of the persona management of a Welsh pantomime performer.

The mechanism involved in such agentive language use is well captured in John Gumperz' notion of contextualization.

Gumperz points out that language varieties serve as so-called contextualization cues. Using a particular language variety in interaction indexes the social meanings attaching to this language variety as relevant for the interpretation of the utterance. These social meanings are for example language attitudes and stereotypes.

In turn, the listener will then interpret the utterance in the light of the attitudes and stereotypes invoked, to the point that they are available to him or her as commonly shared cultural knowledge.

This dialogic relationship between the use of language varieties and styles in conversation, and the social meanings attaching to the language varieties, is one of the central premises of the speaker design approach to sociolinguistic variation. Now, arguably, this dialogic relationship hinges upon listeners' ability to actually *perceive* and *distinguish* the linguistic varieties deployed, in order to contextualize an utterance accordingly. But while we can perhaps assume that the location and extent of switches between different *languages*, in what is usually called code-switching, are most of the time quite prominent and can be established without much dispute,

shifts between closely-related varieties, in what is usually called *style-shifting*, may not be very clear-cut at all.

This is the case with Austrian German, for example, which is the concern of our paper today. It is commonly assumed that every native speaker of Austrian German has a dual competence in two linguistic systems – standard Austrian German, or 'Hochsprache', and some form of Austrian dialect, mainly from the Bavarian-Austrian dialect region. This dual competence means that a typical Austrian native speaker has the option of speaking in standard or in dialect, at any given time. And as Barbara's own research has shown, speakers do deploy the two varieties strategically, for example in political discussions, to achieve certain rhetorical effects, such as irony, contempt, or an antagonistic stance. This is based on the fact that there are quite distinct stereotypes attaching to Austrian standard and dialect use, as attested in a number of language attitude studies. Where standard is the language of education, sophistication, and the public domain, dialect is often reported to sound uneducated, coarse, aggressive, and unintelligent, though it is also considered more likeable, and the language of the private domain.

Now, an analysis trying to investigate the strategic use of these two varieties in interaction inevitably runs into the problem that there are many cases where the phonetic difference between Austrian standard and dialectal forms is very small, or where there are gradient forms in-between, or where there are phonological processes that occur in both the standard and dialect varieties. And in all of these cases, it becomes very difficult for an analyst to provide convincing *descriptive* evidence that a noticeable *shift* between the two varieties has occurred, and in particular, where the shift begins and ends.

So the study presented to you today grows out of a perception experiment that Barbara designed as a methodological tool to investigate exactly when, where, and why listeners actually *hear* shifts between different but closely related linguistic varieties in ongoing talk. And in fact, it seems legitimate to argue that such an investigation should be a prerequisite for *any* discourse analysis of style-shifting in interaction.

For the experiment, 42 native-speakers of Austrian German were asked to listen to an audio tape containing 12 passages of naturally occurring talk of between 35 and 100 seconds in length, and they were asked to indicate any sequence where, according to their own perception, Austrian

'dialect' occurred, as opposed to standard. Each speech sample contained at least one instance of a shift from standard into dialect, according to Barbara's own native speaker judgment. To record the responses during the task, the informants were given transcripts of all the excerpts written out entirely in standard German so as not to anticipate any judgment, and they used colored markers to underline any text passage where they heard dialect being used. The experiment is an adaptation of Coupland (1980), who appears to have been the first and the only one before to carry out this type of perception test on style-shifting in natural conversation.

The samples of talk used in the experiment were all taken from different episodes of a political discussion show broadcast regularly on Austrian national TV. The general speech norm on Austrian national TV and also on this show is standard Austrian German, and the use of dialect is dispreferred. But even though speakers use the standard most of the time, one frequently encounters instances where a speaker will shift into dialect for short stretches of talk, arguably for rhetorical purposes.

After collecting the informants' responses, it was tabulated how many times each word in the transcript had been underlined.

We will now show you a sample visualization of some of the results. In the first data passage we're showing you, journalist and political activist AT is recounting an incident where an Austrian alternative theater group was arrested in the course of the 2001 G8 summit in Italy. AT is claiming is that the Austrian Foreign Minister at the time made a big mistake because she did not immediately intervene with Italian authorities on behalf of the theater group.

So here's a translation of the transcript used in the experiment – the original German version is on your handout under 'Example 1':

AT: She put her foot in her mouth big time [...] because this is about nothing more or less than that a few leftist theater people were arrested in the course of this event [the G8 summit], Austrian citizens, men and women, and that Madam Foreign Minister didn't have anything better to do than to say, well, and this was in public, [...] the text is confirmed, well, those people are no good, against them there are charges recorded in the Ministry of the Interior anyway, and so they deserve what they are getting. That was her reaction to protect Austrian citizens who were arrested abroad [...]

Now let's see which passages the informants in the perception experiment underlined as dialectal. This slide shows just one brief section of the text, where AT puts the supposed quote into the

mouth of the Foreign Minister. The highlighting shows those words that were underlined by at least 25% of the study informants:

2%	2%	2%		76%	69%	88%	88%	90%
der	Text	steht	fest,	najo,	des	san	kane	Guaten,
<i>the</i>	<i>text</i>	<i>stands</i>	<i>fixed,</i>	<i>well,</i>	<i>those</i>	<i>are</i>	<i>no</i>	<i>good people,</i>

26%	29%	43%	67%	33%	21%	14%	7%	7%
gegen	die	liegen	eh	sozusagen	Anzeigen	vor,	im	Innenministerium,
<i>against</i>	<i>them</i>	<i>exist</i>	<i>anyway</i>	<i>so to speak</i>	<i>charges</i>	<i>here,</i>	<i>in the</i>	<i>Ministry of the Interior</i>

12%	24%	36%	57%	64%	95%				
und	denen	wird	scho	recht	g'schehn.	Das	war	ihre	Reaktion...
<i>and</i>	<i>them</i>	<i>will</i>	<i>anyhow</i>	<i>right</i>	<i>be served.</i>	<i>That</i>	<i>was</i>	<i>her</i>	<i>Reaction</i>

*numbers indicate percentage of underlinings received

So what is immediately noticeable here in this passage is that the larger part of the supposed quote that AT is putting in the Minister's mouth which we can delimit by brackets for easier viewing - is perceived as highly dialectal by the informants, as indicated by the shading

Now, a next step is to identify particular dialect features involved, in order to find out what exactly the informants picked up on that sounded dialectal to them.

Thus, we find the following:

So-called dialectal input switches, or instances where you have a standard form and a corresponding Austrian dialect form, but they are only historically related and not via a synchronic phonological rule ("najo", "des", "san", "kane", "Guatn", "scho") and then we have the dialectal discourse marker "eh" and a dialectal syllable reduction in "g'schehn"

All in all, for the whole body of data collected in the perception experiment, 349 words were underlined as dialectal by at least a quarter of the informants. Now, based on past linguistic research on Austrian German, one can draw up a list of commonly known dialect features, such as the ones shown here, and as it turns out, such a list can account for almost 80% of these underlined words. Put differently, in 80% of the cases where the informants perceived a switch we have a good idea on what basis they perceived it. And by comparison, those words in the transcripts that remained completely free from underlining by any of the informants contain hardly any such features.

However, this leaves roughly 20% of the data, or 74 out of 349 highly underlined words, unaccounted for. So the question we asked ourselves next was, why would the informants underline those 74 'ambiguous' words as dialectal, if we can't find any known feature of Austrian dialect in them?

One of the first things that may come to mind here is that the answer could be found on the level of prosody and intonation. After all, past research has shown that languages and dialects may differ with respect to stress, rhythm, or pitch contour, and how pragmatic information is conveyed via prosody.

Gumperz' cross-cultural 'gravy' episode comes to mind. But intonation and pitch contour can also differ across *dialects*. For example, in 'Urban North British' and Belfast English a rising intonation at the end of an utterance is an 'ordinary statement' or declarative. However, in American English a rising intonation would signal a question, a request for information or that more information is to follow (i.e. a continuation rise). Thus, two varieties may show a distinct prosody, and by extension, differences in prosody may be a function of shifting between two varieties.

So our next research question is: did the informants in our perception experiment use prosody as a cue to perceiving the 74 ambiguous words as dialectal? And in order to answer this, we need to ask more fundamentally, what, if any, *are* the prosodic differences between Austrian standard and dialect? So this is where Zhaleh comes in, as phonetician and phonologist, to investigate in detail the role intonation might play in the perception experiment's results.

The only prior studies we could find on prosody and intonation in Austrian German are by Moosmüller. However, she looks at the differences between standard and dialect in *Viennese* Austrian. Her results indicate that a rising intonation in the second syllable of minimal-pair tokens is likely to be identified as dialectal by native speakers, particularly in connection with elongated vowels.

Moosmüller furthermore finds a more monotonous intonation contour as typical for Viennese dialect. However, it is unclear from her research whether the sentences she compared really carry the same illocutionary force at all. And also, as we've said before, her research is limited to a local Viennese dialect, which is very distinct from the Middle Bavarian-Austrian dialects spoken in the rest of Austria.

Therefore, we needed to conduct our own study on whether there are any major intonational differences between Austrian standard and dialect.

We could not analyze any recordings from the discussion show for this purpose, since these don't include any clear stretches of talk in purely dialect or standard that match exactly in terms of content and illocutionary force. So what we did instead was to take four recordings made for a separate matched-guise study, where two female speakers read and performed the exact same text once in dialect and once in standard.

You have on your handout the text written in both standard and dialect, preceded by a close English translation.

Zhaleh's analysis of the prosodic features of these performances is based on ToBI Annotation methods. She uses the autosegmental-metrical method which uses a series of level low and high tones to analyze the pitch contours on prominent syllables and at the edges of prosodic domains. She analyzed all stressed syllables, called pitch accents, and the right edge boundaries of phrases, called edge tones. She only looked at phrases with a break index of strength 3 or 4, in ToBI

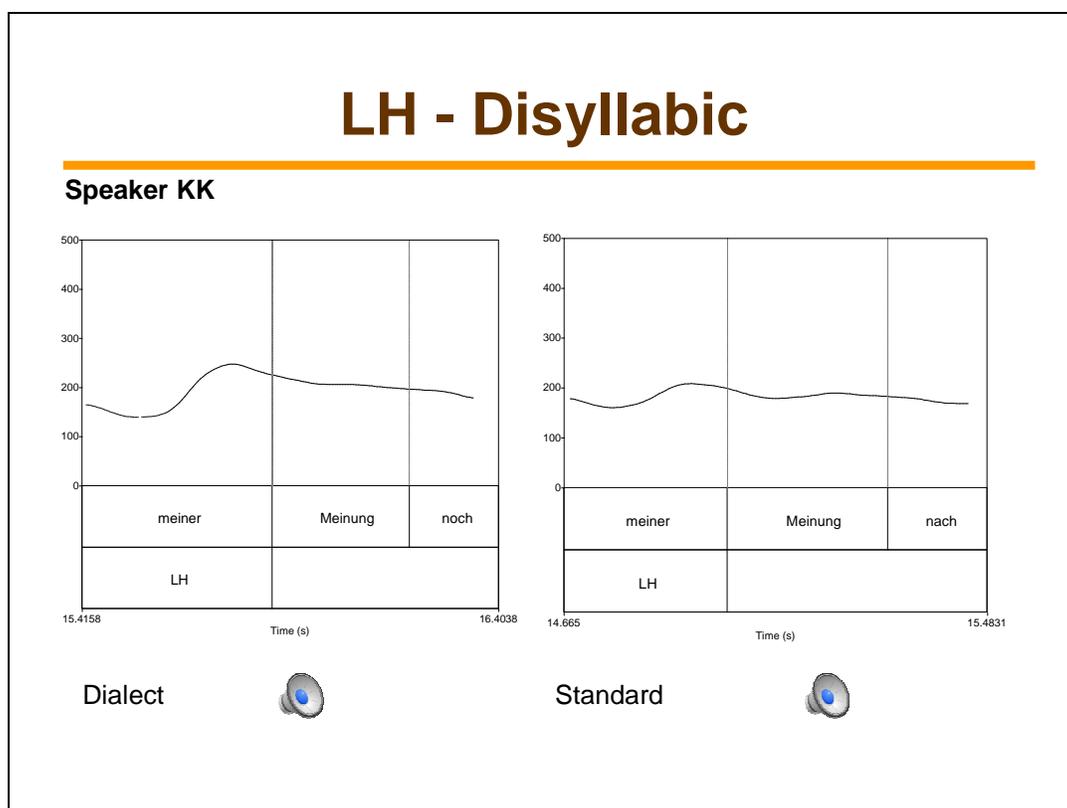
annotation terminology. A break index of strength 3 would have a small pause between it and the following phrase, roughly indicating the equivalent of a written comma. And a break index of strength 4 would have a large pause before the following phrase, roughly indicating a written period.

We use the notation L for a low tone, an H for a high tone, an LH for a rising tone, an HL for falling, and an LHL for a rise and fall.

Frequency or (F0) was analyzed using the auto-correlation pitch tracking method in PRAAT.

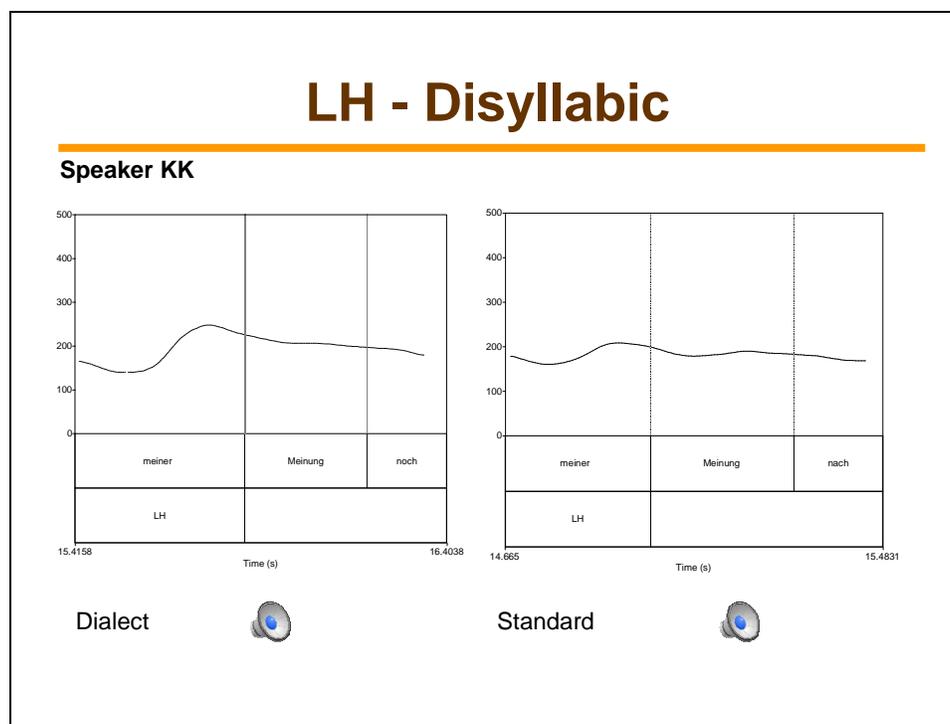
First, Zhaleh annotated the recordings using the ToBI notation. Then she reviewed and discussed her results with Barbara as a native speaker of Austrian German.

We present main findings, namely that the Standard and Dialect varieties are actually *very* similar in terms of intonation and phrasing. We'll only have time to look closely at one of the two speakers analyzed, Speaker KK. But note that the second speaker shows very similar results.



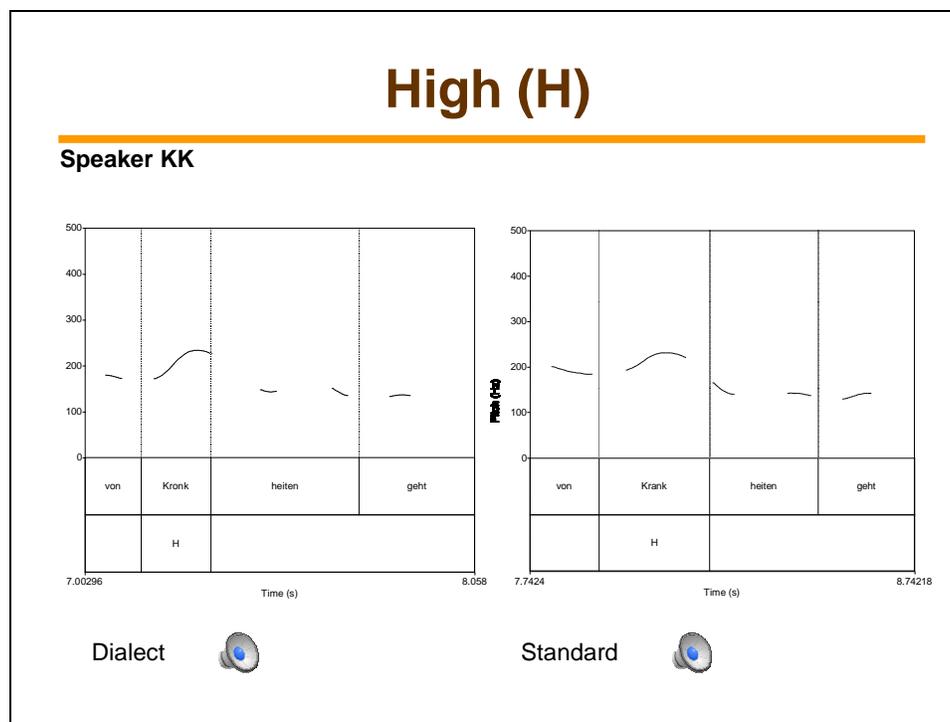
Here, we present the actual pitch contours used by both the dialect and standard versions to show you that *both* make use of the same contours and place these contours on the *same* word within a prosodic phrase. Here we see a rise on 'land' in both the dialect, on the left, and in the standard on the right. There is an initial fall to the low tone, and then an upwards scoop up to the high tone.

Although the standard starts out higher, the pitch accents and final edge tone are virtually indistinguishable in terms of contour, it is only the input-switch a/o in aber~ober and in Land~Lond, that identifies the left example as dialect. Both the dialect and standard variety use this pitch contour as the most neutral type of pitch accent in terms of pragmatic content.

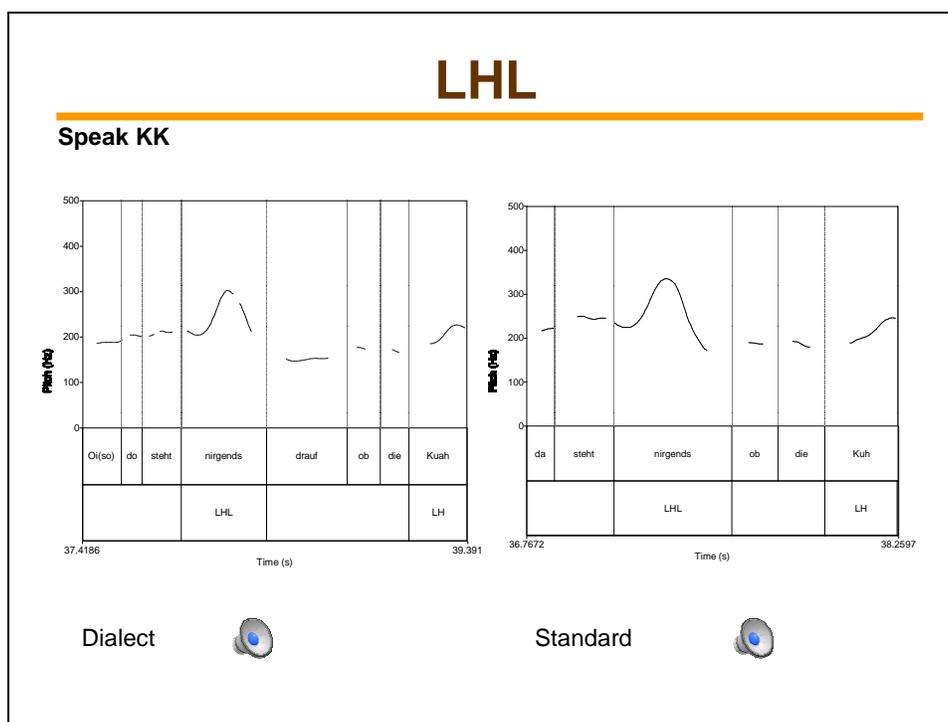


Here, we see the same rise, but in a disyllabic word. Again, we see an initial fall to the low tone, and a rise continuing through to the second syllable. The L and the H spread over the two syllables, the first of which is stressed. This is a particularly good example since almost all of the

segments are sonorants. This phrase “meiner Meinung nach” occurs twice in the text, however, this are both taken from the first occurrence.



In this next slide, we see another example where the same contour occurs on the same syllable in both dialect and standard. We analyze this contour as a level high tone on ‘krank’. Although there is a slight rise at the beginning of the syllable (particularly in the dialect), there isn’t the initial fall and upward curving of the contour seen in the rises of the previous slide. We will play these files for you as well, and you can hear that there is a ‘jump’ up to a high pitch.



And finally, we have a rise-fall on the word *nirgends*. There is the scoop shape which rises to a high, similar to that seen in the rising contour (or LH). However, there is a steep drop down to a low tone right after the peak is reached. The previous rises either stayed high or there was a declination (a slow drop in pitch) over the course of the rest of the phrase.

Again, you can see the consistency in the two varieties, as the two varieties chose the same tonal contour for the pitch accent, *nirgends*, and for the boundary tone on *kuh*.

Falls (an HL) and lows also occurred a handful of times in both the standard and dialect. We'll be happy to demonstrate them in the Q & A period, but for the sake of time we'll move forward.

Thus to conclude, our results show that, all five pitch contours, high, low, rising, falling and a rise-fall are used by both the standard and dialect variety, and these contours are placed on the exact same word within a prosodic domain. (As you saw in the last slide.)

The pitch contours at the end (or the right edge) of phrases, are similar to the pitch accent contours. The boundary tones used are rises to convey continuation of speech, as you saw in the previous slide. A low tone to signal the end of a sentence or to convey finality. And a quick fall

(HL), to convey an indignant attitude. Both dialects and both speakers used these boundary tones with the same pragmatic intent.

Consistency in placement of tones across dialects

- Pitch Accents

	Total Stressed syllables	Same contour + word
Speaker KK	Std. N = 29 Dlct. N = 34	N = 14 (61%)
Speaker SP	Std. N = 67 Dlct N = 69	N = 49 (84%)

- Boundary Tones

[Aber in Bezug auf die Landwirtschaft sind die meisten Österreicher doch noch um Einiges skeptischer]

Speaker KK: 12/14 phrases ended with same contour

Speaker SP: 23/26 phrases ended with the same contour

Now that we have demonstrated that both standard and dialect use the same type of tonal contours and, recall, on the same stressed syllable, we would like to give a short summary to demonstrate the consistency in the placement of these tones between the standard and the dialect variety. Please remember that any given reading will have variations as to the number of syllables and exactly which syllables are stressed *regardless* of which variety is used, so we do not expect there to be 100% agreement between the two readings. Despite this, we see here that there actually *is* a high degree of consistency as to the pitch contour and placement. For Speaker KK who stressed a total of 29 stressed syllables in the standard and 34 in the dialect, 14 of them used the same tonal contour on the exact same word within the phrase.

The data is even more striking in the second speaker SP who stressed more syllables altogether, almost 70 syllables, and a full 49 of them used the same tonal contour on the same word.

Thus, the data suggests that the standard and dialect are very similar in terms of the type of pitch accents used as well as its placement. Differences between the two varieties seem to be differences in reading and interpretation of the text, rather than qualitative differences.

Turning to the boundary tones, we compared the tonal contours at the ends of phrases in standard and dialect. Only phrases that ended in the same position in both the standard and the dialect were compared, irrespective of the strength of the boundary. For instance, in the sentence on the screen: both the dialect and the standard ended the phrase after *skeptischer*, but differed in boundary strength. Nevertheless, both ended with a low tone.

For Speaker KK, of 14 phrases, 12 had the same tonal pattern. Similar results appeared for Speaker SP – A total of 26 phrases, 23 phrases had the same pitch contour at the end of the phrase.

Thus, we conclude that there is a high degree of consistency between standard and dialect. The same tonal contours both pitch accents and boundary tones are placed in the same position.

Phrasing		
Speaker KK -		
Phrases:	Break 3	Break 4
Standard	7	12
Dialect	6	9
• Speaker SP -		
	Break 3	Break 4
Standard	20	15
Dialect	12	14

In terms of the overall phrasing. In tabulating the break indices, we notice that in the standard there are more breaks in the speech, both in break-3 phrases and break-4 phrases.

Speaker KK, in the standard reading has 7 and 12, break-3 and break-4 phrases, respectively. In the dialect, she has only 6 and 9 break-3 phrases and break-4 phrases, respectively. Speaker SP tended to parse the text into more phrases than KK (which would explain why she had so many more stressed syllables, altogether) – in the standard reading she has 20 and 15 break-3 and 4 phrases, respectively, and only 12 and 14, break-3 and -4 phrases.

Thus, the trend seems to suggest that the standard variety tends towards parsing more phrases in the same text. However, further readings from the same speakers and testing other speakers would be needed to confirm this trend. The additional parsing could simply be a difference in reading rather than variety.

To conclude, we have demonstrated that both the standard and dialect use identical pitch accents, and boundary tones. These boundary tones have the same pragmatic meaning, and finally, the two varieties are consistent in terms of the choice of pitch accent or boundary tones and its placement.

Thus, we conclude that Middle Bavarian Austrian does not demonstrate any intonational differences between the Standard and Dialect. Of course, this is a limited study of only two speakers with only one reading for each variety. We would hope that more data and further analysis would support our findings here. Other prosodic differences could play a role such as rhythm and vowel length as Moosmüller found for Viennese Austrian, however, from our finding, we assume that listeners are *not* using intonation and phrasing to perceive shifts from standard into dialect.

In that sense, we have effectively eliminated one possible explanation for why the perception experiment informants would underline words as dialectal that do not show any previously attested features of Austrian dialect.

We hope to have shown today that a perception experiment such as the one we have presented is a very useful tool in the study of style-shifting in conversation, which is bound to raise very interesting questions regarding why and where listeners actually hear such shifts, and what that means for utterance contextualization. Our phonetic analysis of intonation brings us one step closer to Barbara's main explanation for style-shifting in Austrian, that is, that style-shifting coincides with some sort of conversational move, to speak in Goffman's terms. In the example we show you here,

2%	2%	2%		76%	69%	88%	88%	90%
der	Text	steht	fest,	najo,	des	san	kane	Guaten,
<i>the</i>	<i>text</i>	<i>stands</i>	<i>fixed,</i>	<i>well,</i>	<i>those</i>	<i>are</i>	<i>no</i>	<i>good people,</i>

26%	29%	43%	67%	33%	21%	14%	7%	7%
gegen	die	liegen	eh	sozusagen	Anzeigen	vor,	im	Innenministerium,
<i>against</i>	<i>them</i>	<i>exist</i>	<i>anyway</i>	<i>so to speak</i>	<i>charges</i>	<i>here,</i>	<i>in the</i>	<i>Ministry of the Interior</i>

12%	24%	36%	57%	64%	95%				
und	denen	wird	scho	recht	g'schehn.	Das	war	ihre	Reaktion...
<i>and</i>	<i>them</i>	<i>will</i>	<i>anyhow</i>	<i>ight</i>	<i>be served.</i>	<i>That</i>	<i>was</i>	<i>her</i>	<i>Reaction</i>

*numbers indicate percentage of underlinings received

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Speaker AT is clearly performing an alleged direct 'quote' of the Foreign Minister in the dialect, as perceived by the informants, which actually places her in a very bad light. This is an antagonistic conversational move, and these are fairly common in the political discussion show, where a lot of competitiveness and argumentation is involved. So Barbara is now actually concentrating on places in the conversation where such moves coincide with switches into dialect. This analysis is still under way. But for now, we hope to also have demonstrated that a combination of phonetic analysis of intonation and sociolinguistic analysis should be considered in any discourse analysis of style-shifting, and that it opens up some very fruitful avenues for collaboration to further illuminate speaker-design in language use.

THANK YOU!