EXPLORING LANGUAGE VARIATION ON THE INTERNET: REGIONAL SPEECH IN A CHAT COMMUNITY

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1. Introduction

This paper suggests a sociolinguistic approach to computer mediated communication (CMC), drawing on a case study of language variation in e-chat. While most linguistic research on CMC has focused on media or genre related language variation, we argue that more attention should be paid to user related language variation. We will outline three components of a sociolinguistic perspective on CMC, i.e. a focus on social diversity of online language use, the notion of online community as a structural unit of analysis, and an integration of variationist and interactional sociolinguistic methods. The case study to be reported is concerned with the representation of regional speech in #mannheim, a German city-chat. Based on log files collected through participant observation, we discuss the range of regional variation represented in online conversations from a particular region, the frequency of selected regional features as well as the conversational functions of regional speech chat interactions.

2. A sociolinguistic approach to computer-mediated communication

Though CMC has been a popular topic in empirical and applied linguistics in the last years (cf. Crystal 2001, Danet 2001, Herring 1996), relatively few studies have examined it from a sociolinguistic point of view. Most linguistic research on CMC has focused on media or genre related determinants of online language use. For instance, emoticons and acronyms such as *lol* ('laughing out loud') are explained as creative reactions to the reduction of communicative cues in online interaction. Similarly, the amount of spoken features in written online texts is related to the difference between asynchronous and synchronous online communication, with the latter leading in the use of spoken features. While the research so far has made significant contributions in the description of online language use, it tends to downplay its social diversity and the importance of user related features. A prime example of this tendency is David Crystal's *Language and the Internet* (2001). It introduces the concept of "netspeak", which is defined as "a type of language displaying features that are unique to the Internet, (…) arising out of its character as a medium which is electronic, global, and interactive" (2001: 18). Crystal conceives of "netspeak" as a language variety, which is subdivided in the "language of e-mails" and the "language of chatgroups". However, it is empirically questionable whether anything like a "language of e-mails" exists, simply because the diversity of users, settings and communicative purposes of e-mail outweigh any common linguistic features in e-mails. Similarly, while there are resources characteristic for e-chat, such as emoticons and acronyms for actions or states, it is the particular type of chat and the social profile of its users that are decisive in whether these resources are used, and to what extend. Crystal notes the "variety of group practices" (155) in CMC, but does not account for it systematically. However, there is a growing body of evidence for sociolinguistic variation as well as issues of multilingualism and language contact in CMC, which suggests that the time has come to address the sociolinguistics of computer-mediated communication in a more systematic way (cf. Androutsopoulos & Hinnenkamp 2001, Androutsopoulos & Ziegler 2003, Christen, Tophinke & Ziegler in press, Georgakopoulou 1997, Paolillo 2001, Ronkin & Karn 2000, Sebba 2003, Warschauer 2002, Witmer & Katzman 1997).

A sociolinguistic perspective on CMC entails, in our view, three important elements: first, a shift of focus from medium or genre related to user related language patterns. Instead of studying typical patterns of e-chat and other digital genres, attention moves to the varying instantiations of these genres in their social contexts of use. Moreover, we suggest that the social context of CMC is best captured, from a sociolinguistic point of view, with the notion of online or virtual community. As a common denominator of various definitions proposed so far, an online community is a network of regular online interaction, which is constituted on a chat channel or a bulletin board (for further discussion, cf. Androutsopoulos/Ziegler 2003, Paolillo 2001). Its participants develop social relationships and a set of shared interactional and linguistic norms. As Paolillo (2001) has noted, the notion of virtual community provides a link between linguistic research of CMC and the sociolinguistic tradition, in which speech community has always been a crucial notion. We assume that on the Internet, just as in real life, the social meaning of language variation depends on the community's shared norms and on-going negotiations. The virtual community therefore provides the frame for the meaning of vernacular use in CMC. Finally, we suggest that the study of language variation in online communities can benefit from an integration of quantitative (variationist) and qualitative (interactional) methods in sociolinguistics. While this combination is suggested in recent studies (e.g. Bell 1999), it has not been put in use in CMC research so far. A quantitative approach, as proposed by Paolillo (2001), focuses on relations of "micro-linguistic variation to the social mechanisms by which virtual communities are structured and maintained" (Paolillo 2001: 181). An interactional approach, as proposed by Georgakopoulou (1997), examines code- and style-shiftings as contextualization cues in online interaction. The quantitative approach reveals correlations of linguistic variables with social roles particular to the community, e.g. channel operators as opposed to simple users. The qualitative approach reveals how participants in CMC draw on various linguistic resources in shaping their online personae and in accomplishing various interactional tasks. Our discussion is aimed at demonstrating how these approaches complement each other in reconstructing the role of regional speech as a communicative resource of a particular e-chat community.

3. E-Chat: Profile of a communicative genre

E-chat is a particularly suited virtual environment from a variation-analytic point of view. It is widely considered as the digital genre that is closest to conceptually spoken language, containing a higher amount of colloquial and vernacular features than other digital genres (Crystal 2001, Danet 2001, Paolillo 2001, Schmidt 2000). This is due to two contextual factors: first, e-chat is a synchronous, i.e. real-time, interaction mode. The typed contributions of individual participants appear almost instantly on the screen space that constitutes the virtual environment for dyadic or multi party conversations. While e-chat has important structural differences from natural conversation, e.g. with regard to the turn-taking system, it nevertheless includes familiar conversational patterns such as adjacency pairs, response cries, patterns of participant alignment, the use of discourse particles for the organisation of talk etc. E-chats are typical arenas for the emergence of online communities, and informal e-chat interaction frequently rotates around flirt, small talk, and playful communication (cf. Crystal 2001, Danet 2001, Paolillo 2001). These situational factors favour the extensive use of vernacular speech in e-chat conversations. In German, as well as in other languages, typical vernacular features include:

- the graphic representation of colloquial standard pronunciation (allegro forms) or non-standard accents;

- typical syntactic patterns of spoken language, e.g., for German, the deletion of clause-initial subject pronouns, the verb-second order in dependent clauses with the connector *weil* ('because'), left and right side dislocations, and elliptical constructions of various kinds;
- discourse markers, colloquial and slang vocabulary.

Consider how several features of vernacular speech co-occur in a randomly selected piece of e-chat from the #mannheim channel. Extract (1), in which participants discuss a television talk show, abounds with representations of allegro forms, including clitizations as in *wien* ('wie ein'), reductions as in *nem* ('einem'), *hätt* ('hätte'), *hör* ('höre'), and assimilations as in *wasn* ('was ist denn'). As to syntax, line (2) displays the omission of clause-initial subject pronoun *ich* ('I'). Regional features include *ned*, a variant of the negative particle (Standard German 'nicht') and *hea*, an expressive interjection, while the lexical item *assi*, a clipping of *Asozial* ('asocial'), is slang. The extract also includes two Internet specific expressions of laughter, i.e. the English acronym *lol* ('laughing out loud') and a Germanized variant, *atomlol*, with the intensifier *atom* ('atomic').

Example 1 (original spelling is kept throughout the examples):

```
1.   <A> wasn überhaupt das thema bei sat1?
2.   <B> weiss ned assi einfach
3.   <A> lol* meine EX hat mich mit nem anderen BETROGEN ........
        wir waren ZWEI WOCHEN zusammen *atomlol*
4.   <A> den hätt ich auch betrogen, der sieht aus wien hamster
5.   <C> hea...da wird mir kalt wenn ich sowas hör
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Gloss:
1.   <A> what's the topic on sat1
2.   <B> no idea just crap
3.   <A> lol* my EX has BETRAYED me with another guy ........
        we were together for TWO WEEKS *atomlol*
4.   <A> I'd betray him too, he looks like a hamster
5.   <C> ouch... things like that make me shiver
```

As this extract demonstrates, regional speech is not the only type of language variation that occurs in German e-chat interactions. However, the importance of geographic variation in CMC is supported by research from other areas of Germany as well as from Switzerland (cf. Androutsopoulos & Ziegler 2003, Aschwanden 2001, Christen, Tophinke & Ziegler in press). Methodologically, this extract suggests that spelling variation representing phonetic-phonological features is the most frequent set of colloquial markers, and therefore the best candidate for quantification.

4. Data and methodology

The data discussed in this paper are collected from #mannheim, a city-chat operating on the Internet Relay Chat (IRC), a world-wide server network for chat communication. Both the choice of IRC and the choice of a city-chat are methodologically important. IRC is the original chat network, initiated in 1989, and operating independently of the World-Wide-Web. IRC is generally considered to require more expertise than Web chats, and has a more 'insider' flair (Schmidt 2000). We therefore expect IRC to provide a better platform for non-standard language than Web chats. Out of the vast number of virtual conversation rooms available on IRC, city-chats are a distinct type of channel, in that they are supposed to represent the city indicated by their name, as in #berlin, #hamburg or #mannheim. While there is no guarantee that all participants are also inhabitants of the city in question, there is a concentration of users from the respective agglomeration and its

surroundings. In the case of #mannheim, several channel operators and active members identify themselves as Mannheim inhabitants. Many participants log in from net cafés located in the city, and conversations frequently refer to city related issues. The #mannheim channel was selected after preliminary observations suggesting a frequent use of regional features. Since the city dialect of Mannheim has been studied in detail, both grammatically (Bräutigam 1934) and on the level of conversational interaction (cf. Kallmeyer 1994), a solid basis is provided from which to assess the relation of online language variation to its offline model. Our data and participant observation indicates that a virtual community has been formed in #mannheim. Approximately 100 chatters visit the channel every evening, including several regular members, some of which also know each other in real life. The channel log files include sequences of mutual identification and indications of shared interactional norms. A channel homepage (www.irc-mannheim.org) provides pictures and short descriptions of regulars as well as dates of offline meetings for channel members.

The process of data collection in #mannheim is best described as online participant observation. The software used to access the channel, *mIRC* (www.mirc.co.uk), creates automatic log files of channel interactions, which means that researchers just need to log in with a nickname in order to collect data. The channel was repeatedly visited for a period of several months in 2001 and 2002. Active participation in conversations was largely avoided. However, this did not draw any attention, since many participants are idle most of the time. Since #mannheim is a public chat-channel, no permission was asked to create and analyse the log files. However, all participant nicknames have been anonymized. The data for this study comprise log files with approximately 90.000 words. In addition, a questionnaire on participation patterns and language attitudes regarding regional speech was distributed to channel members, and returned by 12 chatters.

As our discussion in section 2 indicates, analysis of data used both quantitative and qualitative methods. After establishing the occurrence of regional features in #mannheim, outlined in section 5.1, three variables were selected for quantification in the usual variationist way, i.e. counting actual over potential occurrences of the regional variants. One of these variables, the negative particle *nicht/nich/ned*, was compared to chat data from other regions of Germany, in order to assess the reflection of the North-South gradation of German dialects in the chats. Quantitative results are summarised in section 5.2. At the same time, we examined the communicative functions of regional features in terms of contextualization cues. The patterns detected in the chat data were compared to descriptions of the pragmatics of dialect shifting in German (Schwitalla 1997). The findings of the qualitative part of the study are outlined in section 5.3.

5. Results

Given the fact that chat communication is generally rich in features of spoken language, and that city-chats primarily serve local communities, we expect a close relationship between the use of regional features in a city-chat channel and the dialect forms of the city or region in question. In other words, when city-chat communities use regional features, they are most likely to adopt forms mirroring the areal variation in the specific urban or regional dialect. We also expect that the language use in chat channels located in different dialect regions will reflect more complex constellations, such as the North-South gradation of German dialects. Finally, selected extracts will provide ample evidence for the interactional relevance of regional features in e-chat.

5.1 Occurrence of regional features in #mannheim

In order to establish the amount of regional features in #mannheim, the chat data was compared to dialect descriptions of both the Mannheim city dialect and the whole Rheinish Franconian area (Zirmunskij 1962). Table 1 provides a list of five vocalic and five consonant features, examples with phonetic transcriptions for each feature, information about its occurrence and distributional restriction in the #mannheim data, and an example for the graphic representation of the feature in the log files. As the table indicates, 9 out of 10 features occur in the chat data. At first sight, then, regional variation seems to be represented to a great extend in online conversations from the same region. However, the distribution of most features in the chat data is restricted in two ways: some environments are absent, e.g. monophthongization appears only for /au/, not for /ai/. Moreover, several features occur only in particular lexical items and not in whole sets of items; for instance, the voicing of plosives is restricted to frequent items such as *bitte > bidde* 'please' and *leute > leude* 'people'. These restrictions may reflect a limitation of the data set, or processes of dialect levelling in the generation of chat users, or a combination of both. However, our findings on the frequency of individual features and their conversational functions will lead us to suggest that only a few widespread regional features are regularly used in the channel, while the majority of features appear far less frequently and, when they do, with a contextualizing function.

Table 1. Overview of regional features in #mannheim

	feature	example	occ.	restrictions	example
	vocalism				
1	monophthongization of /ai, au/	[kla:d] "Kleid" [ra:x] "Rauch"	v	- only /au/	*aach* 'auch', *uff* 'auf'
2	diphthongization of /e:, o:/	[dsein] "zehn" [houx] "hoch"	--	--	--
3	velarization of /a, a:/	[noxt] "Nacht" [mo:l] "mal"	v	- /a:/ - particle *mal*	*mo* 'mal'
4	derounding of /y, y: ø, ø:, oi/	[si:s] "süß" [be:s] "böse"	v	- / ø, y:, oi/	*bled* 'blöd', *ver* 'für', *deitsche* 'deutsche'
5	Lowering and centralization of /i, u/	[net] "nicht" [doSt] "Durst"	v	- /i/ - neg. *nicht*	*net* 'nicht'
	Consonantism				
6	spirantization of /b, g/	[e:ve] "eben" [do:x] "Tag"	v	--	*awwa* 'aber', *froche* 'fragen'
7	palatalization of /s/	[faSt] "fast"	v	--	*bisch* 'bist'
8	coronalization of /ç/	[iS] "ich"	v	- pronouns (*ich, mich, dich,* etc)	*misch* 'mich'
9	word final deletion of /t, l, n/	[biS] "bist" [he:] "hin"	v	- /t, l/	*nich* 'nicht',, *ma* 'mal',
10	voicing of /p, t, k/	[bob] "Puppe" [do:x] "Tag"	v	- frequent items: *bitte, leute, net*	*bidde* 'bitte', *ned* 'net'

5.2 Quantitative analysis of regional variation

To investigate the quantitative dimension of regional variation in #mannheim, three variables reflecting phonological and morphosyntactic processes have been selected. Two of these variables have three variants each (standard, colloquial, dialect) and one variable has two variants (standard, dialect). In particular, we analysed:

(a) the negative particle ‚nicht', with standard *nicht*, colloquial *nich* (with t-deletion) and contracted *net / ned* (with lowering of [i] and optional t-voicing) representing the dialect forms;

(b) the coronalization of the [ç] allophone with *ich* as standard form and *isch* as dialect form;

(c) the realisation of *bist du* 'are you' with *bist du* as standard form, assimilated *biste* as colloquial form and *bisch du* (including palatalization of [s]) as dialect form.

The following table presents the results, listing the variable with the lowest degree of dialect variants on top:

Table 2: Frequency of selected variables in #mannheim

	standard		colloquial		dialect		total	
	%	N	%	N	%	N	%	N
coronalization	91	601	--	--	9	56	100	657
bist du	52	24	20	9	28	13	100	46
neg. particle	18	113	30	182	52	316	100	611

The main finding is that the colloquial and regional variants are used to differing degrees. In the case of the negative particle, the non-standard forms, i.e. the colloquial and dialect variants, clearly make out the norm with a total of 82% of all instances. The contrary holds for the coronalization of the [ç] allophone, which occurs only in 9% of all variants. A more detailed examination reveals that most instances of coronalization are lexically restricted, preferably in pronouns like 'ich', 'mich', 'dich', 'sich'. In light of the fact that coronalization is a highly salient and, moreover, generally stigmatised dialect feature, this result is not surprising. Finally, the variable *bist du* displays the lowest frequency of tokens and a slight tendency to prefer the dialect variant (28%) to the colloquial one (20%). Overall, these results indicate that the variables rank differently in the linguistic repertoire and hence in the competence of the #mannheim chatters.

The next step in our analysis investigates regional variation along the North-South gradation. For that purpose we compare data of #mannheim with data of #hamburg, #bremen and #koeln representing northern and central Germany. The analysis is based on the variable *nicht*. As expected, the use of dialect variants continuously increases from north to south, with #mannheim displaying the highest frequency of dialect forms, i.e. 52% compared to 12% in #koeln, 5% in #bremen and 17% in #hamburg. The frequencies for the standard variants vary accordingly between 70% for #bremen, 64% for #hamburg, 63% for #koeln and only 18% for #mannheim. Interestingly, the central German dialect variant, *net*, also occurs in #hamburg scoring 17%. This figure is all the more impressive as the urban vernacular of Hamburg does not include dialect variants. Assuming that these variants are not used by chatters from central Germany, this practice can be interpreted as a form of "reallocation" (Trudgill 1986). "Reallocation" refers to the sociolinguistic process in which variants from one variety are recontextualized in another variety for stylistic purposes. In our case, we assume that chatters in #hamburg tend to adopt the dialect variant *net* in their chat interactions and re-evaluate it as a marker of informality. In addition, contracted forms such as *net* (as opposed to standard *nicht*) are generally favoured in informal online interactions. Overall, *net* seems to be spreading as a supra-regional variant, becoming part of unmarked e-chat style.

5.3 Conversational functions of regional features in #mannheim

The final step of our analysis deals with the interactional relevance of regional features in chat communication. Studies on style shifting in face-to-face communication demonstrate that alternations such as from dialect to standard and vice versa are mainly used as signalling devices, called "contextualization cues" in the terminology of Gumperz (1982). They are part of the interpretative resources by which participants understand certain utterances. Following Auer (1992, 4) contextualization refers to all "activities by participants which make relevant, maintain, revise, cancel … any aspect of context which, in turn, is responsible for the interpretation of an utterance in its particular locus of occurrence." Our findings indicate that regional features can be used as contextualization cues for various purposes in online interaction. They can frame and structure online interaction, e.g. serve as greetings, farewells or interjections. Moreover, style shifts into dialect can be used to mark shifts in topic or to emphasise certain parts of the interaction. They can signal changes in interactional modality, e.g. the move from a serious to a joking modality, or mark quotes and asides. Finally, they can be implemented to index the mitigation of face-threatening acts or for purposes of stylisation, e.g. for the construction of local stereotypes such as the aggressive, low class Mannheim *Proll*.

The following text samples selected for illustration are of three types providing an insight into (a) the construction of language play, (b) the performance of ritual aggression, (c) the stylisation of a regional voice.

In our first example, chatters <A>, <B> and <K> join in a type of play, in which features of the Mannheim city dialect are the principal focus of interaction. Language play is a quite popular activity in chat interaction. Example 2 centres on a famous minimal pair of Mannheim city dialect, i.e. *net* 'not' / *nett* 'nice', which is based on different degrees of tenseness of the vowel [e]:

Example 2:

```
01   <A> seit wann bekommt ein chan emails hehe
02   <B> weil ich net bin :-P
03   <A> ich dachte immer das wären die user die emails bekommen hehe
04   <B> lööööööööööl
05   <K> net nett ?
06   <B> hrhr <A>
08   <B> nett <K> danke fürs verbessern ,-P
09   <K> <B> is net nett !
11   <B> wieso net ?
12   <B> <K>
13   <B> :-P
```

```
Gloss:
01   <A> since when can a channel receive emails hehe
02   <B> because I'm nice :-P
03   <A> I always thought it is the users who receive
         emails hehe
04   <B> lööööööööööl
05   <K> not nice?
06   <B> hrhr <A>
08   <B> nice, <K> , thanks for correcting me ,-P
09   <K> <B> is not nice !
11   <A> why not?
12   <A> <K>
13   <A> :-P
```

In this extract, <B>'s response to <A>'s question includes a typo, i.e. *net* instead of *nett*, which results in "nice" reading as "not". This prompts <K>'s reaction who playfully takes up <B>'s typo and offers a correction in line 5. <B> reacts on <K>'s initiated repair (line 8), which in turn prompts <K> to a joking reply (line 9) and <A> to an equally joking question (line 11). The next example is concerned with the performance of ritual aggression.

Example 3:

```
01 <A> alda was is !!!
02 <A> ;))
03 <B> Mach isch drehkick biste
04     weg !
05 <A> babbel ned
```

<u>Gloss:</u>

```
01 <A> what's happening man!
02 <A> ;))
03 <B> I'll make a round kick and
04     you'll fly away!
05 <A> shut up
```

Chatters <A> and <B> are engaged in a form of verbal duelling. <B> pretends to be aggressive, threatening to hit <A> hard with a martial arts technique called *drehkick*, and <A> turns him away. Here, features of the Mannheim city dialect co-occur with the stereotypical style of immigrant youth in the construction of playful performance of ritualised aggression. Regional features in this extract are the phrasal expression "babbel ned" (line 5), showing t-voicing, the coronalization of the [ç] allophone and the assimilation of *bist du* in line 5. A stylized German ethnolect is constructed in line 1 with the greeting routine *alda* 'man', and in lines 3 and 4 with the elliptical conditional sentence.

Our last example illustrates the construction of a regional voice and the use of style shifting to mark a shift in topic. This interaction starts off with comments about a soccer match between Germany and Hungary during the European championship in 2001:

Example 4:

```
01 <A> hawwe die deitsche gewunne oder was
02 <B> noch ned ;)
03 <C> ne die spielen noch
04 <D> TOOOOOOOOOOOOOOOR
05 <A> oh mann ich kanns net guggen
06     so ein scheiss wie lange spiele die noch
07 <A> für wen
08 <E> jo tor
09 <E> wir wissens hehe
10 <A> jo un ver wen
11 <E> dtl
12 <E> ;)
13 <F> deutschland
14 <C> :o)
15 <A> geil nenn ich sowas un wer hots gschosse doch net widda de deissler
16     odda
17 <B> Janker
18 <A> Cool
19 <A> was ist eigentlich mit der ct is die schon fertig oder net
```

<u>Gloss:</u>
```
01 <A> did the Germans win?
02 <B> not yet ;)
03 <C> no they're still playing
```

```
04 <D> GOOOOOOOOOOOOOOOOOAL
05 <A> oh man I can't watch it
06     shit how much longer will it take?
07 <A> for whom?
08 <E> yeah goal
09 <E> we do know that, hehe
10 <A> yeah but for whom?
11 <E> dtl
12 <E> ;)
13 <F> deutschland
14 <C> :o)
15 <A> that's awesome and who scored it, not again deissler
16     right?
17 <B> Janker
18 <A> cool
19 <A> what's going on with ct is it ready by now or not?
```

Soccer talk is introduced in line 1 by <A> who wants to know whether the Germans did win. Here, all the way down to line 16, <A> constructs a heavily marked regional voice with a variety of features:

–   line 1: spirantization of [b], deletion of [n], derounding of [oi] and lowering of [u];
–   line 5: clitization of *es*, negative particle *net*, voicing of [k];
–   line 10: interjection *jo*, derounding of [y];
–   line 15/16: velarization of [a], clitization of *es*, deletion of [n], negative particle *net*, shortening of [i:], vocalization of [r] and shortening of [o:].

<A>'s language use deviates from the language of the other chatters who aim at the colloquial standard. <A>'s turns 7 and 10 are clear cases of style shifting. In line 7, his initial query about the player who scored the golden goal aims at standard German, but the repetition of the query in line 10 is in dialect. Obviously, <A> shifts here for the purpose of emphasis. In line 18, <A> brings up a new topic, which relates to a computer magazine, and this change in topic is indicated by a shift to standard German.

6. Conclusion

Dialect appears to be a permanently available, highly visible resource for e-chat interaction in #mannheim. Style shifts between dialect and standard, and vice versa, are a common device used for various interactional purposes. However, the resources for the construction of virtual regional speech are limited with respect to the set of incorporated features and their frequency in the chat. We suggest that these restrictions are due to the chatters' linguistic competence and ideological alignments such as the stigmatisation of particular regional variants. Regional features are present in the linguistic repertoire of various chat communities, but their frequency varies along the North-South gradation of German dialects. Overall, the findings of our study suggest that the concept of online community is a suitable starting point to investigate language variation on the Internet.

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