

CONVERSATIONAL STRATEGIES: TOWARDS A PHONOLOGICAL DESCRIPTION  
OF TURN-TAKING IN AKAN

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Phonetic features have functional relevance for conversational participants. I provide evidence from three natural conversations (in Akan) to show that turn-taking correlates with such phonetic features as tempo and rhythm. I argue that *rallentando* or *lento tempo* deployed singly or conjointly with a drawn-out syllable-time rhythm is turn delimitative. *Allegro* or *accelerando tempo* and a clipped-syllable-time rhythm are projective of further speakership by a current speaker. I also show the co-participants' response to such features.

Les traits phonétiques démontrent une certaine pertinence pour les interlocuteurs. L'évidence présentée consiste en trois conversations (en Akan) et indique que la prise de parole correspond aux traits phonétiques tels que le temps et le rythme. Je soutiens que *rallentando* ou *lento* utilisés seul ou ensemble dans une syllabe allongée indique un changement de prise de parole. Un temps *allegro* ou *accelerando* avec une syllabe à temps coupé indique que l'interlocuteur courant conservera la parole. En dernier lieu, je présente la réaction des coparticipants à ce phénomène.

#### 0. INTRODUCTION

For the past three years I have been working on conversations in Akan and English and have had the privilege of examining some of the various strategies employed by conversational participants in managing such interactive categories as repair<sup>1</sup>, interruptions (overlapping talk) and turn-taking.

In this paper, I will attempt to provide evidence from Akan to show that in taking turns at talk, conversational participants deploy and orient to a considerable number<sup>2</sup> of phonetic features two of which are tempo and rhythm.

Before discussing the data, I will attempt to describe such technical concepts as turn, turn-taking, conversation and intuition. This will be followed by a description of the nature of my data and the methodology employed in my analysis.

#### 1. THE 'TURN'

##### 1.1 ON DEFINING THE 'TURN'

A lot, relatively, has been said about the word 'turn' in scholarship on Social Psychology, Ethnomethodology and 'Conversational Phonology'<sup>3</sup>. There is, however, no consensus of opinion on its nature.

Social psychologists such as Goffman (1976) and Edelsky (1981), who are interested in the functional and referential aspects of the message carried in a talk, contend that the 'turn' is a structural unit intended to convey a message that is both referential and functional. Edelsky (1981:403) has specifically defined the 'turn' as an

"on-record speaking behind which lies an intention to convey a message that is both referential and functional".

The above definition, by implication, suggests that Edelsky and his associates do not count as turns either supportives (as *eee*, *mmhm*, etc.) or side comments, since supportives are non-referential and side comments unofficial<sup>4</sup>.

For the ethnomethodologists - notably Sacks, Schegloff and Jefferson (1977), Feldstein and Welkowitz (1978) and Cherry and Lewis (1976), a 'turn' must be composed by one and only one speaker at a time. Feldstein and Welkowitz (*ibid.*) state that a 'turn' begins the instant one participant in a conversational exchange starts talking alone and ends immediately prior to the instant another participant starts talking alone. This line of argument is supported by Local, Wells and Sebba (1985:315) who identify a turn as

"a spate of talk by one speaker followed by a change of speaker in the clear" (i.e. not in overlap).

Sacks et al (1977) for their part draw an analogy between 'turns' and 'goods'. They contend:

- (i) that 'turns' are goods in an economic system (a conversational exchange);
- (ii) that their possession involves rewards and costs;
- (iii) that this scarce good is allocated to only one customer at a time.

A critical examination of the definition (of the 'turn') proposed by the ethnomethodologists, then, suggests:

- (a) that supportives and the so-called 'back channels'<sup>5</sup> or side comments all constitute turns;
- (b) and that a turn occupant's turn ends if a next speaker issues a supportive.

I object to such a definition because although supportives and the like do genuinely constitute turns, I think they can be issued within a current speaker's turn. I suggest that a current speaker's turn ends when he deploys such phonetic features as *lento* or *rallentando* tempo simultaneously with a drawled-syllable-time rhythm together with semantic, pragmatic and other features, and when he stops speaking prior to another participant in the conversational exchange taking the floor. Thus, for me, parts of a current's speaker's 'turn' can be interrupted or overlapped by the next speaker's 'turn'.

My criticism of those who do not take supportives and back channels as being 'turns' is that their claim is not strong enough. The fact that back channels and encouragers are non-referential does not necessarily mean that they cannot constitute 'turns'. How would Feldstein and his associates classify a conversation dominated by one person with the other participant(s) just issuing supportives? Would such a conversation be composed of only one turn? Goodwin (1981) discusses, in some detail, some of the problems associated with the status of the turn.

## 1.2 TURN-TAKING

### 1.2.1 The Socio-Psychological Thesis of Turn-Taking

The work of Kendon (1967), Duncan (1972, 1974), Craig and Washington (1986) and others show the extent to which turn-taking strategies have been investigated by social psychologists. They have argued that conversational participants use signals to hold as well as to terminate their turns at talk. Levinson (1984) describes this system of turn regulation as being analogous to the 'over' announcement on a field radio transmitter.

The social psychologists concentrate on both verbal and non-verbal cues. Sociocentric sequences<sup>6</sup>, intonation and syntactic features are central to Duncan's (1972) verbal cues: gesture is the non-verbal cue. Kendon (ibid.) also remarks that conversational interchanges between speaker and hearer are in part regulated by gaze.

This view on signals is also bolstered by Scheflein (1964) who posits that body motion and speech are integrated at three levels of organization namely: point, position and presentation. Point, he remarks, corresponds to making a point in conversation and is often indicated by gesticulation - a change in head posture. If the point is in question, the head is raised.

Delong (1974) reports that for children conversationalists a leftward movement of the head and a dropping of the head and/or arms consistently indicates the termination of an utterance.

In their "Gaze and Proximity as Turn Regulators within three-party and two-party child Conversations", Craig and Gallagher (1982) contend that in conversations involving children, when a turn occupant chooses to look at a listener, that listener most frequently became the next speaker.

Craig and Washington (1986) posit that for child conversationalists turn allocation cues are primarily non-verbal with proximity and gaze being the most important cues. Gaze, they argue, is a speaker-based option and proximity is a turn cue used by both speaker and hearer. They emphasize that phonetic cues such as pitch and pause have little or no influence on turn allocation. I will return to this point later.

Although the work of these social psychologists gives valuable insight into how conversation is managed, their work poses a problem since they give functional primacy to non-verbal cues. However, if a signal such as gaze is the basis of turn-taking, then more instances of turn competition, interruptive talk, lapses and gaps will predominate in telephone conversations.

Workers on telephone conversation such as Rutter and Stephenson (1977), Ervin-Tripp (1979) etc. have, however, proved the opposite to be true. They have demonstrated that fewer overlaps and gaps are found in telephone conversations than in face-to-face conversations.

### 1.2.1 Ethnomethodologists' View on Turn-Taking

The view on signals is severely criticised by Beattie, Butterworth and some other ethnomethodologists. They argue that opportunity assignment rules indicate turn transition and turn exchange.

The turn-taking system, they contend, is locally managed; the turn-taking mechanism is governed by a mechanism that accounts for the orderly turn exchange between a current speaker and a next speaker. This mechanism is: (a) a set of ordered rules, (b) has options, (c) operates on a turn-by-turn basis.

The following rules postulated by Jefferson (1975) are quoted from Levinson (1984). In this rule C = Current Speaker and N = Next Speaker. TRP = Transition Relevance Place<sup>7</sup>.

"Rule 1: This applies at the first TRP of a turn.

- (a) If C selects N in current turn, then C must stop speaking, and N must speak next, transition occurring at the first TRP after N selection.
- (b) If C does not select N, then any (other) party may self-select first speaker gaining rights to the next turn.
- (c) If C has not selected N, and no other party self-selects under option (b), then C may (but need not) continue (i.e. claim rights to a further turn-constructive unit).

Rule 2: This applies to all subsequent TRPs. When rule 1(c) has been applied by C, then at the next TRP Rules 1 (a) - (c) apply, and recursively at the next TRP until speaker change is effected".

These rules suggest that conversationalists begin their turn around a TRP rather than randomly throughout a conversation.

Although I appreciate the methodology employed by the ethnomethodologists in describing turn-taking, I think their analysis has one or two problems.

In the first place, rules are imposed which hardly work in 'normal' conversations. A current speaker may select a co-parti-

participant but he may not take up the offer. In fact there are instances where a next speaker does not wait until selected before coming in.

Secondly, the occurrence of a turn-terminating feature(s) does not automatically imply that speaker change will occur. Sacks et al (op cit) do not convince me that a TRP is always transparent. As Edmundson (1981) argues, a TRP of an initial turn-constructive unit may not be identified on any strong overt criteria. In fact, in a conversation of more than two participants, two people might conspire to exclude the other(s).

### 1.2.3 The Linguistic Approach to Turn-Taking

Very little has been done by linguists on conversational strategies in general and turn-taking strategies in particular. Rather, attention has been focused on the correlation between phonological features such as intonation and grammatically defined concepts such as sentences and clauses.

Among the few linguists who have touched this area of linguistics are: Local and Kelly (1986), French and Local (1985), Local, Wells and Sebba (1985) and Obeng (1987). They have shown that there is a relationship between turn regulation and phonetic features such as pitch height, loudness, tempo, rhythmicality, pause and voice quality. Their work will be referred to later in the core sections.

## 2. THE DATA

My data consists of tape recordings and transcripts of three naturally occurring conversations in Akan. Conversation A is a 30 minutes conversation between two undergraduates, Boahene and Asante-Yeboah, of the University of Ghana. They converse about man and religion.

In Conversation B (15 mins.), Dabo, Kwame Doctor, Aniakwaa and Effa discuss the confiscation of their land by the World Bank for an oil palm project, and the 'bravery' of the Asuom people.

Conversation C (also 15 mins.), is between Bosompemaa, Owusu and Abrokwaa. They talk about leaving Ghana for London and life in England.

Two forms of transcriptions, the conventional orthography and an impressionistic transcription, are used.

### 2.1 METHOD OF DATA COLLECTION

All three conversations were recorded without the prior knowledge of the participants. They were, however, informed about the recording afterwards and had no objections to my using it for a purely academic purpose. Since the tape recorder was hidden from my informants, they performed naturally i.e. there were no artificialities. The conversations were therefore true performances of the participants involved.

Conversation A was recorded by me in 1984 in Asuom (Ghana); Conversation B was recorded by my wife in 1985 at Legon and Conversation C was recorded by me in York (England) in 1986.

## 2.2 WHY CONVERSATIONAL AS OPPOSED TO INTUITIVE DATA?

Intuitive data is basically over-restrictive since it does not occur in a wider natural interactional environment. Teeter (1986:205) has argued that if linguists are willing to restrict their range of enquiry sufficiently to intuitive data they will be able to find some answers easily, but these answers will have little or no bearing on anything of importance. Fodor (1977:7) has also commented on the problems associated with intuitive data by stating that: "Intuitions are less confident and less reliable".

According to Antilla (1972), once a person has linguistic training he spoils his native intuitions. Using intuitive data often leads to overreaction and to mistaking one's idiolect for the general norm. For the above reasons I think that data based on intuitions often contain inappropriate information which by implication suggests that work based on intuitive data are indeed misrepresentations of the languages they are meant to describe.

Every normal (and sometimes abnormal) human being engages in conversation; that conversation is the natural use of language. Specifically, utterances produced during conversational exchanges could be attested as having been produced in a non-experimental linguistic situation. Conversationalists have the opportunity of give-and-take. Even if one participant goes on for a long time, one can argue, in theory at least, that there is more than one active participant.

Conversations also represent the most frequent as well as the most wide-spread occurrences of spoken language.

As Levinson (1984) and Kelly and Local (1986) argue, conversations offer the linguist a valuable analytical tool. As each stimulus is responded to by a second or third, the analyst often finds displayed in the response an analysis of the stimulus by its recipient. Such an analysis is often provided by the conversationalists not only for themselves but also for the analyst.

Working with conversational material also reduces and sometimes prevents the situation in which the analyst has to invent contextual or situational details to support his argument.

## 3. METHODOLOGY

The practice by phonologists of making phonological analysis of such phonological features as intonation, tone, tempo, rhythm and vowel harmony in terms of grammatically defined units (e.g. clause, word, phrase and sentence) has been losing ground in recent years. Phonologists like Brazil (1975, 1978), Local,

Wells and Sebba (1985), Local and Kelly (1986) and Brown, Currie and Kenworthy (1981) have attempted in various ways to relate some of these phonological features to discourse rather than to grammatical categories.

However, as Local, Kelly and Wells have argued, some of these recent attempts have been unsatisfactory for the following reasons:

(a) There is often an absolute reliance on the analyst's intuitions in 'setting up and explicating functional categories'. Many researchers are absolutely reluctant 'to warrant from the behaviour of conversationalists, the functional categories they propose' (1986:412).

(b) The phonetic material often used in some of these studies is handled inadequately. Many researchers confine their research to pitch, since they assume that pitch has functional primacy over the other phonetic features. In effect such phonetic events as tempo, rhythmicality, pause, duration and quality are not considered as important and are therefore excluded from their descriptive statements.

(c) As Local and Kelly (ibid.) have remarked, the researchers make simplistic and monosystemic statements about the relationship of functional categories to the phonetic exponents.

In this paper, following Local and Kelly's (ibid.) approach, I present an analysis of one aspect of what I will call 'Conversational Phonology' which seeks to avoid these pitfalls.

I examine two phonetic resources (rhythm and tempo) employed by conversationalists to manage turn-taking. In my analysis, therefore, it is interactive categories which provide the basis for phonological statements. Thus phonological statements are not arrived at from my intuitions as a native speaker of Akan but inductively from my data and are relevant for the conversational participants themselves.

In my analysis I have (where necessary) placed detailed phonetic transcripts of the data along with my analytical claims. This practice, Firth (1935) and Local and Kelly (op cit) argue, prevents one's analytic claims standing insulated 'from any kind of rigorous public inspection' and helps the reader to follow through the logic of the claims made.

I have used the 'piece' as the isolate in my analysis. It is my operational construct and has the following characteristics:

- (a) it is not synonymous with the word, phrase, clause or sentence or any grammatical unit for that matter;
- (b) it is susceptible to revision in the course of analysis.

The piece, then, provides the framework within which to study the phonological structure of either all or part of a turn.





BO: Stop asking about stories which make the devil happy; ask those

AY: Which stories make the devil happy?

A close and systematic look at the above extracts and of other cases of 'one-at-a-time'<sup>10</sup> and interruptive/overlapping talk show comparable features.

With one-at-a-time, I recognize that a turn occupant's last four or so syllables (bits)<sup>11</sup> co-occur with portions of rallentando (rall) or lento tempo. On rhythm, I hear a change in the rhythmic rate and/or organization over such syllables. Specifically, a delayed or rallentando-syllable-time rhythm is associated with the turn occupant's last four or so syllables.

In example 1, the turn occupant, EF, starts his utterance with a norm tempo and a syllable-time rhythmic organization. However, his stretch of talk extending from *se* to *bi*, the last syllable, is marked with a rall tempo and a delayed-syllable-time rhythm. What is significant about this is that EF (the turn occupant) terminates his turn and DA (the next speaker) takes over the floor immediately. DA starts with an allegro tempo, slows down to his norm and then slows down again to lento and subsequently gives up the floor.

A look at example 2 reveals that lento tempo and a delayed-syllable-time rhythm are associated with the stretch [ʔent<sup>sh</sup>i ɛsɛso t<sup>h</sup>uiajɛ̃ka]. Based on my hypothesis, the turn occupant (DA) should have stopped talking and given up his turn, but did not do so. He pauses for a considerable length of time (2.8 secs.) before continuing. This type of long pause has been classified by Mclaughlin (1984:272) as an 'initiative time latency' -

"a longer pause bounded on both sides by talk by the same speaker; regarded as the time elapsing between the intended yielding of the floor by a speaker, and her resumption of it given the failure of her partners to take the floor."

A detailed scrutiny of the turn occupant's (DA) post-pausal talk shows that it is also marked with a lento tempo and a delayed-syllable-time rhythm, a markedly breathy voicing, piano loudness and a relatively low pitch height.

It could be argued from the interactive point of view, therefore, that the turn occupant intended to end his turn after issuing [ʔent<sup>sh</sup>i ɛsɛso t<sup>h</sup>uiajɛ̃ka] but was forced to continue his turn because of the next speaker's failure to take up the turn ownership. The association of lento tempo, delayed-syllable-time rhythm and the other features with his post-pausal utterance is thus an indication that the turn occupant was ready for turn termination and exchange. This is supported by the fact that in his post-pausal talk although there are five people engaged in

the conversation, the turn occupant mentions the name of the supposed next speaker and thus addresses him directly; thus demanding an answer from him and hence a take-over of the floor/turn by him. The next speaker (EF) eventually orients to the turn-termination being carried out by assuming the position of turn occupant. Here we see that he (EF) starts in a latch<sup>12</sup> position.

As with examples 1 and 2, with example 3 the next speaker, AY, comes in when portions of BO's (the turn occupant's) talk was marked with a rallentando tempo and a delayed-syllable-time rhythm. The interrupter (AY) upgrades more than the turn occupant and thereby gains control of the turn. The turn occupant does not stay and fight for the turn ownership but terminates his turn thereby treating the rallentando tempo and the delayed-syllable-time rhythm as turn delimitative.

The above analysis suggests that turn-termination is signalled by either a rallentando or lento tempo with a simultaneous delayed-syllable-time rhythm. To sum up, I posit that delayed-syllable-time rhythm and lento or rallentando tempo are treated by conversational participants as turn delimitative features.

Local, Kelly and Wells (forthcoming) have also identified rallentando tempo as a turn delimitative feature in Urban Tyneside English.

In their study of turn-delimitation in London Jamaican English (1985), they also mention rhythmicality and tempo as being turn delimitative features.

4.2 RHYTHM AND TEMPO IN TURN-HOLDING

This section shows that allegro or accelerando tempo singly or conjointly with a clipped-syllable-time rhythm<sup>13</sup> is projective of more talk by a turn occupant. The following few examples illustrate this claim.

Example 4

DA: Ma menkyerε wo mu! Ma menkyerε wo mu! Nea εbae ne se nea εbae  
 nIε bāε nIse· nIεbaε nI se

norm

allegro

EF: Kyerε muε! Wo na wonim  
 te remūεwunōu nīm

norm

DA: yekoo ho! Yekoo ho!

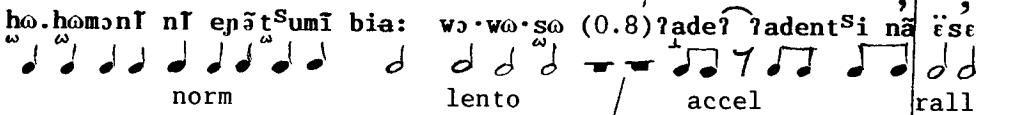
jekoo: ho jekoo:ho  
  
 norm

DA: Let me explain it to you! Let me explain it to you! What happened was that, what happened was that we went there! we went there!

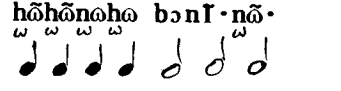
EF: Explain it! You know (better than anybody else!).

Example 5

AY:

Honhom bone no erenya tumi biara wo wo so. Aden aden nti na ese se  
 ho.homoni ni epat sumi bia: wo.wo.soo (0.8) ade? adent si na esse  


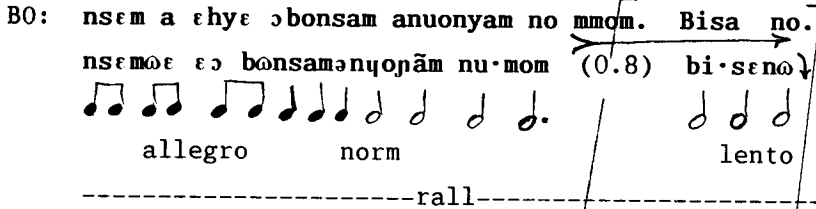
BO:

Honhom honhom bone no  
 hohohoho boni-noh  
  
 allegro rall

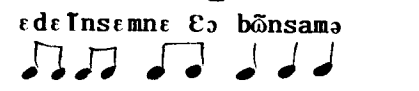
AY: The evil spirit won't have any influence on you. Why should it be the case that...

BO: Spirit! The evil spirit!

Example 6

BO: nsem a ehye obonsam anuonyam no mmom. Bisa no.  
 nsemoe eo bomsam nuporam nu-mom (0.8) bi-senoh  


AY:

ede n nsem na ehye obonsam  
 ede nsemne eo bomsame  
  
 allegro

AY: anuonyam? Nokore na | nokore na mepe se eda adi  
 nyopam (0.6) nokweɪl nānokweɪlnā mɪpɛsɛdɛ: die

norm                      allegro                      rall

B0: Nsem a ebeboa yen  
 nseməbeboajɛɪ

norm      lento

B0: (stop) those stories which glorify the devil. (Ask) stories that'll help.

AY: What stories glorify the devil? It's the truth I want to bring out.

The above examples and other cases of overlapping talk, one-at-a-time and other interactive categories indicate that turn-holding is signalled by either *allegro* or *accelerando* tempo with a simultaneous clipped-syllable-time rhythm.

In example 4, the next speaker interrupts the turn occupant at a place which would not normally be a turn yielding place. In order not to lose control of his turn ownership, the turn occupant upgrades by increasing his rate of talking and changing the rhythmic rate of his talk. By doing so, he manages to keep the turn snatcher off. Thus *accel* tempo and a clipped-syllable-time rhythm are seen as signalling further speakership by the current turn occupant.

In example 5 the turn occupant starts with a *norm* tempo and a syllable-time rhythm. Here we see that his turn stays uninterrupted. From [bia:] to [sə], however, the turn occupant slows down his tempo of talking and uses what sounds to my ears as a delayed-syllable-time rhythm. The next speaker immediately treats the *lento* tempo and the delayed-syllable-time rhythm as turn delimitative (an attempt by the turn occupant to terminate his turn) and interrupts him. Realizing that his turn occupancy is threatened, the turn occupant accelerates his tempo and changes the rhythmic organization of his utterance, and so wins back control of his turn.

The example above suggests that *lento* tempo and a delayed-syllable-time rhythm are turn delimitative whereas *allegro* or *accelerando* tempo and a clipped-syllable-time rhythm project talk from a current turn occupant.

In example 6, as in examples 4 and 5, the turn occupant is interrupted only when he slowed down his tempo of talking. There are two cases of overlap; in the first the turn occupant (B0)

lost his turn when he slowed down his tempo and changed the rhythm from syllable-time to delayed-syllable-time rhythm. The interrupter came in with a stretch marked with an allegro tempo and a clipped-syllable-time rhythm and managed to snatch the turn from the current speaker (B0). The new turn occupant (AY) slows down and is also interrupted by B0. AY, however, speeds up his rate of talking and B0 withdraws. From the above examples and my data as a whole, it appears that turn holding may be signalled by an allegro or accelerando tempo with a simultaneous clipped-syllable-time rhythm. Whenever a turn occupant reached a possible turn termination point and s/he was interrupted, these phonetic features were used to secure turn ownership. Whenever an interrupter went in with a relatively faster tempo (plus a clipped-syllable-time rhythm) than a turn occupant, the interrupter often won the turn occupancy.

##### 5. CONCLUSION

Conversational participants have a number of ways at their disposal of managing turn regulation. I have argued that

(a) allegro or accelerando tempo deployed singly or conjointly with a clipped-syllable-time rhythm projects more talk by a turn occupant; and

(b) lento or rallentando tempo and rall/delayed-syllable-time rhythm are turn delimitative. Thus I have shown that a close and systematic attention to phonetic detail leads to a clear understanding of how conversational participants manage conversations.

I have also emphasized the need for interactive categories to be used as the basis for phonological statements. In taking turns at talk, not all the phonetic cues mentioned in the core sections of this paper are present, but when they are present, they mark either turn holding or turn delimitation.

My analysis has been motivated by what conversationalists themselves do rather than by some phonetic or phonological theories. My findings about turn delimitation in particular and turn regulation in general are in line with those of Local, Wells and Sebba's (1985) work on turn delimitation in London Jamaican English, Kelly and Local's (1984) study on rhythm in Guyanese Creole, and Local, Kelly and Wells' (1986) paper on turn delimitation in Urban Tyneside English.

That some of the phonetic resources identified in this study as turn delimitative also perform a similar function in some varieties of English needs further consideration. Generally speaking, though, this study shows that there is a high degree of systematicity in the correlation between interactive categories and phonetic features. If the same amount of attention as is given by linguists, ethnomethodologists and social psychologists to syntax, gaze, pragmatic and content aspects of conversation, were to be given to its phonetic features, many hidden facts about conversational management could be unearthed.

## NOTES

<sup>1</sup>It is a device for rectifying mishearings, non-hearings and misunderstandings.

<sup>2</sup>Other phonetic features used in signalling turn completion and turn holding are: loudness, pitch, duration, creaky voicing and breathy voicing. These have been examined in Obeng (1987).

<sup>3</sup>Phonological analysis in which phonological statements are based on interactive categories (conversational material).

<sup>4</sup>Do not (strictly speaking) form part of the subject-matter of the conversation.





<sup>5</sup>McLaughlin (1984:270) defines back channel utterances as 'brief arguments, repetitions, or mirror responses by a listener that are believed to occur primarily during pauses in the turn of the speaker who has the floor; usually characterized by a reduced set of normal speaker-state signals'.

<sup>6</sup>Sociocentric sequences include such supportives or encouragers as **mmh**, **ehe**, **yes**, etc.

<sup>7</sup>A possible turn termination and hence turn exchange point.

<sup>8</sup>Although the successive syllables are isochronous, the interval between them are longer than those in turn initial or medial positions. Due to the *lento tempo*, the syllables themselves are also of longer duration.

<sup>9</sup>Transcription conventions:

[	overlap onset
]	overlap ending
=	talk begins in a latch position
↘	falling pitch movement (usually to the bottom of the speaker's pitch range).
↗	rising pitch movement
↘	falling pitch movement
	two (2) half beats
	one beat
	two beats
	three (3) beats
rall	rallentando tempo
accel	accelerando tempo
norm	norm tempo
(0.2)	pause within or between turns; given in tenths of a second
ʔ	creaky voicing
ɦ	breathy voicing
? ?	glottal hold
∞	inner rounding
ω	outer rounding
<	increasing loudness
>	decreasing loudness
ʔ	half silent beat
ʔ	one silent beat
⏟	two silent beats

- <sup>10</sup> Conversational situation in which there is a smooth turn exchange without any speaker being interrupted.
- <sup>11</sup> A bit corresponds to a phonetic syllable - an utterance produced by a single chest pulse.
- <sup>12</sup> The final segment of the turn occupant's turn and the initial segment of the next speaker's turn are almost, but not quite, simultaneous.
- <sup>13</sup> The successive syllables are isochronous but the interval between them is relatively shorter than those which occur turn in, say, turn final positions. The syllables themselves are also of very short duration.

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