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Rhythm in telephone closings*

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> I set out with supposing the reader to have some practical knowledge of modern music; – I say *practical*, for without that in some degree, it is next to impossible by theory alone, to comprehend clearly and distinctly, either the *rhythmical* or *metrical* divisions of time; the difference between *emphasis* and *force of loudness*; and still less the differences of *accent, acute, grave,* and the *circumflexes.* To musicians, these will be no difficulties at all; and a very few lessons of a master, either on a bass viol, or a great *pitch-pipe*, or the voice, will be sufficient to enable any person, with a tolerable ear, to overcome them.
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> Joshua Steele, *An Essay Towards Establishing the Melody and Measure of Speech*, 1775, pp. xiii–xiv.

1. Introduction

The structure of telephone closings has been well explored in conversation analysis (cf. Schegloff and Sacks, 1973; Button and Casey, 1984; Jefferson, 1973; Button, 1979; Davidson, 1978; Heritage and Watson, 1979) and outside (cf. Clark and French, 1981; Werlen, 1979; Goffman, 1971 and others). It is an established fact that between the first pre-closing and the definite termination of the call (in the "closing sequence") a number of features not usual or not so frequent in other conversational environments occur. In particular, many activities such as salutations, wishes, pre-closing formulae are reciprocal, i.e. the same token can be used for the first and for the second pair part (cf. non-reciprocal adjacency pairs such as offer/acceptance or decline); there is a tendency to use tag-positioned

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address terms (names and endearment terms) which regularly occur in pairs as well; and final salutations and other routine formulae are very often produced simultaneously, or in overlap.

If a well-investigated topic such as phone closings is taken up here again, it is because central aspects of their structural organisation have been neglected. These aspects relate to the prosodic, and particularly the rhythmic make-up of such sequences. This is not to say that in other areas of conversation analysis prosody has played a very important role.[1] However, being an almost paradigmatic case for the strength and success of CA work, the analysis of conversational closings seems to be a good point to demonstrate the relevance of prosodic features for conversation.

The general research policy to which the present paper is subjected consists in making visible small scale linguistic structures not easily recognised by the usual, linguistically 'naive'[2] surface treatment of utterances in CA, and in showing the interactional relevance of these structures. The present analysis of rhythm in telephone closings is one in a series of partly published, partly unpublished papers on rhythm and tempo in conversation by a research group at the University of Constance, dealing with turn-taking and topicality (Couper-Kuhlen, 1989a, b; Uhmann, in press), repair work (Couper-Kuhlen, in press) and 'critical moments' in conversation (Couper-Kuhlen and Auer, in press). For a more thorough discussion of our approach to prosody, and of the methodological and practical problems encountered in a CA type analysis of rhythm, the reader is referred to these papers.[3] How much our work is indebted to F. Erickson and R. Scollon who were the first to draw attention to the interactional relevance of rhythm and tempo, will be obvious to anyone familiar with their work (e.g., Erickson and Shultz, 1982; Scollon, 1981, MS).

2. On rhythm and tempo

The following analysis of prosodic structure in German telephone closings will focus on two parameters: on *isochrony*, concerning the spacing between the prosodically emphasised ('stressed') syllables in speech, and on *tempo*, here primarily understood as the duration of isochronous intervals. The notion of 'isochrony' needs some commenting.

Languages such as English or German are said to be stress-timed (following a terminology introduced by Kenneth Pike) and, as such, opposed to languages like Spanish or Turkish (syllable-timed), and to languages like Japanese (mora-timed). The distinction, the typological validity of which need not concern us here, aims at identifying the smallest phonetic unit in which isochrony is established in a language, i.e. where

timing intervals are equal. For languages of the stress-timed type, the hypothesis in its strictest version predicts that the prosodically prominent syllables occur at an equal distance from each other, i.e. that accent groups ("feet") are of equal duration, whereas in syllable-timed languages, syllables should be of approximately equal duration, and morae in mora-timed languages.

There is a large (and only partly conclusive) body of phonetic literature on the question to which degree and under what conditions stress-timing occurs (although the fact itself is only occasionally disputed). For the purposes of the present study, one result of phonetic research is particularly important: isochrony is stronger in perception than in the actual speech signal; i.e. we hear language to be more rhythmic than it actually is. Why there are such discrepancies between speech signal and perception is an open debate; but for an interactionally oriented analysis of rhythm the discrepancy itself suggests (and even necessitates) working with perceived rhythm, and not with instrumental measurements. When people are asked to tap the rhythm of a speech passage, they are (after some training) able to detect an isochronous succession of beats in the speech signal.

The linguistic and phonetic definition of stress-timing had to be recast in interactional terms and made applicable to conversational material for the present study. Phonetic research usually deals with very small test phrases spoken by one informant under more or less artificial conditions. We start from the assumption that isochrony is not only present in such monologous speech under very favourable conditions (such as: no major grammatical boundaries, no pauses, etc.), but also in conversational dialogues, i.e., that co-participants often synchronize their speech behaviour such as to make the occurrence of prosodically prominent syllables match into a joint rhythmic pattern of isochrony. For this purpose, the notion of isochrony had to be relaxed slightly as compared to (most of the) phonetic research. This is done by distinguishing between rhythmic beats and prosodic prominences, and by dissolving the one-to-one correspondence between the two.

Note the parallel with musical rhythm. As soon as a rhythm is established in music, i.e. as there is a regular succession of beats, it becomes possible to dissociate beats and accents. I.e., in one measure, there may be accented notes which fail to occur on the beat (e.g., in syncope). Or a beat may 'fall' on a pause, i.e. not materialize at all. Nevertheless, the established rhythmic pulse will subsist, although it may become more difficult to discern. They same is true for ordinary language. As soon as there are at least three prosodic prominences that are evenly spaced in time, they constitute a rhythmic grid; we shall say that they are beats in a rhythmically integrated passage of speech. The three prominences may be produced by

one speaker alone, or by more than one speaker. Such a rhythmic pattern makes predictions possible as to where the next beat will occur. If there is a prosodic prominence in the predicted point in time, the rhythmic integrated passage is extended. Like this, relatively large parts of speech may be subject to one rhythm. However, just like in music, there may be prosodic prominences which occur between beats; and, there may be beats that 'fall' on silence (so-called "silent beats").

The following example will illustrate this point. In one of the phone closings, we find the following exchange between the close initiating party and his co-participant (in the usual CA transcription, '–' is a silence of appr. 0.2 seconds, ' marks a primary, ' a secondary prominence on the syllable):

M: ú:nd.n kűßchen durchs télefon – –
and a kiss through the phone
F: jjá – –
yeah
M: já:?
yeah?
F: dánkeschön
thank you

M's first line contains three prosodic prominences; they occur at equal distances, each appr. 0.5 seconds long, i.e., they establish an isochronous rhythm. All three prominences therefore constitute beats. In our notation, these beats are marked by slashes preceding the prosodically prominent syllables. (The right-hand slashes give an iconic representation of the relative length of the time interval between the two beats.)

/únd.n /
/kűßchen durchs /
/télefon /

The reader is asked to perform this rhythmic pattern by tapping the beats. Now, the next speaker (F) could come on the next beat with her *jjá*:

M: /únd.n /
/kűßchen durchs /
/télefon – /
F: /jjá /

However, in the actual interaction, she delays her response, not by an arbitrary amount of time, but by just as much as to place it on the following beat in the rhythm established by M. Between M's utterance and her own, a silent beat occurs:

M: /únd.n /
/kűßchen durchs /
/télefon – /
/^ /
F: /jjá /

M, in turn, also delays his subsequent *já:?*, but the underlying rhythm is still there: in her final *dánkeschön*, F takes it up once again, by positioning the syllable bearing the primary prominence exactly on the beat:

M: /únd.n /
/kűßchen durchs /
/télefon – /
/ ^ /
F: /jjá – /
M: /^ – já:? /
F: /dánkeschön

Note that there is a primary prominence (on *já:?*) and a secondary prominence (on *schön*) in this rhythmic pattern which do not fall on, but between beats. Thus, the one-to-one correspondence between prosodic prominences and beats is dissolved in both ways: there are prominences between beats, and there are beats without prominences.

Obviously, there are degrees of rhythmic integration. It goes without saying that a passage like the one discussed right now is less distinctly rhythmically integrated than one in which beats and (primary) prominences always coincide. However, there is good evidence that isochrony can be sustained even when the correlation between the two is loosened to a certain degree.[4]

Contrary to some phoneticians, we do not think that isochrony is an all-or-nothing matter. Isochronous passages may alternate with non-isochronous ones, rhythmic integration may be more or less perfect. Whether isochrony is achieved or not, and where rhythmic integration is tighter or looser, seems to be a contextualization cue (in Gumperz´ sense) for conversational structuring (turn-taking, turn-internal structuring, sequencing, activity types etc.). The following hypotheses can be formulated:

(a) Although isochrony of prosodically prominent syllables is something speakers strive for in general (and thus a natural tendency) in languages such as German or English,[5] it is only realised to varying degrees.
(b) The passages in which isochrony occurs, or fails to occur, more often than elsewhere, can partly be described in conversational terms.
(c) Phone closings are a conversational locus in which isochrony is extremely frequent.

The second prosodic parameter that will play an important role in the following analysis is *tempo*. Although tempo is an intuitively much more straightforward notion than isochrony, it is extremely difficult to give a unitary description of what we perceive as tempo (or speech rate). In fact, a closer inspection of this parameter reveals that it has to be dissolved into a number of sub-parameters (cf. Uhmann, in press). In the present context, tempo refers to two phenomena:

a) the succession of beats in time, i.e. the absolute amount of time elapsed between two beats in an isochronous pattern. Changes of tempo in this sense can be identified in the transcripts by distances between right and left slashes in isochronous passages. Often, a rough measurement of the duration of a 'cadence' (amount of time between two beats) is given in seconds.
b) beat anticipation and beat delay. Our impression of tempo is also influenced by minor digressions from established isochronous rhythms in which the following prominence is audibly before or after the expected location of the next beat. This, however, does not result in a dissolution of the prior rhythm, but only on a slight rhythmic hitch. As an example, consider the continuation of the little extract discussed before:

M:		/únd.n	/
		/kűßchen durchs	/
		/télefon –	/
		/^	/
F:		/jjá –	/
M:		/^ – já:?	/
F:		/dánkeschön	
M:	/tschűűß=		
	bye	/	
F:	/tschűßli		
	bye	/	
M:	/dánke dir		
	thank you		

The first salutation produced by the close-initiator (M) is distinctly earlier than expected on the basis of the established rhythm. However, the anticipated beat is taken up by F, who produces her next beat at approximately the same interval as established in the rhythm before. Thus, tempo in terms of cadence duration remains more or less constant, while the anticipated beat on *tschüüß* gives an impression of accelerando.

As in the case of isochrony, it is hypothesized that changes of tempo occur in an interactionally relevant fashion. The more restricted hypothesis investigated here is that phone closings are an excellent locus for increases in tempo.

3. Isochrony in telephone closings

In the following, I will discuss the hypotheses introduced in the last section in some detail on the basis of German telephone closings. The data basis is 40 phone closings selected at random (i.e. in their order on the mother tape) out of a larger collection with participants from various parts of Germany. (Some of them are strongly dialectal, almost all show local accent features.) As of course not every closing sequence is followed by an actual termination of the interaction, and in considering every closing sequence from the moment of the first pre-closing on up to the termination of the call or a moving-out of the closing, the number of extracts to be dealt with increased to 47. (For reasons of space, only a fraction of these extracts can be reproduced in the following.) Rhythmic structures were transcribed by the author and checked by another member of the project team.[6]

In quantitative terms, the hypothesis that telephone closings are rhythmically well integrated was amply confirmed. Out of the 47 phone closings, 31 (66%) were fully rhythmically integrated, i.e. both parties participated in the construction of a isochronous structure incorporating (a subset of) the prosodically prominent syllables. Some examples are:[7]

1)

01	F:	m /hḿ – m= /
02		/hḿ
03	M:	und=er /
04		/sòll hü:t óbend ins /
05		/bétt
06	F:	já:
07	M:	wenn fhr ins bétt gehn (dè:n) (na er soll) áu ins bètt
08	F:	/já: /
09	M:	/géll? /
10	F:	/gúet ò= /
11		/ké /
12	M:	ò= /
13		/ké
14	F:	tschűß /
15	M:	/ádè

[cadence in isochronous final part is ca. 0.4 sec.]

01 F: mhm, mhm
02 M: and tell him to go to bed tonight
06 F: yes
07 M: as soon as you go to bed he is to go as well
08 F: yes
09 M: o.k.?
10 F: o.k. good
12 M: o.k.
14 F: byebye
15 M: bye

2)

01 F: há wènn die kléi it dò[isch ha ha ha
02 M: [ha ha ha
03 hàja /lógisch
04 F: hh /
05 M: /álsə
06 F: /álso[du
07 M: [sa= /
08 /lű hási /
09 F: /tscháu du m:[:=
10 M: [m= /
11 F: [/ 'pf
12 M: ['pf

[cadence > 0.5 sec.]

01 F: well when the little one isn't[there ha ha ha
02 M: [ha ha ha yes of course
04 F: hh
05 M: well then
06 F: o.k.[you
07 M: [see you honey
09 F: ciao[mpf ((kiss))
12 M: [mpf ((kiss))

3)

01 M1: – nàjá mich würds áuch frèun schòrschi
02 M2: jó:
03 M1: schmátz=ma am díenstag[wèiter (.) gőj –
04 M2: [jó:
05 [sàgst deiner
06 M1: [g
07 M2: /fráu en schönen /
08 /grúaß –
09 M1: ja /
10 [/grűeß dei wéiwə
10 M2: [göj – un /

11 /dánk da schön fürn /
12 /ánruf
13 M1: göj /
14 /pfíati
15 sérvus
16 M2: sérvus

01 M1: – well I would be glad too Schorschi
02 M2: yeah
03 M1: we'll talk more about it on Tuesday (.) o.k.? –
04 M2: yeah
05 give my love to your wife
06 M1: g-
09 yes and yours my love too
10 M2: o.k.?
11 and thanks for calling
13 M1: yeah so long see you bye
16 M2: seeyou

(4)

01 M1: oké=ja=àlles=/klár=o= /
02 /ké bis /
03 /gléich (.) /
04 /tscháu
05 M2: já (.) /
06 /tscháu .

[*cadence: > 0.3 sec*]

01 M1: o.k.=yes=everything's fine=o.k. see you soon (.) bye
05 M2: yes (.) bye

Take extract (1). There is an isochronous pattern in lines 01–05, still in the topical conversation. In 07, M. loses this rhythm, so that the last passage of talk before the initiation of the closing sequence in 08/09 is anisochronous. However, a new and faster isochronous rhythm begins as soon as the closing sequences gets on its way, continuing throughout it until the termination of talk.

The duration of the cadence (=the tempo) varies between ca. 0.3 and more than 1 second in the data. The longer the cadence, the more difficult it is to hear the isochronous pattern. (I take this to be true both for participants and transcribers, and I will return to the issue of how participants perceive rhythmic integration in the final section of this paper.) Intervening prosodically prominent syllables distract from established rhythmic patterns. On the other hand, the more primary prominences fall on the beat, the more distinct the rhythm becomes. For this reason, although all the extracts cited so far are rhythmically integrated, (4) is best integrated (all prosodic

prominences are primary and on the beat), (2) and (1) are quite well integrated (in (2), only one primary prominence is not on the beat – v. 1. 08 *há* –, and every begin beat is a primary prominence; in (1) there are three secondary prominences on *ò=* and *dè*, but all primary prominences are on the beat), (4) is less integrated.

What is the relation between the beginning of isochrony and the ongoing interactional development of the closing phase? Often, the beginning of the isochronous passage coincides with the production of a (pair of) preclosers, such as in extract (2) (*álsə – álso*); but it may also fall after (cf. e.g. extr. (4)) or before this point (cf. extr. (1)). Isochrony persists all through the closing sequence up to the final pair of salutations (which is a pair of kisses in (2)), or to a moving-out of the closing.

It was said above that both parties participate in the construction of an isochronous pattern in the extracts cited. In fact, in every one of them, each participant contributes at least one beat. This, however, is not to say that both are equally responsible for the constitution of isochrony. For the constitution of a rhythmically isochronous pattern at least three prosodic prominences that can be heard as beats with equal distance between the first two and the second two were said to be necessary. Obviously, one speaker can constitute such a pattern alone, for instance:

A:	/ríght	/	[hypothetical example]
	/táke care	/	
	/byé	/	

But if another participant is to take part in this construction process by providing the second beat, then it is only the producer of the third beat that decides if isochrony is achieved or not:

A:	/ríght	/
B:	/táke care	/
A:	/byé	/

Now compare extr. (1) and extr. (4). In (1), there is an ideal sharing of the job to be done: F provides the first phonetic prominence on *já:* (which is not yet a beat, but only a prominent syllable that will eventually turn out to be the anchorage point of the rhythmic structure), M the second one on *géll* (again not a beat, but only a second prominent syllable fixing an interval between F's *já* and this *géll*); finally, in 1. 10, F provides the decisive third prominent syllable on *gúet*, that duplicates the interval defined by M in the preceding line, and retrospectively turns the whole exchange into an isochronous one. In the following lines, M and F cooperate in the production of the next isochronous beat on his *=ké* and her *tschűß*, uttered simul-

taneously, and the final *á=* is contributed by M alone. In extract (4), on the other hand, things are quite different. It is M1 alone who is responsible for the emerging isochronous pattern: he produces the decisive first (*klár*), second (*=ké*) and third (*gléich*) syllable, and M2 only takes up this rhythm in lines 05f., where his *já*, and his *tscháu* are placed on the beat in M1's rhythm. This means that even where a common isochronous rhythm can be observed in which both participants take part, the individual participants' share in this achievement is not necessarily equal. We will have to ask later on, if disparity on this level can be given an interactional interpretation.

4. Tempo in telephone closings

The first important rhythmic characteristics of closing sequences I have mentioned is their isochronous patterning. That isochrony is achieved relatively often in closings may indicate that the degree of rhythmic integration plays a role in the coordinated suspension of an interaction. There is, however, an additional rhythmic feature. Very frequently, one has the impression that somehow the rhythm accelerates. At a closer look, this impression can be tied to three phenomena: (a) acceleration by reduction of the cadence duration, (b) acceleration by doubling of rhythm and (c) acceleration by anticipation of the beat.

4.1. Shorter cadence ("più agitato")

In a good number of the isochronous closings in the data, there is a switch to a shorter cadence within the synchronized passage. Usually, the pattern exemplified by the following extracts was observed:

(5)

01	M:	... daß sie=s den (.) den hérrn mal ságet (.)
02		daß ich mórge míttag dann kómm
03	F:	– och / bráuch ich anfürsich / [0.8 sec.]
04		/nícht (.) da is jemand /
05		/ dá –
06	M:	isch=auf= /
07		/jéde fall jemand dá?
08	F:	jó /
09		/jò = (dóch) (.)
10	M:	/ókè / [*acceleration, < 0.5 sec.*]
11		/dánke:=
12	F:	(...) /
13		/=géll?=

14 M: =ja /
15 /áuch /
16 F: bítteschön (.) /
17 /wie derhörn
18 M: wíederhörn

01 M: ...if you could tell the gentlemen (.) that I'll be coming tomorrow afternoon
03 F: – oh actually there's no need (.) somebody will be here –
06 M: somebody will be there in any case?
08 F: yes yes = (certainly) (.)
10 M: o.k. thank you:
11 F: (...) o.k.?=
14 M: =o.k., also
16 F: you're welcome (.) goodbye
18 M: goodbye

(6)

01 M: álso f- ich wűnsch dir vìel vergnűgn
02 F: hn,
03 M: und s=is gút daß der Mammi was hingeschriebn has da
04 /fréut se sich / [*>0.7 sec.*]
05 /séhr daß du kùrz /
06 /hèimgekommen bist /
07 F: já=à, [*clearly before the beat*]
08 /^ /
09 M: /schréib noch drúnter
10 /pápi hat mit mir / [*0.9 sec.*]
11 /áuch gesprochen /
12 F: /já gù:t /
13 M: /dánke / (*faster*)
14 /tschűß /
15 F: /tscháù /
16 M: /sérvus

01 M: o.k. I hope you'll have a lot of fun
02 F: hn,
03 M: and you did well to leave a note for mom she will be pleased to hear
06 that you dropped in at home
07 F: yeah, yeah –
09 M: add a note saying dad talked to me as well
12 F: all right
13 M: thanks bye
14 F: ciao
16 M: take care

In all cases, the acceleration coincides, on the sequential level, with another step towards the termination of the interaction. It occurs on or around a pre-closing, or, alternatively, a thanking or greeting produced by the party who thereby displays himself or herself as the one propagating termination. This

suggests that acceleration by shortening of the cadence is an additional rhythmic feature used to indicate an imminent closing when switching to isochrony has been employed already as a pre-closing cue. The acceleration referred to here does not seem to occur before the first pre-closing. In contrast to the beginning of isochrony which is not regularly in the responsibility of the close-initiating party, acceleration is most often achieved by the same participant who produced or produces the pre-closing formula. Thus, in (5), M provides the segmental pre-closing formula in 10 (*ókè*) and also accelerates the previously established cadence from 0.8 to less than 0.5 seconds by his subsequent *dánke*, with F taking up the new rhythm in line 13 (*géll*); in (6), M accelerates on *dánke* and *tschűß* in lines 13/14 which close the preceding topic and lead into the final exchange of salutations.

In a sense, acceleration is an increase in rhythmicity, for, as mentioned already, the impression of a tight rhythmic integration is enhanced by short cadences, with few phonetically prominent syllables that are not on the beat intervening between the beats. Rhythmic integration is therefore favoured by reduction of cadence duration.

4.2. Double cadence ("alla breve")

Whereas in the extracts discussed in 4.1., acceleration led to a new rhythm – switching from one isochronous rhythm to another –, there is a special case of acceleration in which the old rhythm continues to be relevant. What happens is that new beats are introduced at half cadences such that the overall number of beats per unit of time is doubled. Cf.:

(7)

01	F:	… und=na du=e se an d= /raiffeisenbank /
02		/hámburg /
03		/ábtre te.
04	M:	hm m
05	F:	sò /
06		/mách ma des
07	M:	jójò
08	F:	un (was na) – des isch mir no gléich abert so mách=ma
09		dés (.) bei dèm – –
10	M:	ó / kè
11	F:	mjá-
12	M:	álles /
13		/klàr
14	F:	mhm: (.) ó= /

15		/kè:= álso /	15	F:	/álso /
16	M:	/tschűßle /	16	M:	/tschűßle /
17	F:	tschűßle	17	F:	/tschűßle /

01 F: ... and then I'll cede them to the Raiffeisen Bank Hamburg
04 M: hmhm
05 F: that's how we do it
07 M: yeah yeah
08 F: and (then) – I don't care but this is how we do it (.) in his case – –
10 M: o.k.
11 F: myeah
12 M: everything fine
14 F: mhm (.) o.k. well then
16 M: bye
17 F: bye

8)

01 M1: und=da=hat=er=gset=hàja isch nétt oké áber= äh
02 M2: mhm
03 M1: er mőcht des noch ob – ich im des heut (noch)
04 dúrchgebe kőnnt
05 M2: hajá
06 M2: /já des mach i jetz so= /
07 /fórt /

08	M1:	géll – alles /	08	M1:	/géll – alles /
09		/klár (mol)	09		/klár (mol)
10	M2:	ja áda príma /	10	M2:	ja /
11		/dánkschö:n	10a		/áda príma /
12	M1:	mérci mal tschűß á	11		/dánkschö:n
13	M2:	áde	12	M1:	mérci mal/
			12a		/tschűß ád
			13	M2:	áde

[*cadence ca. 1 sec*] [*cadence ca. 0.5 sec.*]

01 M1 and he said well this is nice allright but=eh
02 M2 mhm
03 M1 he would like also – if I could transmit it today
05 M2 yeah yes I'll do it immediately
08 M1 o.k.
09 everything in order then
10 M2 yes bye super thanks a lot
11 M1 thankyou bye see you
12 M2 see you

As it is possible to hear, in these cases, two rhythmic patterns that do not exclude each other, both of them appear in the transcription side by side, the faster (doubled) one in a box to the right of the slower one. For instance, in

(7), an isochronous rhythm is established in 1. 10–15 through the equal spacing between the phonetic prominence-bearing syllables *=kè/mjá – klár/ḿ=, =kè*. In line 15, F produces another prosodically prominent syllable after *=kè*, i.e. *ál=*, which is too early for the next beat but right half in the cadence; now her subsequent *tschűß=* does, rhythmically, a double job – it is another beat in the rhythm already established, i.e. it matches with *kè* in 1.15, but it also introduces a new rhythm by providing the necessary third beat in line with *kè* and *ál=;* the new cadence has half the duration of the old one which continues to be relevant.

Acceleration by doubling of the tempo is similar to but also different from acceleration by a less precisely timed shortening of cadence. It is similar for it also conveys the impression of a denser and more accurate rhythmic integration, integrating prosodially prominent syllables that would have remained outside the pattern otherwise. However, this is done without a change of rhythm between the old and the new pattern, for the old one continues to be hearable; hence, acceleration appears smoother and less marked. This observation may be related to another one, i.e. that double tempos are often employed very late in the closing sequence. It may be difficult to shift to a new pattern at that stage, as well as it may be difficult to prevent the factual termination of the interaction (which, incidentally, follows in all the relevant extracts very soon afterwards). Also related to this late placement, the responsibility for the doubling of tempo is not regularly with the close-initiating party.

4.3. Beat anticipation ("syncopation")

The third type of acceleration may be combined with a faster, but not a doubling of tempo. A faster isochronous rhythm is introduced by beat anticipation in the following extract:

(9)

01	F:	... bis / dréi uhr bis(t) noch nich /	[*ca. 0.6 sec.*]
02		/dá (.) da kann ich noch schnell /	
03		/éinkaufen gehn	
04	M:	ich bin bis /fűnf uhr nich /	[*> 0.7 s*]
05		/dà	
06	F:	m= /	
07		/=hḿ	
08	M:	/sérvus /	[*faster, 0.6 sec.*]
09	F:	/sérvus mein /	
10		/schátz	

01 F: ... until three you won't be there so I can go shopping
04 M: I won't be there 'til five
06 F: mhm
08 M: bye
09 F: bye my sweetheart

M is the participant who is 'urging' F to close the conversation, as indicated by the precipitating exchange of salutations not prepared by a pre-closing formula (1. 08–10). These salutations coincide with a markedly faster cadence accomplished by both participants. The acceleration is prepared by M in 1. 08, where his *sér-* is clearly before the next beat that would be expected in the isochronous pattern *fǘ – dà – hḿ* . F responds very quickly to this anticipation, taking it up as a new anchorage point and providing the missing two prominent syllables in time to constitute a new isochronous pattern. Thus, it is F who is responsible for the new tempo, but M who 'forces' her into it by his anticipated beat. More than the decrease in cadence duration, it is beat anticipation that conveys a sense of 'urging', of pushing the other participant into a faster rhythm. The close-initiating party not only pre-closes the conversation, he also signals 'impatience' about its duration.

Although cooccurring in a part of the transcripts, beat anticipation and faster tempo do not necessarily go together. In the following extract (10), the isochronous pattern in 06ff. is not noticeably faster than the one in 14ff.; nevertheless, F's *né?* in 1. 14, being before the beat, provides a new anchorage point oriented to by M and F in their subsequent talk (after some initial insecureness, cf. 1. 15), but does not change the duration of the cadence:

(10)

01	F:	ich wèrd die wóche die ich im krángehaus war –	
02		scheinlich zúbringe muß werd ich mir – ˀh als (e)	
03		séchshundert oder áchthundert kalorie (.) málzeit (.)	
04		be⌈stélle	
04a	M:	⌊dá nimmsch àb –	
05	F:	já: – dès kámma ja gótt sèi dánk=	
06		=die habe ja / éxtra die /	
07		/ schlánkheitsmenùs /	
08		/ drín (.) /	
09		/ dá werd=i be= /	
10		/=stímmt au e bißle /	
11		/ ábnehme /	
12		⌈/ dànn –	
13	M:	⌊ prímà – –	
14	F:	/né? ⌋	[*very high pitch*]
15	M:	/ jó – /	[*slightly before the beat*]

16 /mách mal /
17 F: /álso du /
18 /áuch=
19 M: = tschűß /
20 /spätzele /
21 F: /tschűßle /
22 M: ´tschűßle /
23 F: /tschűß (du) [very high pitch]
24 M: was is=des für en /
25 /bríef (.) von /
26 /stóllwerck? /
27 F: /äh já sie hat gsagt von stóllwerck (.) aber
28 eh=sie=äh die fräuln (édeltraut) kumm áu erst so
29 um síebe rum von de stádt
((etc.))

01 F: the week I'll probably have to spend in hospital I'll order – ehm 600 or 800 kcal (.)
03 meals
04 M: there you'll surely lose some weight –
05 F: yes – you can do that thank god they have special diet meals there (.)
09 I should be able to lose a little weight then –
13 M: great – –
14 F: right?
15 M: yeah – you do that
17 F: well you too=
19 M: =bye darling
21 F: bye
22 M: bye
23 F: bye
24 M: what sort of a letter was it from Stollwerck?
27 F: eh right she said from Stollwerck (.) but ehm=she=eh Miss Edeltraut will
28 only come
29 back from town around seven ((etc.))

Whereas in examples (9), (10), the anticipated beat is taken up and becomes the starting point of a new rhythmic pattern, co-participants may also ignore it. This is another reason why beat anticipation need not lead to a shorter cadence:

(11)

01 M: und wénn de des kàbel nímmst un stèckst die bèiden
02 zusámm (.) dam műßtes háltn
03 F: mhm (.) óke (.) àll es klár
04 M: ne: – u:nd dann kann der den
05 hábn wo die wo mónitore àngeschlossn

06		sin=muß=er=halt=ábmachn vorher[(né,)
07	F:	já – óke: alles klár=
08	M:	=aver áh áh (.) mórgn wíeder[né?
09	F:	/jájà klár (.) /
10		/álles klàr
11	M:	òké: /
12	F:	/tschúß [*before the beat*]
13	M:	un=dann solln se éndlich mal n /
14		/fílm bestelln ich will ma mein re- /
15		/kórder (rausmachn) /
16		/já? hh
17	F:	óke: /
18		/tschúß
19	M:	/tschúß

01	M:	and when you take the wire and plug the two together
02		then it would have to stick
03	F:	mhm (.) o.k. (.) everything[o.k.
04	M:	o.k.? – and then he can have the one where the
05		monitors are connected he just has to undo them[first right?
07	F:	yeah – o.k. everything o.k.=
08	M:	=but ehm ehm again tomorrow,[right?
09	F:	yeah yeah sure (.)
10		[everything o.k.
11	M:	o.k.
12	F:	bye
13	M:	and then they should finally order a movie I want to (take) my recorder (out)
15		[right? h h
17	F:	[o.k.
18		bye
19	M:	bye

In (11), F's impatient *tschúß* in 1. 11[8] is distinctly misplaced but ignored by M. Thus, beat anticipation may occur, and signal impatience, although the cadence isn't shortened, and vice versa. Just as cadence shortening, beat anticipation seems to be strictly bound to the role of the close-initiating party. It is another way to invite co-participants to come to an end.

5. The final salutations

Before dealing with the closings that are not fully rhythmically integrated, a look at the final salutations in the integrated, actually terminated sequences is of interest. The greeting tokens exchanged here are the following (together with their absolute numbers of occurrence in the 40 telephone conversations investigated):

tschüß, tschüüß (the most wide spread informal salutation token in modern German, usually mono- but occasionally bisyllabic)	29
tschau (> ital. *ciao*, informal, used by younger people, wide-spread in Switzerland)	5
wiedersehn (unmarked salutation token, gradually becoming marked for formality)	6
servus (Bavarian/Austrian, informal)	6
tschüßle (diminutive of *tschüß*, Southwest German, dialectal)	6
áde (old-fashioned informal salutation token, widely used in Southwest Germany, mostly with accent on the first syllable)	5
wiederhörn (telephone equivalent of *wiedersehn*)	5
adé (std. German version of *áde*, outmoded)	2
adéle (Southwest German, dialectal diminutive of *áde/adé*)	1
salute (not really a German salutation token at all, > ital. *salute* with different usage)	1
áda (very dialectal Southwest German version of *adé*)	2

One conversation ends without an exchange of salutations, in another one, the final salutations are (replaced by) kisses. More interesting is the question if a salutation is responded to by the same token or not. Of the tokens that were produced as firsts in a sequence, or simultaneous, 27 had such a corresponding 'second', whereas 11 failed to (among them, the very regional *servus* and *ada* were especially frequent). There is, then, a certain tendency to duplicate greeting tokens.

But are final salutations sequentially organised as pair sequences at all? With respect to rhythm, we may distinguish three types. The first possibility is that the final salutations occur one after the other, just like ordinary turns, each representing one beat in the isochronous pattern, e.g.

(12)
11 M2: /áda/
12 M1: /áde/
13 M2: /áde

The second possibility is that final salutations are produced on the same rhythmic beat, exactly simultaneous, e.g.

(13)
24 M2: (tschüß Heinz)
25 M1: /tschűß
26 M2: /tschűß

However, in the most frequent variant in the data investigated, at least one of the salutations is not 'in phase', although the closing passage itself is neatly synchronized, and the salutations are neither simultaneous nor adjacent but overlapping or latched to each other:

(14)
18 M: /tschűß=
19 F: =tschűß

(7)

An interpretation of these findings will be offered in the last section. We may add at this point, however, that the overlaps that occur so frequently may start at any time in the 'first' greeting; in contradistinction to 'full' speaking turns, there is no such thing as a "recognition point" (Jefferson, 1973) in salutations from where simultaneous talk could be classified as an overlap, not threatening the present speakers role.

6. The non-isochronous cases

We now turn to the analysis of the data in which no or no full rhythmic integration was found. Of these 16 extracts, 10 document one-sided rhythmic integration, i.e., in these cases, one party establishes, and sticks to an isochronous rhythm which the other fails to pick up, building on his own rhythmic grid (cf. extract (16) below) or just following no rhythm at all (cf. extract 17). It would be too strong a claim that one-sided isochronous patterning in the closing is always an interactionally dramatic (or even noticed) deficiency. One-sided rhythmically integrated closings are often simply less smooth than two-sided integrated ones. In some cases, however, there is more at stake. Cf. the following extracts:

(16)

01 F1: muß ma èrscht wárten wie's dem Jőrg geht
02 F2: genáu j[á
03 F1: [gíbschim en kűßchen von uns [állen
04 F2: [tú[ich gérn
05 F1: [ságsch
06 mir sèin drèi fráuen hier an bórd
07 F2: mhḿ::
08 F1: und von jéder éins und wir wünschen ihm àlles
09 [güte – – und
10 F2: aah [*very high pitch*] hhh schő::n – dá wird er sich
11 drüber[fréuen
12 F1: [und /dánke für de / [*much faster*]
13 /ánruf /
14 /gej =
15 F2: =ságsch du àu lìebe grűß[e
16 F1: [/ j´a /
17 [/mách ich /
18 F2: [an álle
19 F1: [/dánke /
20 F2: ru[ndrùm já?
21 F1: [/tschűßle[à= /
22 F2: [tschűüß
23 F1: [/dé

01 F1: we have to wait to see how Jörg's doing
02 F2: that's[right
03 F1: [give him a kiss from all of us
04 F2: [I'll do[it
05 F1: [tell him we are three
06 women here on board
07 F2: mhm
08 F1: and from each of them he gets one, and we're wishing him all the[best – and
10 F2: [aah hhh
11 that's nice – he will be very[pleased about that
12 F1: [and thanks for calling o.k.? =
15 F2: will you also give my best[wishes
16 F1: [yes[I'll do that
18 F2: [to everyone a=
19 F1:[thanks
20 F2:[round right?
21 F1: bye [see
22 F2: [by:e
23 F1: you

(17)

[*M= child*]

01	M:	únd – sie hat gesàgt – was ich (so) so gérn – ab .n
02		zu mal mŏchte
03	F:	ja,
04	M:	als geschenk. hàb ich gesàgt en wésternheft
05	F:	áhja
06	M:	h̲ h̲ h̲ –
07	F:	/áls ⌜ō – in /
08	M:	⌞jaja
09	F:	/zéhn minùte simma de= /
10		/hái⌜m
11	M:	⌞jája – jája /
12	F:	/tschûûß
13	M:	tschûûß
14	F?	[*hangs up receiver*]
15	M:	du:

01	M:	and – she said – what would I – like every now and then
03	F:	yes,
04	M:	for a present. I said a cowboy book
05	F:	I see
06	M:	h̲ h̲ h̲ –
07	F:	o⌜k.
08	M:	⌞yeah yeah –
09	F:	in ten minutes we'll be⌜home
11	M:	⌞yeah yeah – yeah yeah
12	F:	bye
13	M:	bye
14	F:	[hangs up receiver]
15	M:	hey you:

In extract (16), the close-initiating party is F1 (wishes in 03, 05, 06, 08, thanks for call in 12–14). That F2 fails to pick up on her close-preparing isochronous rhythm in 1. 12ff. is due to her determination to provide a reciprocal response to F1's wishes to her own husband, Jörg. This determination to exchange wishes, instead of simply receiving them, leads her into interrupting F1's rhythm in 1. 15, and to produce a number of utterances outside the rhythmic pattern in 1. 18, 20 and 22. The utterances are very obviously squeezed in at a moment where the closing is imminent and the proper time for the reciprocal wishes has gone by already (they could have been produced in 1. 10 more calmly). Thus, the failure to develop a common rhythm is connected to a misplacement on the sequential level here. (It could be further asked why it is so important for F2 to extend wishes to the other women on the boat; if we wanted to elaborate on this, we would have to take into account that the three women's wishes – kisses

to F1's husband – have an ambiguous status; they could be heard as more than just innocent *küßchen* , and in fact the wife's response in 1. 10, above all the prosodically extremely marked *aah* prefacing the acknowledgement turn, points in that direction. If so, she may have reason to re-negotiate the status of these wishes by reciprocating them, thereby underlining their routine character.)

Another extract in which the lack of a full rhythmic integration is interactionally noticeable is (17). It may be relevant that the male participant is a child here, presumably F's son. Again, we observe a misplaced activity. In this case, F's opening up the closing clearly comes too early, for there has been no proper acknowledgement of the news told by M in 01–04, and especially no response to M's laughter in 06 (which may suggest that F. didn't listen or didn't understand what M meant). Instead of such an acknowledgement, F immediately pre-closes the conversation (cf. her *álso* in 1. 07). M is not able or not willing to take up the closing rhythm so fast; his collaboration in it would in fact smoothen out the inappropriate behaviour on the part of his mother, something the boy clearly refuses to do, as signalled by his misplaced *jaja's* and *tschüüß*. Not taking up the rhythm established by the close-initiating party displays unwillingness to accept the closing here. M's unsuccessful attempt to continue the conversation after the phone has been hung up by F in 1. 15 (*du:*) is further evidence for the participants' diverging interests and for the lack of rhythmic integration in this passage.

In the six extracts that remain, an isochronous rhythm is established in the closing sequence but is dissolved again for various reasons. Thus, these cases do not contradict the general hypothesis that rhythmic integration is usual in closing sequences, for participants successfully establish such a rhythm; they do show, however, that to sustain such a rhythm requires continuous interactional work. An exemplary extract will be discussed in the following section.

7. Some possible interpretations

I have argued that telephone closings are almost always thoroughly rhythmically structured. In particular, the following rhythmic techniques used to pre-close the interaction were found:

- isochrony; not typically associated with the close-initiating party, at least if beginning before the pre-closing formula
- increase in tempo within an isochronous rhythmic patterning; often beginning with the pre-closing formula, hardly ever before it; strongly associated with the close-initiating party
- doubling of tempo; often occurring very near the final salutations, not associated with the close-initiating party, and

– beat anticipation; often co-occurring with cadence shortening, strongly associated with the close-initiating party whose 'impatience' is being signalled.

If I may use musical terminology once again: one has the impression, that coparticipants build a *stretta*, by techniques analogous to syncopation, *alla breve* rhythm and switching to a *tempo più agitato*. There is thus more conversational involvement in closings, the interactants' being together is emphasized once again before leave-taking.

The interactional relevance of the construction of such a rhythmic *stretta* is evidenced by the fact that not participating in it can lead to a moving out of the closing. Therefore, if a conversation is considered to be a personal one,[9] and therefore of the sort that should not end without such an increase in conversational involvement, withholding it can become a very effective – although entirely 'implicit' – means to prevent the call's termination. How this is done can be shown on the basis of the following three extracts from the same conversation; the first two are unsuccessful attempts (segmentally initiated by M, the husband) to push the closing sequence to the end, whereas the third attempt is successful. There is little reason for this on the segmental level; the decisive difference is on the level of rhythm, where not enough integration is achieved in the first two cases.

(18)

01 F: já (.) gút
02 M: gút mein mäus
03 [chen
04 F: [já – já
05 M: /álso (.) dénn /
06 F: /já (.) gùt (.)
07 M: vìele /
08 /kűßchen –[já
09 F: [(.) já (.) já/
10 /áuch[– ich nèhm doch héute die
11 M: [nich (.... durch) ich ruf héut nochmal án – [já?
12 F: [já: – ick
13 néhm hèut die púmuckls mit ((etc., continues with new topic))[

01 F: yes (.) o.k.
02 M: o.k. my sweetheart[
04 F: [yes – yes
05 M: o.k. (.) then
06 F: yes (.) all right
07 M: many kisses –[right?
09 F: [yes (.) yes too –[today I'll take the
11 M: [not (...through) I'll call back today –

		[right?
12	F:	right – I'll
13		take the munchkins with me today you know ((etc.))

(19)

10	F:	morgen is doch níkolaus
11	M:	a /só já: /
12		/ménsch /
13	F:	na/já siehste /
14	M:	/álsò denn wűnsch ick dir /
15		[/wàt – já
16	F:	[já nájà – /
17		/gú:t [
18	M:	und den púmuckls òoch –
19	F:	[já
20		já [– –
21	M:	najà – wie wárm is dènn?
22	F:	ja háb ick noch nìch jekúckt – aber es is schőne
23		sònne
((etc.))		

11	M:	a/só /
11a		/já /
12		/ménsch

10	F:	tomorrow is St. Nicholas' day
11	M:	oh yes of course
13	F:	yeah you see
14	M:	well then I wish you everything – [right
16	F:	[yes well – allright
18	M:	and to the [munchkins as well –
19	F:	[yes
20		yes – –
21	M:	well – how warm is it
22	F:	well I haven't looked – but the sun is nice
((etc.))		

(20)

01	F:	najá du gőnn uns mal en bißchen sónne hier
02	M:	wás?
03	F:	du /sóllst uns mal en bißchen /
04		/sónne gőnn.n /
05	M:	/já
06		/álso mein mäuschen – / [*somewhat faster*]
07		/já [
08	F:	[já – – /
09	M:	/kűßchen und auf /

10		/wíedersehn já?	10	M:	/já?	/
11	F:	já:/	11	F:	/já:	/
12		/já:	12		/já:	/
13	M:	wiedersehn /	13	M:	/wíedersehn	/
14	F:	/wíedersehn	14	F:	/wíedersehn	/

[*cadence < 1 sec.*]

01	F:	well you shouldn't grudge us a little bit of sun here
02	M:	what?
03	F:	you shouldn't grudge us a little bit of sun
05	M:	yes o.k. my sweetheart – yes
08	F:	yes – –
09	M:	kisses and goodbye right?
10	F:	right right
13	M:	goodbye
14	F:	goodbye

Both in (18) and (19), there is isochrony, and M and even F produce prosodically prominent syllables on the beat. However, the rhythm is very slow (a cadence of around one second) and very loose (cf. the primary prominences not on the beat and the beats only marked by secondary phonetic prominences in (19)). There is no acceleration whatsoever. In both cases, isochrony is dissolved again, and so is the closing sequence itself. The situation in (20) is quite different. There is an increase in tempo in 1. 06, established by M, and there is an *alla breve* in 1. 10ff., signalling the imminent termination of the call. From the first acceleration on, only one syllable bears a (secondary) prominence without being on the beat (*mäus-*).

If rhythm plays such an important part in the termination of telephone conversations, we have to ask next: what is its function for the closing? As is well known, closing sequences have been described by Schegloff and Sacks (1973) as a technical means to "coordinate the suspension of the transition relevance of possible utterance completion" (p. 295). They go on to state that the final exchange of *good-byes* can do this job by virtue of their adjacency pair format.[10] It seems to me that this is a rather unfortunate description. If it is true that closing sequences have the function of making the turn taking machinery stop, this stopping does not coincide with the termination of the exchange of salutations. Contrary to what we should suspect in such a case, second salutations are quite often followed by third and fourth salutations; cf. extracts (6), (8), (10), (11), (16). Whereas some of these examples, in which three salutations occur, may be explained as refusals of the recipient of the first greeting to terminate the conversation, most of them cannot. It is correct that participating in a greeting exchange normally precludes further topical talk; and also, that salutations have to be produced in pairs to be interactionally valid 'last events' in a phone call;[11]

but their occurrence, although making termination possible, does not rule out the production of further salutations or similar routine formulae (such as wishes, kisses, arrangements about future calls, etc.). The final interactional even in the closing sequence is not a verbal one – i.e. the exchange of greetings – but a non-verbal one, i.e. the hanging up of the receiver. (Incidentally, this is a delicate facet of the social handling of this machine: children have to learn that after the final good-byes, the conversation isn't "simply" over, but that they have to do something else: they have to hang up.)

The status of salutations as terminating exchanges is also questionable to the degree that their status as adjacency pairs is questionable. It is striking indeed that the 'small tokens' exchanged in phone closings are so often reciprocal. But in order to classify them as adjacency pairs, less important than that is their adjacent positioning governed by the conversational turn taking system which crucially depends on the transition relevance conjoining the two pair parts. There is little justification however in treating the final section of conversations, up to and especially including the exchanges of salutations, as subject to the same turn taking machinery to which 'ordinary' turns somewhere in the middle of a conversation are subject.[12] As shown above, the placement of the salutations relative to each other is unconstrained by a preference for 'one speaker after the other'; simultaneous talk in closing sequences is the rule, not the exception. Neither is their evidence that simultaneous material consisting of salutations, preclosing formulae etc. is recovered in the way overlapped material in 'ordinary' turns may be recovered by repetition. On the other hand, the dispreference for silence is even stronger in closings than in 'ordinary' talk. (Incidentally, silence is another indicator of tempo, and its avoidance in closings a further factor responsible for our impression of a faster tempo.)

All these differences between conversation-internal and conversation-final sequencing suggest that the exit from the turn taking machinery is partly or completely accomplished *before* the terminating salutations: it is accomplished not co-terminous with the end of the section, but *during* it. In the course of this section, participants make an increased effort to establish and maintain a common rhythm, disregarding, if necessary, the dispreference for simultaneous talk. Thus, overlaps, simultaneous starts and adjacent production all are possible, but which of them occurs is not a question of 'one speaker at a time', but, at least in the first place, a question of rhythmic integration.

The routine formulae produced in closings, the many *ja, oke, ade, tschüß, danke, machs gut, bis dann, also* have one thing in common: they are very short, consisting of one or two syllables, and each of them carries at least one prosodic prominence. As routine formulae, they are, by definition,

comparatively void of content. They do face-work, of course, but they also have another function: they make it easy to establish rhythmic patterns. Whereas rhythm in 'ordinary' turns is partly contingent on matters of syntax and lexical choice, and the tendency to establish or maintain isochrony is sometimes at odds with questions of content dictating lexical choice, this is hardly the case with these 'small tokens.' They are repeatable, largely independent of each other, and have few unstressed syllables that have to be squeezed between the rhythmic beats. If need be, they can be lengthened or their main accent shifted (cf. *tschüß* and *tschűüß, adé* and *áde, óke* and *oké*), i.e. they are prosodically very flexible. Being short, they are very good vehicles for increases in tempo. All in all, they are ideal for the purpose for integrating two participants' utterances into one rhythm.[13]

A promising way to look at these 'small tokens' in phone closings is therefore to see them as doing a job for rhythmic integration. Although the fact of isochrony cannot be derived from their occurrence (i.e., isochrony is not determined by them), they provide the necessary segmental grounding for isochrony. How many 'small tokens' are produced (and consequently, how long the closing section becomes) is not only a question of how long participants want to provide a 'last chance' for 'forgotten' topical material, but also of how much rhythmic integration participants consider to be necessary before leave-taking. Obviously, a closing sequence cannot go on forever, i.e. as soon as it is running, and unless new topics are brought up, it is expected to terminate the conversation sooner or later.

One problem remains. If pairs of salutations are not terminating, and not adjacency pairs, then how do we know that the conversation is over? If the exit from the turn-taking to the rhythmic base of conversation is accomplished earlier in the closing-sequence, when does the rhythm stop? The answer is: as soon as nobody provides new syllables. In principle, closing sections are quite expandable. What terminates them is silence. But this silence is different from the silence that may turn up in the middle of a conversation, i.e. silence interpreted in the framework of turn-taking. It is not *somebody*'s silence (for such an attribution is only possible as long as the turn-taking machinery is in action), it is just silence. The problem Schegloff and Sacks start with, i.e. "how to organize the simultaneous arrival of the coconversationalists at a point where one speaker's completion will not occasion another speaker's talk, and that will not be heard as some speaker's silence" (pp. 294f.), is solved already.[14]

8. Concluding remarks

Rhythm and tempo have been analysed as contextualisation cues for the termination of an interaction. Contextualisation is in most cases redundant; this means that rhythm will usually be supported by other segmental and suprasegmental cues. Insofar as this is true, the isolated analysis on just one parameter is artificial: it reduces the complexity of the signalling process as perceived and produced by the participants to one aspect. The analytic perspective abandons the holistic interpretation carried out by the lay participant for the sake of a particularistic focus on just one of its aspects. This, although necessary, must be kept in mind. The present analysis should therefore be complemented by work in two directions: by an analysis of the role of other contextualization cues (both on the segmental and on the suprasegmental level) in telephone closings, and by an analysis of the role of rhythm and tempo in other contexts (for instance, in other parts of a telephone conversation, but also in face-to-face interaction).

Notes

1. But cf. recently: French and Local (1983); Local and Kelly (1986); Local (in press); Goodwin and Goodwin (in press); Selting (1988); Selting (in press).
2. By "naive" I mean to say that the usual "seen-but-unnoticed" character of these structures, to use H. Garfinkels famous term, is not dissolved ('bracketed') in the CA perspective. Obviously, structural details of the conversational utterances in question may be more or less easy to identify. Thus, 'words' or 'sentences' seem to be well-defined and easily grasped linguistic entities – at a first, non-linguistic sight, at least – for in their identification and in making reference to them, we can rely on lay notions of 'words' and 'sentences'. This reliance on the lay underpinning of linguistic terminology is impossible however in many parts of phonetics, phonology and prosody. Now, the practice of CA is constrained by the fact that only what can be identified as a linguistic property of an utterance can be made use of in the description of how this utterance becomes interpretable ("accountable"). We can only see what we know to be there already. In this sense, the present paper is an attempt to make things see-able that are on a comparatively hidden level, although they are certainly interactionally relevant features of the utterance.
3. In particular, I cannot give an overview of the phonetic and linguistic issues revolving around the problem of isochrony. Here, the reader is referred to Auer and Uhmann (1989) for a critical summary. The question of timing and rhythm has also received some attention in social and cognitive psychology and communication studies; a review of the most important findings is Pelose (1987).
4. If a next utterance comes in on the beat, or with a delay, even if it is rhythmically integrated as in our example, is of course interactionally meaningful. For a discussion of silent beats and the work they do in conversation, cf. Couper-Kuhlen (1989a, b).

5. Both English and German are said to be stress-timed languages. However, our – still relatively intuitive – impression is that the unmarked degree of isochrony in (British and American) colloquial English is higher than the rhythmic integration reached in German. This may be due to structural characteristics of German, above all to the much larger number of secondary prominences in this language which are somewhat ambiguous as to their availability as rhythmic beats. The matter remains to be investigated in more detail. In any case, it should be noted that German conversation is not normally isochronous throughout. Passages in which isochrony can be observed most frequently – such as telephone closings – are therefore of particular interactional interest.
6. The production of a rhythmic transcription takes some time, and also some training. This is mainly because the transcriber has to give up his or her naive, holistic way of listening and has to develop a very selective ear tuned in to rhythm and neglecting other parts of the speech signal. (Scollon reports that he was most successful in transcribing rhythm when deliberately distorting the signal, e.g. by reducing tape speed.) After some years of working with a team of researchers on this issue, my experience is that a high degree of transcriber reliability can be reached. (Of course, there are always passages which can be heard in various ways, simply because their rhythm *is* not unambiguous.) The principle problems are basically those known from narrow auditory phonetic transcription. That no lay person is able to produce such a transcription (even if she has learned the notational conventions) is no argument against their global perceptability (and accountability) in terms of accents or personal traits. It is the step from such a holistic to a analytic mode of listening which makes all the difference.
7. M = speaker, F = female speaker.
   The transcription of simultaneous isochronous talk is a special problem in rhythmic notation. In the notation chosen here, a structure like

M: ⌈/klàr
F: ⌊ḿhm̀ (.) ó=/
   /kè:

   is to be read as follows: M's talk is simultaneous with F's from the squared bracket onwards up to the next line. The beat on *klàr*, marked by the preceding lefthand slash, coincides with F's beat on *ḿ*; the cadence ends with the righthand slash after *ó*=.
8. Another case of beat anticipation occurs in the final *tschűß*. 1. 19., this time produced by M. (whereas throughout the closing sequence, it was F who urged for a termination, cf. the pre-closing tokens in 1. 03, 07, 09).
9. As we have shown, phone closings differ in the degree of rhythmic integration. On the basis of the limited data analysed, it seems that 'business like' closings are less in need of rhythmic integration, or: a closing may exhibit, by virtue of a participants' neglect for rhythmic integration, this call's business-like character. In contradistinction, 'personal' calls are characterised by more conversational work invested in the constitution and maintenance of rhythmic integration, in being 'in phase', usually leading into longer closing sections.

10. "We are then proposing: If *where* transition relevance is to be lifted is a systematic problem, an adjacency pair solution can work because: by providing that transition relevance is to be lifted after the second pair part's occurrence, the occurrence of the second pair part can then reveal an appreciation of, and agreement to, the intention of closing NOW which a first part of a terminal exchange reveals its speaker to propose." (p 298)
11. Cases such as extr. (10), 1. 24ff. are clearly marked.
12. Incidentally, the same seems to hold for greetings in the opening of conversations, above all in face-to-face interaction. Doubts about the classification of greetings as pair *sequences* have also been expressed by Clark and French (1981).
13. Obviously, this is not to say that *oke* and *tschüß* or whatever, are sequentially interchangeable. It is quite clear that salutations occur nearer to the end than pre-closers, or even wishes such as *machs gut*. The sequentiality involved may be less strict though than is suggested in Schegloff's and Sack's (1973) paper.
14. The exact timing of the hanging up with respect to preceding talk cannot be investigated on the basis of the audio recordings available to me. The click that interrupts the line is partly on the beat in the final rhythm (if it is very slow, 1 sec. or more), more often after it. It remains to be seen if there is a point in the action of hanging up (e.g. its beginning i.e. the point in time in which the receiver is removed from the ear) which is synchronized with the rhythmic pattern established.

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