

Overview of HIAT transcription conventions

Thomas Schmidt, 20 Nov 2008, revised 07 Jan 2011

This is a brief overview of the most important HIAT transcription conventions as described in

Rehbein, J.; Schmidt, T.; Meyer, B.; Watzke, F. & Herkenrath, A. (2004) Handbuch für das computergestützte Transkribieren nach HIAT. In: Arbeiten zur Mehrsprachigkeit, Folge B (56). [http://www1.uni-hamburg.de/exmaralda/files/azm_56.pdf]

It is meant as a help for those who do not read German or those who want to understand HIAT support in EXMARaLDA without having to delve too deeply into the theory behind HIAT. It is not meant as an equivalent substitute of the above publication. The most recent English publication on HIAT by one of its original authors is (to my knowledge) this:

Ehlich, K. (1992). HIAT - a Transcription System for Discourse Data. Edwards, Jane / Lampert, Martin (eds.): Talking Data – Transcription and Coding in Discourse Research. Hillsdale: Erlbaum, 123-148.

More recently, members of the Spoken Turkish Corpus project at METU Ankara (<http://std.metu.edu.tr/en/>) have published a very useful English transcription manual:

Ruhi, Ş.; Hatipoğlu, Ç.; Işık-Güler, H. & Eröz-Tuğa, B. (2010). A Guideline for Transcribing Conversations for the Construction of Spoken Turkish Corpora Using EXMARaLDA and HIAT.

1. Words

Standard orthography is the base model for the transcription of words, that is: word boundaries are set according to orthographic conventions and words are transcribed according to their standard spelling, unless their actual pronunciation deviates strongly from their standard pronunciation. In cases of strong deviation, the phoneme-grapheme correspondences of the respective orthography are used to make a so-called 'literary transcription'.

Examples:

German: 'zwohunnerfuffzich' (for 'zweihundertfünftig', the number 250)
English: 'luvly' (for 'loveley')

Literary transcription is to be used sparingly. Most standard phonetic phenomena of spoken language (like assimilations, elisions in final positions) should be transcribed with their standard spelling rather than literary transcription.

Capitalization is also done according to orthographic conventions. In German, for instance, all ordinary and proper nouns are capitalized as well as the word at the beginning of an utterance. When using HIAT for other languages, the capitalization rules of that language should be applied accordingly.

2. Special words

Special words are words which are either not taken into account in orthography rules (mostly semi-lexical things like interjections) or whose standard spelling does not follow the principle of phoneme-grapheme-correspondence (like abbreviations, numbers etc.). The basic rule for these special words is: describe their phonetic shape by the same logic as ordinary words. More specifically:

- Interjections: Use the spellings that are current in your language to describe interjections (e.g. 'ähm', 'äh', 'öhm' in German, 'eh', 'ehm', 'erm' in English, 'euh' in French). If there is no established spelling for a given interjection, use literary transcription to model its phonetic shape as closely as possible.
- Numbers and dates: Do not write numbers in digits, spell out their phonetic form (transcribe 'two hundred', not '200'). Do the same for dates (transcribe 'the second of August nineteen seventy', not '2.08.1970').
- Abbreviations: Words for which an abbreviated spelling exists in the orthography are nevertheless spelled out in transcription when they are not uttered as abbreviations (e.g. 'Saint Paul', not 'St. Paul'; 'Mister Bond', not 'Mr. Bond'; 'etcetera' not 'etc.'). Abbreviations which are uttered as such are transcribed in their standard form (e.g. 'USA') except when the standard form contains periods in which case the periods are omitted (e.g. 'hc', not 'h.c.').
- Spelling: Sequences of spelled letters are transcribed using the letters with spaces in between (e.g. 'London is spelled L o n d o n').

3. Unintelligible words and uncertainty in transcription

If a transcriber is uncertain about a word or a sequence of words, he should put single round brackets around the uncertain word(s). The closing bracket should always be placed inside the utterance (i.e. not after the utterance end symbol), and uncertain passages should not cross utterance boundaries.

OK: I am not (sure) I heard that right.
I am not sure I (heard that right).
I am not sure I heard that (right). (Did you) get it?

Not OK: I am not sure I (heard that right.)
I am not sure I heard that (right. Did you) get it?

If a stretch of speech is completely unintelligible, this is indicated by the string '((unintelligible))', possibly noting the length of the stretch, e.g. '((unintelligible, 2,5s))' for an unintelligible stretch which is 2,5 seconds long. In languages other than English, the corresponding translation of "unintelligible" should be used (e.g. '((unverständlich))' in German). If the unintelligible stretch is very brief, the description can be abbreviated accordingly (e.g. '((unint.))')

4. Non-Phonological phenomena

Non-phonological phenomena (e.g. coughing, laughing, throat clearing), as far as they are alternative (rather than simultaneous) to speech, are described between a pair of double round brackets, possibly noting the length of the phenomenon. Such phenomena can occur inside utterances, at the beginning of an utterance or in isolation.

I've got a really ((coughs)) sore throat.
I mean ((laughs, 1,2s)) this is extremely funny!
((coughs, 2s)) I smoked too much.
((clears his throat))

5. Pauses

All pauses have to be transcribed. Pauses are described according to their length. If the length of the pause is estimated, bullet points are used to indicate the length as follows:

- one bullet for a short interruption of the flow of speech (micro pause)
- two bullets for an estimated pause up to half a second
- three bullets for an estimated pause up to one second

If the pause is measured or if it is estimated to be longer than one second, a numerical description is used as follows:

((2,3s)) for a pause of 2.3 seconds

Pauses are attributed to speakers. The following rules are applied:

- Pauses between a change of speakers are attributed to the later speaker's utterance:

X [v]	I say something.
B [v]	•• And then it's my turn.

- Pauses within an utterance are attributed to the speaker who has the turn:

X [v]	I say •• something.
-------	---------------------

- The latter rule applies also when an utterance of one speaker is interrupted by a (usually short) utterance of another speaker:

X [v]	I say •• something.
B [v]	Yes!

- Pauses between two utterances of the same speaker are attributed to the later utterance:

X [v]	I say something. •• And then I add another thing.
-------	---

6. Events, segment chains and utterances

When transcribing in a musical score, the transcriber partitions the transcription into **events**. A new event is started at least at every change in the speaker constellation, that is whenever a new speaker starts or ends a contribution to the discourse. Thus, in the following excerpt, there are altogether 13 events – 8 for speaker X and 5 for speaker B.

	0	1	2	3	4	5	6	7	8	9	10
X [v]	Yes?	One moment please.	((coughs, 1s)) Okay.	So we said the second of october.			Oct	ob	er.	Yes that suits me.	
B [v]					Second of octo	ber.		Yes	three to four in the	afternoon.	

Note that, since events are purely temporally motivated entities, you can, in principle, start a new event at any point in time.

Segment chains are defined on the basis of events: a segment chain is any temporally contiguous sequence of events within a tier. Thus, in the above example, there are altogether 4 segment chains:

- (1) **X:** Yes? One moment please. ((coughs, 1s)) Okay. So we said the second of october.
- (2) **B:** Second of october.
- (3) **X:** October. Yes that suits me.
- (4) **B:** Yes three to four in the afternoon.

Like events, segment chains are more or less independent of an underlying theory about entities of spoken language.

In contrast to this, the concept of an **utterance** is motivated linguistically. Rehbein et al. (2004: 19ff) explain the concept in detail. In this overview, we only summarize the most salient characteristics of an utterance:

1. Each segment chain can be partitioned into one or more utterances. Utterances do not cross segment chain boundaries.
2. Utterance boundaries are identified using morphosyntactic criteria (e.g. word order) and intonational criteria (e.g. rising or falling contour).
3. The central concept in identifying and classifying an utterance is its mode.
4. HIAT distinguishes five utterance types. For each type, there is a corresponding utterance end symbol.
 - a. Assertions (utterance end symbol: period, e.g. "That suits me.")
 - b. Questions (question mark, e.g. "Does that suit you?")
 - c. Exclamations, addressations, demands, etc. (exclamation point, e.g. "Good morning!")
 - d. Aborted utterances (ellipsis symbol, e.g. "I just wanted to...")
 - e. Modeless utterances (superscript period, e.g. "Hm[·]")

Thus, the four segment chains of the above example can be segmented into altogether 8 utterances (1 question, 7 assertions)

- (1) **X:** Yes?
- (2) **X:** One moment please.
- (3) **X:** ((coughs, 1s)) Okay.

- (4) **X:** So we said the second of october.
(5) **B:** Second of october.
(6) **X:** October.
(7) **B:** Yes three to four in the afternoon.
(8) **X:** Yes that suits me.

Among the five utterance types, aborted utterances and modeless utterances are the hardest to classify. Most importantly, aborted utterances (as in (a)) have to be distinguished from utterances which contain a repair sequence (as in (b)).

- (a) I don't want... You cannot make me do that.
(b) I don't wa/ don't want to do that.

The decisive criterion here is whether

- we are dealing with a complete utterance in which some deficiency is repaired at the surface (repair sequence, example (b)) or
- the ongoing verbalisation of an utterance is aborted, and a new utterance is started (aborted utterance, example (a))

Modeless utterances are typically interjections uttered by a participant who is currently in the role of the listener and who does *not* claim the turn for himself. In other words: modeless utterances are typically listener signals.

7. Repairs

Repairs are self-initiated corrections. Typically a repair consists of three parts, a reparandum (the part to be repaired), an intervention (often a hesitation signal like "ehm") and a reparans (the repairing part), though not all of these components are present in every repair. In the transcription, the repair sequence is represented by a forward slash immediately after the reparandum, e.g.

Well his/ eh he would prefer to start later.

8. Transcriber's comments

An extra tier for every speaker (with category 'k' and type 'a') can be used for transcribers' comments. These comments should be exactly aligned with the part in the verbal transcription to which they refer, i.e. the comment and the thing commented on should be in events with identical start and end points.

	0	1	2	3
X [v]	I didn't have	(many)	ambitions.	
X [k]		any?		

Transcriber's comments typically give information of the following types:

- non-verbal behaviour which is parallel to speech (e.g. "laughing")

X [v]	I can't believe he really said that.
X [k]	laughing

- the standard form for a strongly deviating form in the verbal tier

X [v]	That is absolutely lublee.
X [k]	for: loveley

- IPA transcription of pronunciation peculiarities which cannot be adequately represented with the help of literary transcription
- possible alternatives in cases of uncertainty

X [v]	I didn't have (many) ambitions.
X [k]	any?

9. Other phenomena

In order to keep thing simple, the following phenomena are not mentioned here although HIAT has rules for their transcription:

- smooth transitions between utterances ("latching")
- speech act augments
- direct speech, citation etc.
- stressed syllables
- other non-segmental phenomena (modulation, speed etc.)
- announcements
- tones

For HIAT beginners, we recommend to ignore them for a while and start with the eight classes of phenomena described above.

HIAT Quick Reference

Words

- use literary transcription for strong **deviations** *luvly*
- use customary spellings for **interjections** *eh, erm*
- spell out **numbers and dates** *two hundred*
- spell out **abbreviations** *etcetera*
- write **spellings** as sequences of individual letters *L o n d o n*

Unintelligibility / Uncertainty

- put **uncertain words** or sequences of words in single parentheses *I am not (sure) of it*
- use the notation ((unintelligible)) for **unintelligible passages** *((unintelligible))*

Non-phonological phenomena

- describe **non-phonological phenomena** in double parentheses *((coughs))*

Pauses

- use one to three bullets for **estimated pauses** up to 1 second *•••*
- use a numerical description for **measured pauses** *((2,3s))*

Utterance terminators

- use a period for **assertions** *That suits me.*
- use a question mark for **questions** *Does that suit you?*
- use an exclamation point for **exclamations**, addressations etc. *Good morning!*
- use an ellipsis symbol for **aborted utterances** *I just wanted to...*
- use a superscript period for **modeless utterances** *Hm[.]*

Repairs

- mark the end of the **reparandum** with a slash *Well his/ eh he would prefer it.*

Transcriber's comments

- put **transcribers' comments** in a separate annotation tier

X [v]	That is absolutely lublee.
X [k]	for: loveley