Speech reconstruction guidelines for Czech data

(draft)

(Translation of manual in Czech: Marie Mikulová: Rekonstrukce standardizovaného textu z mluvené řeči. Manuál pro anotátory. 2008)

Abstract

This document contains instructions for the manual annotation that needs to be completed while building up the dependent corpus of spontaneous speech. The annotation is based on the so-called spontaneous speech reconstruction (SSR), i.e. the original segments of spontaneous speech that are often grammatically incorrect are edited in the way that is described in this document in order to meet written text standards, which can further be used for application of other annotation rules (that add especially information about syntactic structure of a sentence).

The annotation manual is meant for annotators of Prague Dependent Treebank of Spoken Czech, but it can be understood as a general manual to the annotation of spoken corpus of any language, if approached in a similar way.

Acknowledgement
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1 Basic Annotation Principles

When performing the SSR, the annotator's activity can be compared to the work of editor who processes a recorded interview that is going to be printed in a magazine: a conversation is changed into the written text (i.e. it follows the rules for written language); not only has its final form to be intelligible to the potential reader, but it also has to read well.

The output of the annotation is the so-called **standardized text** that is defined by the following factors:

- the text does not contain non-speech events,
- speech-specific features are removed,
- the flow of spoken language is divided into sentences,
- in general the text is intelligible and reads well,
- sentences follow the grammatical word order and common Czech syntax,
- only standard word forms are used,
- the text corresponds to the rules of Czech grammar.

Two basic principles are applied for the SSR from original segments of spoken language:

A. **The Content-Preservation Principle**: the modifications of the original speech segments may not affect the content; in other words: it is true that the contents communicated by the original speech are identical to the contents included in the standardized text.
B. **The Minimal Modification Principle**: modifications are performed only when it is necessary to achieve the written-text standard of the original speech segments.

1.1 Annotation Representation

Detailed description of the annotation is available in the TR-2006-33 technical report (ÚFAL MFF UK Praha, 2006). With regard to the needs of the annotation manual, only basic principles are mentioned here.

1.1.1 Annotation Layers

While performing the SSR, we work with the corpus of at least two annotation layers. In the Prague Dependency Treebank of Spoken Czech, however, we work with the corpus of three hierarchical levels.

1.1.1.1 Z-layer

The Z-layer is the lowest layer of the corpus. It is the automatically identified and automatically segmented transcript of the audio file.

1.1.1.2 W-layer

The w-layer represents the manual transcription of the discourse, i.e. everything the speaker has said including all slips of the tongue, coughing, pauses etc.
The so-called events are the basic units of the w-layer. The most important events (not only) for the SSR are the so-called **content events** that represent:
- recognized word forms (tokens, w-nodes of the **w** type)
- recognized non-speech events (w-nodes of the **`nonspeech`** type)
- recognized background noise (w-nodes of the **`background`** type)

At the w-layer, the events (w-nodes) are segmented in **turns**. The turn is primarily defined by a single speaker (the cases of overlapping speech allow for one turn to be associated with several speakers).

1.1.1.3 M-layer

The m-layer contains the standardized text that is further subjected to the morphological annotation (then the text can be annotated at higher syntactic levels).

Lexical units (word forms, numbers, punctuation) are the basic units of m-layer and they are represented by **m-nodes** of the **`m` type.** Other discourse-relevant features of speech (especially non-speech events) are then represented by special **m-nodes** of the **`nontext` type**.
The m-nodes are segmented in the so-called **s-elements** that represent individual sentences of standardized text.

By means of various modifications of the manual transcription represented at the w-layer, the annotator creates a standardized form of discourse at the m-layer of the corpus. If the manual transcription at the w-layer is not available, it is necessary to create such transcription first, i.e. to manually correct the automatically identified and segmented discourses captured at the z-layer of the corpus. Instructions for the manual transcription of speech segments at the w-layer are not included in this manual; they are partially described in the TR-2006-33 (ÚFAL MFF UK Praha, 2006) and they will be treated in a separate manual on the comprehensive basis.

1.1.2 Relations between the m-layer and w-layer units

The differences between the input segments of the manual speech transcription (captured at the w-layer) and their standardized form at the m-layer, i.e. the performed modifications, are captured in the relations between both layers and in the relations between the m-layer units (m-nodes) and the w-layer units (content events, w-nodes).

Every m-node that corresponds to a w-node contains a reference to that w-node.
The heart of references between the m-layer and w-layer is formed by the references between the `m` type m-nodes (representing tokens at the m-layer) and the `w` type w-nodes (representing tokens at the w-layer).
The following statements are true for the relations between the `m` type m-nodes and the `w` type w-nodes.
The `m` type m-node does not have to contain any reference to the w-layer.

The `m` type m-node that contains no reference to the w-layer is called **inserted m-node**. It represents insertions that are necessary from the perspective of grammar and content and that do not correspond to any `w` type w-node (token) at the w-layer (see 4.2.2 *Insertion*).

The `w` type w-node does not have contain any reference from the m-layer.
The **`w`** type w-node which is not referred to from the m-layer represents a deleted, discourse-irrelevant lexical unit (see 4.2.1 *Deletion*). It is called **deleted w-node.**

The order of the `m` type m-nodes at the m-layer does not have to correspond to the order of the `w` type w-nodes at the w-layer.
Changes in word order (see 4.2.4 *Word order changes)* are captured by a different arrangement of nodes at both layers.

In case that the text is unintelligible and deduced (see 4.2.3.5 *Unintelligible text span*) the `m` type m-nodes contain reference to the `nonspeech` type w-node with the `unintelligible` value.

Other types of references include references from the `nontext` type m-nodes (that represent discourse-irrelevant non-speech events) to the `nonspeech` type w-nodes (that represent non-speech events), or possibly to the `background` type w-nodes (that represent background noises; see 4.2.5 *Annotation of discourse-relevant non-speech events*). The following statements are true for the relations between the `nontext` type m-nodes and the `nonspeech` or `background` type w-nodes.

The m-node of the `nontext` type does not have to contain any reference to the w-layer.
If there is no reference from the `nontext` type m-node to the w-layer, then the m-node stands for a discourse-relevant non-speech event that has not been captured at the w-layer (e.g. an emphasis put on a word, whispering etc.).

The w-node of the `nonspeech` and `background` type does not have to contain any reference from the m-layer.
If there is no reference from the m-layer to the `nonspeech` and `background` type w-node, the non-speech event represented by the w-node is discourse-relevant from the perspective of the m-layer, or its meaning has been captured by the means of written text.

Overview of references from m-nodes to w-nodes

Type of m-node	Referenced types of w-nodes
`m` type m-node	`w` type w-node
	`nonspeech` type (`unintelligible`) w-node
	Ø
`nontext` type m-node	`nonspeech` type w-node
	`background` type m-node
	Ø

Comment to typing of references to the w-layer:
In manual annotation, references from m-nodes to w-nodes are not typed. Types of references will be added to the annotated data automatically when the annotation is finished.

The following types of references between the m-nodes and w-nodes have been considered so far:
A. Types of references from the `m` type m-nodes to the `w` type w-nodes:

- **`basic`**: the form of the m-node is identical to the token of the w-node or there were only the so-called orthographical modifications (*4.1 Orthographical modifications*),
- **`num`**: orthographical modifications of numbers (see *4.1.3.1 Numbers and digits*),
- **`substitution`**: the form or the lemma of an existing m-node was altered, and it is different from the one of the corresponding w-node (substitution was performed – – see *4.2.3 Substitution*).

B. Types of references from the `nontext` type m-nodes to the `nonspeech` and `background` type w-nodes:

- **`nonspeech.`**

1.1.3 Sentence Attributes

The m-nodes at the m-layer are segmented into the so-called **s-elements**, which represent individual sentences of the standardized text.

Each s-element contains attributes:

- **`w-speaker.rf`**: identification of the speaker who presented the content. The attribute value is added automatically after the manual annotation is finished.
- **`is_modified`**: this attribute indicates whether the sentence represented by the given s-element has or has not been (had to or did not have to be) altered with respect to the corresponding w-layer segment. The attribute is added automatically after the annotation is finished.
- **`stype`**: type of content of the given sentence. The attribute is annotated manually (see 3 *Sentence types by content*).

Each s-element contains two (non-typed) references to the w-layer: to the first and to the last content event that belong to the reconstructed sentence.
The reference of the s-element (`w-begin.rf`, `w-end.rf`) determines the span of the w-layer that has been used as an input for the reconstructed sentence represented by the s-element (see 2.1 *Indicating sentence borders in spontaneous speech*).

1.2 The Annotation Procedure

The following **annotation procedure** has been set for the SSR:

1. The annotator reads the entire manual transcription of speech captured by the w-layer.
2. When something in the text is unclear or ambiguous, the annotator listens to the corresponding part of the original audio recording.
3. The annotator performs the sentence segmentation.
4. The annotator smoothes sentences in order to meet the written-text standards and to maintain annotation principles by means of the modifications of deletion, insertion, substitution and word order change.
5. The annotator checks the references to the w-layer (from both m-nodes and s-element).
6. The annotator determines the type of sentences.

7. When the annotation of the file is finished, the annotator reads the entire standardized text and adds further modifications whenever necessary.

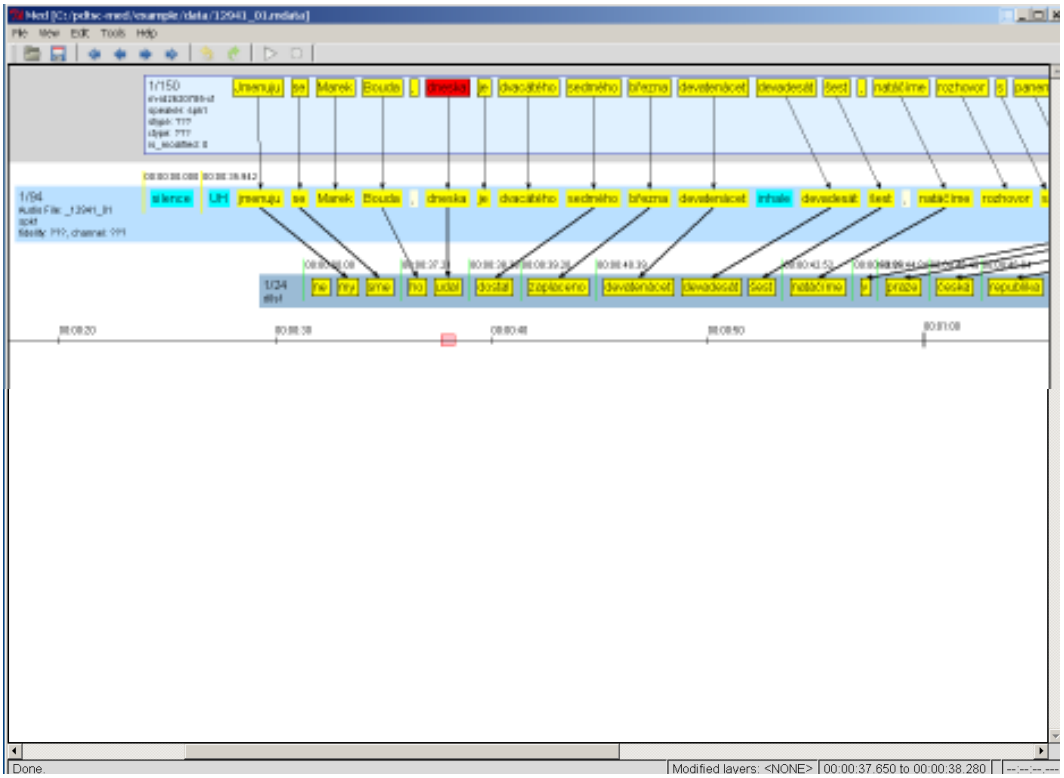
1.3 The MEd Annotation Tool

The annotation is performed with the help of the MEd annotation tool that has been developed exclusively for this purpose. The z-layer, w-layer and m-layer and their reciprocal interconnections are displayed in the main annotation window of the annotation tool. A time line representing the audio recording is displayed under individual layers of the corpus.

The annotation tool can:

- segment the speech (manual transcription) to sentences, assign attributes to sentences;
- move the words at the m-layer arbitrarily in terms of their order in a sentence;
- perform deletion, insertion, connection, other modification of words including the change of form or lemma;
- interconnect the m-node at the m-layer with the corresponding w-nodes at the w-layer so that we can distinguish the units at the w-layer that relate to the given m-node (the units from which the m-node was "created"); or possibly determine the type of interconnection;
- play the original audio recording that is necessary to listen to, particularly in cases when neither the original transcription (e.g. given the absence of prosodic information, information about the length of pauses and given the other "loss of information"), nor its context allow the annotator to decide on the appropriate modification.

The MEd annotation tool



2 Sentence Segmentation

Speech segmentation at the z-layer always results from the automatic procedure performed within the framework of the speech recognizer in use; it is performed primarily (by an automatic procedure) on the basis of occurrence of a (longer) span of a non-speech event. Resulting segments more or less correspond to sentences but it is not necessary. The w-nodes at the w-layer are segmented only to turns. There is no other segmentation performed within the scope of a turn. Thus, actual segmentation to sentences does no occur until the SSR at the m-layer.
The sentence segments created during the SSR are supposed to meet the written-text standards. The resulting (reconstructed) sentence can even be incomplete (for instance an unfinished thought) but it must be shaped as one of the four clause types described in the tectogrammatical annotation manual. These are the following types:

- **verbal clause** (possibly containing an ellipsis),
- **nominal clause**,
- **interjectional clause**,
- **vocative clause**,

or their combination.

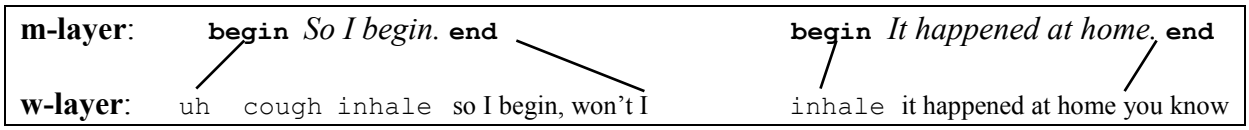
Sentence at the m-layer is the communication of content (i.e. it has some content); content-less text spans (included in the spontaneous speech and captured at the w-layer) do not have their counterparts at the m-layer. For more information, see 2.2.5 *Content-less text span*.

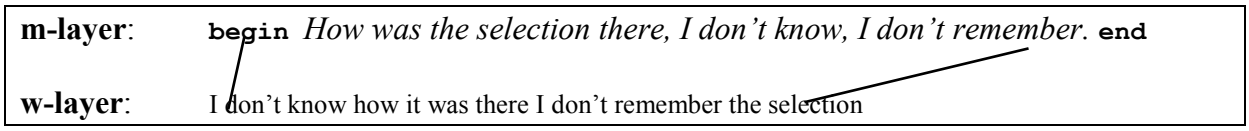
2.1 Indicating Sentence Borders in Spontaneous Speech

The sentence at the m-layer is a sequence of m-nodes determined by the so-called s-element. This sequence corresponds to one or several spans of recognized content events at the w-layer. This span of content events that has been used as an input for the output reconstructed sentence represented by the s-element is determined by two references to the w-layer.

Each s-element contains two references to the w-layer: the reference to the first and the reference to the second content event that was used to for the reconstructed sentence.

References from two different s-elements can cross (in case of overlapping speech, see section 2.2.4 *Overlapping speech*). There can be content events at the w-layer that were not used to constitute any reconstructed sentence (see 2.2.5 *Content-less text span*).
Non-speech events such as `ehm`, `breath`, `cough`, `mouth` that occur immediately before (or immediately after) the speaker's own words are always added to a sentence at the m-layer. Before actually speaking, the speaker often coughs, sais "ehm" or takes a breath. Those phenomena are included in a sentence at the m-layer through the `w-begin.rf` (and `w-end.rf`) reference. Similarly, all text spans – deleted superfluous connectors, deictic words, filler words and phrases, false starts, repeating text spans, fragments etc. – that were deleted from the m-layer are included at the m-layer (see 4.2.1 *Deletion*).
Most often, every content event at the w-layer has a corresponding sentence at the m-layer. A content event at the w-layer can be left over only in case of the so-called content-less text span.





2.2 Determining Sentence and Clause Borders

2.2.1 Clause Borders

The following principle is applied when determining the borders of clauses:

- **The Principle of the longest possible clause:** the clause is supposed to include as many potential sentence elements as possible to remain acceptable both syntactically and semantically.

Examples:
we met *noise* in Prague *noise*
We met in Prague.

we met *noise* in Prague *noise* at Vyšehrad *noise*
We met in Prague at Vyšehrad.

we met *noise* in Prague *noise* me and Paul *noise*
Me and Paul, we met in Prague.

2.2.2 Sentence Borders (connecting clauses in complex sentences)

When connecting clauses into complex sentences, too long sentences are to be avoided. **A complex sentence should not contain more than three main clauses**. Shorter sentences are preferred. When the speaker speaks continuously without pause or dropping intonation, repeatedly using the connective *and*, his turn has to be chunked into several shorter complex sentences.

We do not connect incoherent contents.
Example:
in 1957 there I was on holiday in *begin* the Jeseníky mountains *end* the first time in the mountains actually *breath* and it was a tourist tourist holiday, we did lotta hiking every day *breath* we were staying at *begin* the saddle Červenohorské sedlo
In 1957 I was on holiday in the Jeseníky mountains, the first time in the mountains.
It was a tourist holiday.
We did lot of hiking every day.
We were staying at the saddle Červenohorské sedlo.

We do not add any new information to the answer to a question.
Example:
Are you in touch with her up to the present time?
no I am not in 1959 I then moved to *begin* Plzeň *end* and then we somehow *breath* she actually also married to another place from *begin* Roztoky *end* , so we have not seen each other since, however there is a meeting soon, *breath* so we shall possibly meet
No, I am not.
I then moved to Plzeň in 1959 and she married to another place from Roztoky as well, so we have not seen each other since.
However, there is a meeting soon, so we shall possibly meet.

Superfluous connectives indicate a new span (see 4.2.1.4 *Superfluous connectives*).
Example:
my parents died soon and so there was a certain Herman family living in our house for thirty years, they has the only son, so since we had no grandma, so she was an aunt
My parents died soon.
There was a certain Herman family living in our house for thirty years, they had the only son.
Since we had no grandma, she was an aunt.

Other examples:
breath but now they just somehow heard from~ from another girl who *breath* was out classmate as well and who I was in touch with then, *breath* because my husband was actually from a neighboring village that was *breath* the former classmate of mine and so it was through her that they somehow heard about me
But now they somehow heard about me from another girl who was our classmate as well.
I was in touch with her then because my husband was from a neighboring village where also the former classmate of mine was from.

and then we were walking I do not know anymore how long it took and when we got there then it happened and it was the end of all hope
Then we were walking.
I do not know anymore how long it took.
When we got there, it happened.
It was the end of all hope.

uh I certainly cannot complain about my childhood my patents were *inhale* very kind and tolerant I on the other hand wasn't so tolerant of them and *inhale* I was one of the children who *noise* they were worrying about a lot I guess *inhale* particularly then in subsequent years when I *inhale* was already what can be called politically active *inhale* the worries of my parents were increasing particularly after the occupation *inhale* of Czechoslovakia
I certainly cannot complain about my childhood, my parents were very kind and tolerant.
On the other hand I wasn't so tolerant and I guess I was one of the children who the parents were worrying about a lot.
Particularly in the subsequent years, after the occupation of Czechoslovakia, when I was already what can be called politically active, the worries of my parents were increasing.

I think the resoluteness of Czechs or of this nation *inhale* that led up to two mobilizations was kind of you know *uh* the optimism *inhale* and the *noise* reliance on the help of allies of that time England and France *inhale* and the Soviet Union was so large that we felt kind of safe after all behind the behind *noise* the Czech Maginot Line you see behind the *uh* behind the *noise* fortresses *inhale noise* with the army that was well trained on the practical basis *inhale noise* and as later historic investigations showed so it the optimism was justified
I think that Czechs or this nation had such a resoluteness, leading to two mobilizations, that the optimism and the reliance on the help of allies of that time, England, France and the Soviet Union, were so large that we felt sort of safe after all behind the Czech Maginot Line, behind the fortresses with the army that was well trained on the practical basis.
As later historic investigations showed, the optimism was justified.

Did you know him personally as well?
I knew him personally, I knew him personally very well because he chose me
I knew him personally.
I knew him personally very well because he chose me.

2.2.3 Discourse-Relevant Fragments

When a discourse-relevant sentence has evidently not been finished, be it deliberately or due to an interruption by another speaker, the utterance is to be left incomplete.
In the standardized text, especially the incomplete utterances that carry content are analyzed; discourse-irrelevant fragments (e.g. *And there was…; It…; Because then, how…)* are erased without a substitute and are not represented in the standardized text.
Discourse-relevant fragment is marked with **three dots at the end of the utterance**.
If the speaker's idea is evident, we change the incomplete utterance in a complete utterance while reconstructing – we deduce the content (see 4.2.2.2 *Unexpressed text spans*).

NB! We distinguish between incomplete utterances and fragments (see 4.2.1.8 *Fragments*). In contrast to fragment, an incomplete utterance is the utterance that was meant to be expressed (its content to be told) but that was not completed for some reason. On the contrary, fragment is a piece of utterance (the content) that was not completed deliberately.

Examples:
spk1
in the time when you were in Palestine were you in correspondence with Czechoslovakia with parents or
Were you in correspondence with Czechoslovakia, with parents in the time you were in Palestine or…
spk2
with Czechoslovakia not, but with parents with the help of the Red Cross where I've also learned they had been deported
Not with Czechoslovakia, but with parents with the help of the Red Cross where I have also learned that they had been deported.

breath so there is my oldest daughter at this photo, me *EHM* grandson , granddaughter and I should have taken my specs yeah and my daughter the second
At this photo, there is my oldest daughter, me, grandson, granddaughter…
I should have taken my glasses.
... and my second daughter.

spk2
they exa- they always told me the exact date when I would be released in the given date I was never released
They always told me the exact date when I would be released. I was never released in the given date.
spk1
how did you get finally
How did you get finally...
spk2
finally the day arrived when I was released and it was some time in October I'm trying to recall on about when it was
The day finally arrived when I was released, and it was some time in October.
I'm trying to recall when it was.

spk2
on the way back, all the buses were quiet as a grave, one might have heard a feather fall, in was a huge disappointment unfortunately but on the other hand it brought about
On the way back, all the buses were quiet as a grave.
One might have heard a feather fall.
Unfortunately, it was a great disappointment but on the other hand it brought about…
spk1
so they relegated
So they relegated?

spk2
and the decoration was under inspection, and people who lacked it they were in trouble windows had to be decorated, our flags, *breath* soviet flags and woe betide when a custodian of the house
The decoration was under inspection and people who lacked it were in trouble.
Windows had to be decorated – our flags, soviet flags.
And woe betide when a custodian of the house...
spk1
what kind of trouble
What kind of trouble?

spk2
well it was too much there
There, it was too much…
spk1
Unfortunately, we are out of time.

2.2.4 Overlapping Speech

When two (or more) speakers make different utterances simultaneously or interrupt one another, the annotator is supposed to merge the discontinuous segments into semantically and syntactically **complete utterances**.
As a last resort (if appropriate), we do not merge the utterances; instead, we indicate the reciprocal interruption of speakers: failure to complete the utterance is represented by three dots at the beginning of the utterance, and continuation of the previously interrupted utterance is represented by three dots at the beginning of the utterance.

Examples:
spk1
inhale how did your classmates treat you I mean those who knew you were Jewish did you *inhale* encounter spk2 I did't have spk1 a display of hostility in your childhood
How did the classmates who knew you were Jewish treat you?
Did you encounter a display of hostility in your childhood?
spk2
I didn't have spk1 with a display of hostility in childhood spk2 I didn't have any problems in this respect
I didn't have any problems in this respect.

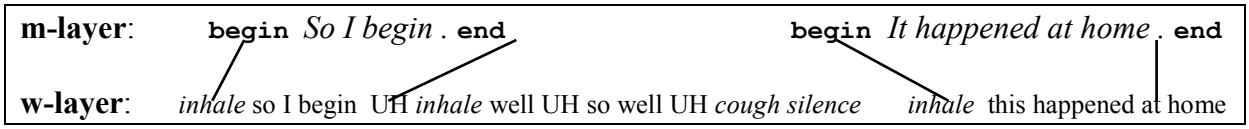
spk1
inhale after elementary school, after primary school you started to study at grammar school
After elementary school, after primary school you started to study at grammar school.
spk2
at high spk1 how was it there spk2 grammar school yes
At grammar school, yes.
spk1
How was it there spk2 grammar school yes spk1 *inhale* what did you do there
How was it there?
What did you do there?

spk1
what 'bout the weather
What about the weather?
spk1
now it should spk2 I didn't watch the forecast, my dad watches the forecast and he said that spk1 now it should be warm and then cold again
Now it should be warm and then cold again?
spk2
I didn't watch it, my dad watches the forecast and ha said that spk1 now it should be warm and then cold again spk2 that it should be warm for three days and but you can watch it today
I did not watch it, my dad watches the forecast and he said it should be warm for three days.
But you can watch it today.

2.2.5 Content-Less Text Span

In spontaneous speech, there can sometimes occur also the (longer) spans with no content. These are mainly sequences of non-speech events and/or function words that obviously cannot be included during the sentence segmentation at w-layer in any segment that corresponds to the sentence at the m-layer (e.g. hesitation at the beginning or at the end of a sentence).

Content-less text spans do not correspond to any s-element at the m-layer.



Following cases are interpreted as content-less text spans:

A. a sequence of non-speech events and/or function words, that is clearly separated from other discourse-relevant utterances e.g. by means of a longer pause, a noise, a coughing. Example (content-less text span is underlined):
I left UH inhale no UH so it cough noise I never came back again
I left.
I never came back again.

B. discourse-irrelevant non-speech events `noise`, `cough`, `laugh` in the background of a dialogue: their originator is a participant in the dialogue who does not speak at the very moment (but e.g. who coughs because s/he has a cough), or a person that do not participate the dialogue at all.
Example:
spk1
there were better places to take a photo there than this one, but we were taking it with a digital spk2 cough spk1 so we project it at home
There were better places to take a photo there than this one.
But we were taking it with a digital camera so we project it at home.

C. discourse-irrelevant affirmative confirmation of the other speaker (listener) with the content of the first speaker's speech (*yes, I see*, the `EHM` non-speech event and so on). Speech of the first speaker is not interrupted at all by this (see also 3 *Sentence types by content*).
Example:
spk1
there were better places to take a photo there than this one, but we were taking it with a digital camera spk2 yes spk1 so we project it at home
There were better places to take a photo there than this one.
But we were taking it with a digital camera so we project it at home.

D. "empty" incomplete utterances that were not included in the standardized text (see also *2.2.3 Discourse-relevant fragments*).
Examples:
spk2
and the decoration was under inspection, and people who lacked it they were in trouble windows had to be decorated, our flags, *breath* soviet flags and be it so
The decoration was under inspection and people who lacked it were in trouble.
Windows had to be decorated – our flags, soviet flags.
spk1
what trouble
What trouble?

3 Sentence Types by Content

Each sentence is evaluated in terms of content importance in context of the whole text. The type of the content of the sentence is defined, i.e. whether the sentence brings a new piece of information or whether it is a question, imperative, agreement of the speaker etc.

We distinguish five types of sentences; the information about the sentence type can be found in the `stype` attribute that goes with the s-element that identifies the sentence boarders.

Values of the `stype` attribute

`information`	information, discourse-relevant sentence
`instruction`	imperative, request for the second speaker to perform something
`guestion`	question for information
`confirmation`	affirmative confirmation of the second speaker (listener) with the content of the first speaker's utterance
`other`	other type

The `information` value is assigned to the sentences that do bring new relevant pieces of information to the final reconstructed text. In no case can the sentences with the `information` value be left out of the standardized text.
From a formal point of view, these are mainly declarative sentences (or possibly optative sentences, exclamatory sentences, rhetorical questions).
Examples:
I am eighty years old.
In Prague.
Oh, it was terrible.
I wish it did not happen.
Yes. (answer to yes/no question)

The `question` value goes primarily with yes/no questions and wh-questions that ask for information. It does not go with exclamatory and rhetorical questions or with the questions that represent a request if fact (and they are assigned `information` or `instruction` according to their meaning).
From a formal point of view, these are interrogative sentences.
Examples:
How old are you?
How did you spend your childhood?

The `instruction` value goes with the sentences that represent order, request, the wish of a speaker that the other speaker should perform something or should follow his/her instructions.
From a formal point of view, these are mainly imperative sentences and partly questions representing a request.
Examples:
Let's stick to your childhood.
Tell us how you spent your childhood.
Tell us something about those days.
Would you close the window?

The `confirmation` value is assigned to the sentences that represent the other speaker's (listener's) affirmative confirmation with the content of the first speaker's utterance without the utterance being interrupted in any way; the speaker does not change the subject on the basis of the confirmation. Such sentences are commonplace in conversation, they do not carry information, they do not contribute to the content of the conversation, and they can even be skipped without losing the information value of the text.
Note: In SSR, these "agreements" are omitted as content-less text span (see 2.2.5 *Content-less text* span) in most cases; however, it may sometimes be appropriate to capture such agreement – then it has the `confirmation` value.
NB! The `confirmation` value is not to be assigned to the answers to yes/no questions!
Examples:
It is true.
OK.
I agree.
I see.
Yes.
Sure.
I understand.

For other undefined cases (that are at variance with the aforementioned values) we use **the `other` value**.

If there is a sentence containing two clauses that should get different `stype` attribute value, the whole sentence is assigned the same value as the last clause of the sentence. However, if appropriate (in case of long sentences), the given span can be divided in two clauses with its own `stype` attribute value having been assigned.
Examples:
`instruction`
It is funny, let us see another photo.

4 Text Modifications

The most essential part of the annotation is various types of modifications of the input transcription at the w-layer performed in order to make the text conform to written-text standards. There are two basic types of modification:

- **Orthographical Modifications**
- **Substantial Modifications**

4.1 Orthographical Modifications

Orthographical modifications represent regular modifications of input text that result from the basic condition of a standardized text; that is, the standardized text meets the general characteristics of a written text and complies with the rules of Czech orthography.

Under orthographical modifications we understand:

- **Deletion of Discourse-Irrelevant Non-Speech Events**
- **Orthographical Issues**
- **Transcription of Words with the Help of Non-Alphabetic Tokens**

4.1.1 Deletion of Discourse-Irrelevant Non-Speech Events

Non-speech events (e.g. breathing, coughing) are consequently recorded at the w-layer. Only discourse-relevant non-speech events are preserved at the m-layer (see also 4.2.5 *Annotation of Discourse-Relevant Non-Speech Events*).

Most of the discourse-irrelevant non-speech events are deleted from the m-layer without substitution. The deleted non-speech events are usually included in a segment of the m-layer by means of `w-begin.rf` and `w-end.rf` references (see 2.1 *Indicating Sentence Borders in Spontaneous Speech*). Only the non-speech events that make part of content-less text spans are not included in segments at the m-layer. It is for example the independent `ehm` that has the function of the moderator's agreement (see also 2.2.5 *Content-Less Text Span*)

Summary of non-speech events at w-layer

`click`	tongue smacking
`mouth`	lip smacking
`cough`	coughing
`laugh`	laughter
`breath`	breath noise
`inhale`	inhalation
`silence`	silence, pause
`uh, ehm`	uh, um, uh-huh, uh-hum, hm, ehm
`noise`	background noise
`unintelligible`	unintelligible span

Discourse-irrelevant non-speech event do not correspond to any node at the m-layer. There is no reference to a discourse-irrelevant non-speech event from the m-layer.

Examples:
silence mouth inhale so maybe I could say something more *breath uh silence*
I could maybe say something more.

silence inhale some people *uh* stuck in my *inhale* memory very much *inhale* from the concentration camp *silence*
Some people from the concentration camp stuck in my memory very much.

4.1.2 Orthographical Issues

The standardized text is supposed to meet written-text standards (those rules do not have to be obeyed by adopted transcription rules concerning the notation of spontaneous speech segments at the w-layer).

Two things are especially important at this point:

- **Punctuation**
- **Capitalization**

4.1.2.1 Punctuation

The m-layer output text is supposed to contain correct **punctuation** (commas, periods, dashes, quotation marks, colons, brackets). They are represented by a single m-node.

An inserted m-node representing a punctuation mark contains no reference to the w-layer.

4.1.2.1.1 Comma, Period, Exclamation Mark, Question Mark, Quotation Marks

Commas, terminal punctuation characters (period, exclamation mark, question mark) and punctuation characters that mark direct speech (quotation marks and colon) are used in accordance with the rules of Czech orthography.
If a direct speech is formed of more sentences, then there is only one pair of quotation marks (the initial and terminal one) but the number of segments corresponds to the number of sentences. If there is a reporting clause, it is in the first segment together with the first sentence of the direct speech.
Even the "non-dictionary" words (see 5.2 *Reconstruction of "Non-Dictionary" Words*) and strong expressive, vulgar, metaphoric and other expressions are placed between quotation marks.

Examples:
he said I was there but nobody believed him
He said, "I was there," but nobody believed him.

inhale we were thinking, well, but it's it's not far after all my, *click inhale* if they take us, we're going with them, we'll get here to clo- closer to Prague like this
We were thinking, "After all, it is not far.
If they take us, we are going with them.
Like this, we will get closer to Prague."

I can say I , *inhale* remember it till present that *inhale* EHM when I was a small girl *inhale* EHM my mum wrote into my scrapbook like *inhale* when you're hurt don't seek compassion, or at least not from others *inhale* shut yourself away and suffer proudly *inhale* hide your tears and smile at them
I can say, I remember till present that when I was a small girl, my mum wrote into my scrapbook: "When you are hurt, do not seek compassion, or at least not from others.
Shut yourself away and suffer proudly, hide your tears and smile at them."

4.1.2.1.2 Brackets

In a standardized text, it is possible and advantageous to use brackets to mark a parenthesis. However, brackets (parentheses) should be used advisedly and their necessity should be considered carefully. Parentheses and digressions are commonplace in a spontaneous speech but in a written text it is better to substitute them for a separate segment incorporated in the text (rather than for a parenthesis marked by brackets). Syntactically non-incorporated expressions are used with parenthesis.

Examples:
and when I managed to get my daughter to England as an au-pair au-pear, which is a well known term, I don't have to explain, it's a kind of help with keeping house, a family member, so I have arranged with my wife to try it, how long we would be able to stay abroad in a foreign country
When I managed to get my daughter to England as an au-pair (it is a well known term, I don't have to explain it, it's a kind of help with keeping house, a family member), I have arranged with my wife to try how long we would be able to stay abroad, in a foreign country.

finally I managed to find a job in O P B H Prague one, housing economy district office.
Finally I managed to find a job in OPBH Prague 1 (Housing Economy District Office).

breath and the following day we went to *begin* Sokolov *end* to *begin* Falknov *end* , *breath* today *begin* Sokolov *end* and we were there in a band too until the fifteenth of April nineteen forty-six.
The following day we went to Falknov (Sokolov today) and we were there in a band too, until April 15, 1946.

4.1.2.1.3 Dash

In a standardized text, it is possible to use a dash as well, particularly in order to separate elements that were added subsequently. Similarly to brackets, the use of a dash should be considered carefully. Dashed cannot be used to mark a parenthesis (i.e. in place of brackets)
Examples:
we used to play marbles when we were children , you know the children's games
We used to play marbles when we were children – you know the children's games.

but everybody lived here around *begin* Plzeň *end* , *begin* Dobřany *end* , and *begin* Litice *end* , and those *begin* Robčiče *end* , well and mommy was in these *begin* Útušice
Everybody lived here around Plzeň - Dobřany, Litice, Robčiče.
Mammy was in Útušice.

in *begin* Rokycany *end* I attended junior secondary school for three years *breath* the first, the second and the third
In Rokycany I attended junior secondary school for three years – the first, second and third.

breath well she taught us all the subjects , the subjects , that were in the first grade such as figures, reading, natural sciences
She taught us all the subjects that were in the first grade – figures, reading, natural sciences.

4.1.2.1.4 Hyphen

Hyphen is used in accord with the rules of orthography.

Examples:
in the district, actually it is not a district any moo~more , *begin* Plzeň *end* South
In the district, actually it is not a district any more, Plzeň-South.
Note: Words connected with a hyphen/dash (*Plzeň-South, twenty-five*) are represented by three m-nodes at the m-layer.

4.1.2.1.5 Colon

After a careful consideration even a colon can be used, particularly to introduce a listing.

Examples:
and a curiosity we were once *breath* EHM in a cha~ EHM chalet *begin* Vrátná *end* it was EHM called we had a lunch there *breath* and suddenly we stared *breath* and the actor Vojta *begin* was there
A curiosity: We were once in the Vrátná chalet.
We had a lunch there and suddenly we stared and the actor Vojta was there.

and when I opened , EHM EHM opened the envelope , *breath* there was a card there *breath begin* František Slivoně *end breath begin* Křimická *end* one hundred and six *begin* Plzeň
When I opened the envelope, there was a card there: František Slivoně, Křimická 106, Plzeň.

inhale these are my parents , *click* mamma Hermína on the left, *inhale* father Eduard on the right
These are my parents: mamma Hermína on the left, father Eduard on the right.

we got there apples , pears , cherries *breath* and my wife grows vegetables celery , *breath* kohlrabi , cauliflower all kinds of things
We have there apples, pears, cherries and my wife grows vegetables> celery, kohlrabi, cauliflower, radishes, all kinds of things.

4.1.2.2 Capitalization

In a standardized text, capital and small letters are written in accord with the rules of Czech orthography.

There are especially following changes:

- **capitalizing at the beginning of sentences**
- **capitalizing in proper names**.

Example:
long live Havel
Long live Havel.

4.1.3 Transcription of Words with the Help of Non-Alphabetic Tokens

Everything that has been said is usually recorded in words (through letters) at the w-layer. However, non-alphabetic tokens (numbers and other symbols) are often used to notate certain words in a written text.

4.1.3.1 Numbers and Digits

Various numeral data that are recorded at the w-layer the same way they were pronounced (i.e. as words) are captured in the way that is usual for common text (i.e. either in words or in digits) at the m-layer. In general, one-word numbers are reconstructed in words and multi-word numbers are reconstructed in digits (even the one-word compound number of the *jedenadvacet* (=lit. *one-and-twenty*) type is written in digits). In mathematical context, numbers are always written in digits.

Examples:

three
three

twenty-three
23

first
first

twenty-sixth
26th

eight times
eight times

twenty-five times
25 times

one plus two equals three
1 + 2 = 3

Modification of a number that is at the w-layer written in words into the number written in digits is regarded as a special type of orthographical modification (i.e. not the substantial modification) even in case when digits substitute a number the ending of which was pronounced as a substandard one (e.g. *čtyřicátej pátej → 45th).* For more information, see 5.1 *Reconstruction of Numbers*.

4.1.3.2 Other Non-Alphabetic Tokens

There are other words besides numbers that can be transcribed by non-alphabetic tokens. The following rule is applied: non-alphabetic tokens are used only if necessary, i.e. notation in words is preferred. Non-alphabetic token is used only in cases where its usage is completely usual

Examples:

two per cent
two per cent

twenty-three per cent
23 per cent

twenty-one dollars
21 dollars

třicetiprocentní
třicetiprocentní (=thirty per cent; adjective*)*

dvacetipětiprocentní
25procentní (=25 per cent; adjective*)*

two plus three equals five
2 + 3 = 5

4.2 Substantial Modifications

The most important part of the annotation are the so-called **substantial modifications** of the transcribed input text. In contrast to orthographical modifications, they affect the form of the input text to great extent.

The following types of substantial modifications are available:

- **Deletion**,
- **Insertion**,
- **Substitution**,
- **Word Order Changes**,
- **Annotation of Discourse-Relevant Non-Speech Events**

The modification terminology (the terms deletion, insertion etc.) is based on the reconstruction process going in the direction from the input transcribed text at the w-layer towards the output reconstructed text at the m-layer.

While performing the reconstruction, it is necessary to **think a lot about the way to create nice sentences out of the speaker's discourse.**
Individual modifications are given different weight. Our aim is to reach the reconstructed text by using the modifications that represent lesser change with respect to the original transcription of spontaneous speech.

Word order changes affect the original text the least possible. The changes to word order are performed in cases when it is the way to reach "nicer" reconstructed text.

Modification of function words and word forms is perceived lesser change compared to the modification of autosemantic words. The modifications of function words and word forms (substitution, deletion, insertion) are usual changes.

Modification of autosemantic words always needs to be given careful consideration. They are performed only in the most necessary cases, provided that the reconstructed text cannot be reached by means of other changes.

Deletion is lesser modification compared to insertion.
It is better not to use certain pronounced segments than to think out new ones (particularly incase of autosemantic words). The segments that were corrected by the speaker (substituted by other ones, specified, added, changed etc.) are subject to deletion in the first place. However, insertion (of autosemantic words) is always used in cases when the missing text is obvious and if it is not inserted, the output segment will be unfinished or syntactically incomplete in other respects.

NB! Individual types of modifications presented in this manual are illustrated by examples of isolated sentence segments; it is necessary to consider the usage of any modification with respect to the context of the whole reconstructed text.

4.2.1 Deletion

The reconstructed text contains only discourse-relevant lexical units. They are lexical units that carry meaning and contribute to the content of an utterance. Discourse-irrelevant lexical units as well as entire text spans that do not contribute to the content of a sentence or otherwise disturbs the cohesion deleted from the input transcription during the reconstruction. These are discourse-irrelevant lexical units.

A w-node (of `w` type) representing a discourse-irrelevant lexical unit has no corresponding node at the m-layer.
The m-layer contains no reference to the w-node (of `w` type) that represents a discourse-irrelevant lexical unit at the w-layer.

Mainly the following lexical units are regarded as discourse-irrelevant:

- **Filler Words**,
- **Filler Phrases**,
- **Superfluous deictic words**,
- **Superfluous Connectives**,
- **Superfluous or wrong function words**,
- **Reparandums and interregnums**,
- **Repetitions**,
- **Fragments**.

4.2.1.1 Filler Words

right, basically, actually, well, so, yeah, okay, like, etc.

Filler words are semantically empty lexical units that do not carry meaning. The speaker uses them when hesitating what to say or searching for the right word. Also parasitic words are regarded as fillers.

Examples:
they were looking for a poor little boy you know
They were looking for a poor little boy.

well we stayed there for two years
We stayed there for two years.

it is basically a place of pilgrimage there
It is a place of pilgrimage there.

right you have to walk a bit to get there
You have to walk a bit to get there.

breath well I think I have been there two times when I was not like married and I have not been there since then
I think I have been there two times when I was not married and I have not been there since then.

breath and then, when we moved to UM another house, we were neighbors in fact, she lived next door to us
Then, when we moved to another house, we were neighbors, she lived next door to us.

for me personally it is going to be the first meeting after basically perhaps more, than fifty years *breath* when I am going to meet the classmates I used to attend the same class with
For me personally, it is going to be the first meeting after more than fifty years, when I am going to meet the classmates I used to attend the same class with.

Why you did not like it?
breath well firstly I have never been much strong in math and then actually I did not have a relationship to farming *breath* though both of my parents came from farming families but *breath* I did not like it, I basically did not have a relationship to it
I have never been much strong in mathematics and I did not have a relationship to farming, though both of my parents came from farming families.
But I did not like it, I did not have a relationship to it.

4.2.1.2 Filler Phrases

I think
you see
you know
God beware
see
the hell
Oh, God

Under **filler phrases** we usually understand parenthetical constructions. They are removed from a sentence when they disturb its structure and when they are discourse-irrelevant. However, they can be preserved when they do not disturb the cohesion of the sentence (in the tectogrammatical manual, these types are described as: lexicalized parenthesis, frozen infinitive and participial constructions).

Examples:
it was in Prague at Christmas I think
It was in Prague at Christmas.

What is your son's job?
breath well in present oh *noise* God *laugh* I cannot remember the name of the company
I cannot remember the name of the company.

4.2.1.3 Superfluous Deictic Words

the
this, that, there
there

Demonstrative pronouns *this, that, there* and other deictic words (*the, there, here*) are used more frequently in continuous speech than in written text. Continuous speech is conditioned by a particular space and time and such environment is constantly referred to by the speaker in a communicative situation. In continuous speech, deictic words are usually used as filler words to emphasize particular words as "the one we have already talked about" and for other reasons that are irrelevant in the written text.
While performing the reconstruction, **deictic words are deleted**.

Superfluous deictic words (they are superfluous in view of a written text) include mainly:

A. deictic word that **stands for an element that is placed elsewhere in the sentence** (e.g. to express an emphasis).
Example:
there were perhaps not only children in all the passenger cars there
Perhaps there were not only children in all the passenger cars.

B. deictic word used as a **filler word** (speaker is not sure, considers something, and therefore a pronoun is used before telling the word).
Example:
I was in that eh camp
I was in the camp.

C. deictic word used to identify uttered words as "**the one we have already talked about**". Such superfluous deictic words of this type include especially demonstrative pronouns placed before proper names and the names that identify an entity sufficiently on their own.
Examples:
I went to that Prague
I went to Prague.

D. neutral **pronoun *it* that functions as an initial expression or that has a connecting function.**
Example:
it was on motorbikes we went then b *breath* was there , it was a kind of adventure too
We went there on motorbikes, it was an adventure too.

NB! It is necessary to distinguish superfluous deictic words from demonstrative pronouns that unambiguously identify an object (among other objects) that is being mentioned (e.g. *I came to the camp and not to that one.*)

Other examples**:**
and *noise* behind her stands my grandpa no father , who w~ was , I think the fourth one there , EHM in the previous photo
Behind her stands my father, who was, I think, the fourth one in the previous photo.

so I has always been somehow connected with the nature for the villagers
For villagers it has always been somehow connected with nature.

so grandpa was in Rumburk *end* , he get as well somehow involved in the revolt , but *breath* since he did not organize directly *breath* he was not the chief organizer *breath* almost nothing happened to him , however he nearly ended up the way the acquaintance of his ended up *begin* Noha *end*
Grandpa was in Rumburk and he get somehow involved in the revolt as well, but since he was not the chief organizer, almost nothing happened to him.
However, he nearly ended up the way his acquaintance Noha ended up.

breath well and there we sat down , so in the shade , to watch the countryside and the everything around , *breath* so we sat down there and the groom-to-be of mine , so he layed down on my knee , so that we had a rest
We sat donw in the shade to watch the countryside and everything around.
We sat down and my groom-to-be laid down on my knee so that we had a rest.

She lived down there in *begin* the Tiché údolí *end*
She lived down in the Tiché údolí.

4.2.1.4 Superfluous Connectives

and
so
therefore
that
then
well

Connectives *and, so*, and even the subordinating connective *that* a adverbial expression *then* (and substandard particle *well*) in the spontaneous speech may often lack their meanings – copulative, or of consequence, time, and adding a subordinate clause expressing content. They are very often used only as a means of adding a new piece of information. They have connecting, tying and segmentary function (they function as "periods and capital letters"). During the reconstruction these expressions **signify that the segment should be divided and a new sentence should be made**.

Note: Deleted superfluous connective is included in a subsequent sentence by the `w-begin.rf` reference.

Examples:
and it took years there and they begin to do this thing together
It took years there.
They begin to do this together.

she lived down there in *begin* Tiché údolí *end breath* well I very often visited them , so in that age we well , what girls often behave well *breath* were chatting , playing that various , the kind of things from that time well
She lived down in the Tiché údolí.
I visited them very often.
We were chatting, playing the sort of things from that time, the way girls of that age behave.

breath then her son was in *begin* India *end* indye , so and in that time , when he was in the *begin* India *end* indye , so her husband died , so_that we were naturally *breath* everything was lying on us , because they had relatives *breath* in *begin* Prague *end* , they did not have any other relatives here and they were nieces *breath* well_so we t~ I mean the aunt we took care about her
Then her son was in India and in that time her husband died.
Naturally, everything was lying on us, because they had relatives in Prague.
They were nieces, they did not have any other relatives.
So we took care about aunt.

there the festival many youngsters visit it, that they kinda get acquainted there and so forth
Many youngsters visit the festival there.
They get acquainted there and so forth.

4.2.1.5 Superfluous or Wrong Function Words

In perspective of a written text and its usual stylistic qualities, **superfluous or wrong function words** include superfluous or wrong:

A. auxiliary verbs.
Example:
then he was came
Then he came.

B. prepositions.
Example:
in was in Prague on I think at Christmas
It was in Prague at Christmas.

C. connectives.
Example:
It happened to me and Jess and Tim
It happened to me, Jess and Tim.

D. personal pronouns in position of subject.
Example:
I my name is Mark
My name is Mark.

4.2.1.6 Reparandums and interregnums

Spontaneous speech occurs in time, on a linear basis. In contrast to written text, speaker cannot delete and correct what has been said incorrectly, choose better words or change grammatical categories. Such corrections can only be made by saying the part of the utterance again. It results in a loosened syntax with many digressions, anacoluthons, non-finished and restarted sentences or additional information.

An archetypal example of "correction" in the spontaneous speech in the **restart** in its base form: `reparandum - (interregnum) – correction`.
Reparandum is a text span that is going to be substituted by a new text span that is called restart. **Interregnum** is a speech event (or events) that indicates that the preceding utterance is going to be abandoned, and it introduces the restart. Interregnum may be missing in the structure of the restart. Then, the **correction** is the corrected reparandum.

Example:
we went there on Friday no sorry on Saturday
Reparandum: *on Friday*
Interregnum: *no sorry*
Restart: *on Saturday*
We went there on Saturday.

However, the restart can have more complex structure. There can be several reparandums (before the speaker gets to what he or she meant to say).

From this perspective, spontaneous speech can be divided into corrected and non-corrected text spans: `span1 – (interregnum) – correction(span1)`, and the correction of a span does not have to immediately follow the span.

Reparandums and interregnums are deleted while performing the reconstruction.

There is a vide variety of restarts:

A. correction.
Example:
we went there on Friday no sorry on Saturday
We went there on Saturday.

B. stammer.
Example:
w- why were you in France?
Why were you in France?

C. specification.
Example:
son my son did not come back again
My son did not come back again.

D. correction: sections where the speaker stumbled, stammered, searched for right words. It is a text span that is subsequently (usually) reformulated and substituted by another one (i.e. because a sentence structure has been changed).
Example:
and the most often they were the most often it was that staff
The most often it was the staff.

Other examples:
and during EHM *breath* during the summer actually from spring to autumn
from spring to autumn

breath we were celebrating my EHM grandpa's birthday husband's
We were celebrating my husband's birthday.

who sits *breath* on the left grandpa I mean great-grandpa , well my husba~ husband's father
The on who sits on the left is my husband's father.

When did your daughter moved to Plzeň?
breath well , I think it was in nineteen , nineteen sixty~ *unintelligible* sixty I don't think , around nineteen seventy or so
I think it was in 1970 or so.

breath well , it was roughly back in *breath* nineteen fifties or so nineteen fifty-five
It was roughly in 1955.

and it's the youngest sister I mean well my younger sister , it's *begin* Annie *end* is 'er name
It's my younger sister, her name is Annie.

What was the weather like back then?
incredible, it was beautiful , sun was shining beautifully , it was beautiful there , beautiful weather and the water it was beautiful there
It was beautiful there, sun was shining beautifully.
Both weather and water was beautiful.

him he is kinda engineer and he attends further distant distance studies at university *breath* he continues in his studies
He is an engineer and attends further distance studies.

When did he attend dancing courses?
breath oh God four , six *breath* in think in nineteen eight y, because he was sixteen and he was born *breath* in nineteen sixty-four yeah , *breath* so in the nineteen eighty so it wasn't *noise* until the turn of eighty and eighty-one
He was sixteen and he was born in 1964, so it wasn't until the turn of 1980 and 1981.

How many children do you have altogether?
breath well we had two children , *breath* but the older son died eight years ago , so I have only the son now and my husband also died three years ago , so *breath* I have only the son and grandchildren and so it's one child
We had two children but the older son died eight years ago.
My husband also died three years ago, so I have only a son and grandchildren and so it's one child.

4.2.1.7 Repetitions

Repeated words and text spans in which the repetition does not have any special meaning in terms of the discourse are deleted at the m-layer. If a text span is repeated word-for-word, the first span is deleted. If the repetition is not word-for-word or if it is complex in other respect, it is possible to reflect various parts of repeated text spans in the reconstructed text.

Examples:
and they took us to to to the quarantine block
They took us to the quarantine block.

it was the last last meal
It was the last meal.

we were getting subventions in Bratislava you know it was about ten crowns a day we were getting actually
In Bratislava we were getting subventions of about ten crowns a day.

and it has always been a grand , pop~ popular mass was there
It has always been a grand, popular mass.

good , good student *breath* he had very good results
Good student, he had very good results.

How old were the children when the photo was taken?
the children on the photo, I think , *breath* that it wasn't long *noise* before the tragedy *breath* because people say that the younger one the *begin* Mary *end*, that she was five when she died actually
I think it wasn't long before the tragedy because people say that the younger one, Mary, was five when she died.

So you do only hiking in the mountains?

only hiking only hiking
Only hiking.

They look different now?
totally different , totally different
Totally different.

breath grandpa , he didn't eat fish you know , he used to say , that he ate enough fish in *begin* Italy *end* , when he was in the military service , so he didn't eat fish
Grandpa didn't eat fish.
He used to say that he ate enough fish in Italy when he was in the military service.

What does the final dancing lesson mean?
well it's similar *breath* similar to a prolonged dancing lesson , but the fin~ the very last *breath* to conclude the dancing lessons *breath* and there even the parents are invited and it's simply at the end of the dancing lessons you know
It is similar to a prolonged dancing lesson but the final dancing lesson is the very last one to conclude the dancing lessons.
Even parents are invited there.

4.2.1.8 Fragments

A **fragment** is a text span (one or several autosemantic words) that remained incomplete and is not further referred to in the following text neither directly nor indirectly (i.e. it is to a great extent discourse-irrelevant). In fact, it is a **separate reparandum** that has been completely omitted and the restart, the correction relates to a completely different thing.
Fragments are to be differentiated from incomplete sentences (see 2.2.3 *Discourse-Relevant Fragments*).

Examples:
on Friday I've `cough` then Barňák went away
Then Barňák went away.

I the most often it was that staff
The most often it was the staff.

breath I was , I like travelling very much and my husband , he dislikes it , so a friend of mine always me and my husband, when they were going to *breath* well we were kinda crowd , *breath* so that we , there were three families of us , three couples , children were already big , *breath* so we were travelling quite a lot
I like travelling very much and my husband dislikes it.
We were a sort of crowd, there were three families of us, three couples, children were already big so we were travelling quite a lot.

breath well and the gal , she was celebrating her eighteenth birthday *breath* and the lads , it was my first time in hospital
The girl was celebrating her eighteenth birthday.
It was my first time in hospital.

4.2.2 Insertion

The reconstructed text can even contain lexical units that have not been pronounced but that are indispensable for the construction of both grammatically and lexically correct sentences (in the reconstructed text).

Such lexical units are represented each with its own new m-node inserted at the m-layer.

The m-layer can contain (inserted) m-nodes (of the `m` type) that represent lexical units missing at the w-layer.
The m-node (of the `m` type) that represents a lexical unit missing at the w-layer does not contain any reference to the w-layer.

The inserted nodes typically represent:

- **Missing Function Words**,
- **Unexpressed Text Spans**.

NB! Even punctuation is inserted as m-nodes, see 4.1.2.1 *Punctuation*.

4.2.2.1 Missing Function Words

Function words are to be inserted to the input text at the m-layer to the positions where such words are missing and where they are indispensable in order for the sentence to be grammatically correct.

Missing function words include:

A. auxiliary and modal verbs.
Example:
he killed in the war
He was killed in the war.

B. prepositions.
Example:
we were chosen my brother
We were chosen with my brother.

C. connectives.
Example:
he brought some bread tea
He brought some bread and tea.

D. pronouns. Pronouns are inserted to the positions where it is necessary for the text to be coherent.
Example:
Hana and Pavel came brought some bread carried some bread tea
Hana and Pavel came.
They brought some bread and tea.

4.2.2.2 Unexpressed Text Spans

The speaker can omit some parts of utterances for various reasons (it is obvious what the speaker wants to say; it is indicated by a gesture; the speaker is interrupted).
While performing the reconstruction, unexpressed text spans are inserted only in the cases where **the unexpressed text span can be expressly deduced from the context** and its insertion makes the reconstructed text cohesive.
Insertion represents the very last modification that is performed. However, it is to be performed each time it leads to a cohesive, "nicer" reconstructed text. In obvious cases, it is preferable to perform insertion than leave the sentence incomplete.

Examples (inserted spans are underlined):
suddenly the Gestapo men *inhale* just *inhale* got into out camp immediately *inhale* alarm immediately you know attention immediately
Suddenly the Gestapo men got into our camp, alarm was launched immediately, we had to spring to attention immediately.

they kept just still remaining us th~ ~at there was a danger , *breath* that war could break out any moment , so that *breath* it also was not quite , even th~ even though peace , *breath* so it was not such peaceful after all
They just still kept remaining us that there was a danger that war could break out any moment.
Even though there was peace, it was not such peaceful after all.

inhale well a great welcome you know well *inhale* lots of tears and joy
A great welcome it was, lots of tears and joy.

I say oh my God who may be ringing and my son fell asleep and missed the right train stop
I say "Oh my God, who may be ringing?"
It was my son, calling me he fell asleep and missed the right train stop.

silence inhale they started to a revolver in front of his nose like this *inhale* wanted him to say sieg heil *cough* yeah *silence*
They started to brandish a revolver in front of his nose and wanted him to say "Sieg heil".

I was learning a bit of stenography in Terrezín but I wasn't able to earn my living by this.
but *inhale* well I thought well EHM I have to go to work and try to some
But I thought "I have to go to work and try to earn some money."

and so she bought *inhale* EHM right here EHM in the village Labuť EHM in that Přimda *inhale* EHM
She bought a small house right here in the village Labuť in Přimda.

my w- wife was young *inhale* she didn't want without children
My wife was young, she did not want to go without children.

I had no expectations of university studies.
inhale my husband did not want me to commute to Prague and and also just when the children were small it
My husband did not want me to commute to Prague and also when the children were small it was impossible.

I had to procure birth certificates of my ancestors back to the third generation, it was exceptional.
actually EHM it's – I don't know , I didn't meet anybody who would be like this
I didn't meet anybody who would be discriminated like this.

Memories last forever and cannot be banished until the end of my life.
well *inhale* this *inhale* I can't
I cant' tell more about it.

4.2.3 Substitution

The speaker leaves some text spans uncorrected, even though they were not uttered with accuracy and they are imperfect particularly in view of word forms, i.e. the speaker does not repeat them in the correct form (such error does not prevent intelligibility, the speaker is not aware of the error).
While performing the reconstruction, **syntactically incomplete and damaged sentences are corrected.**
The used words should correspond to the meaning expressed in the reconstructed text. However, there are various reasons why the speaker may use a word that is inappropriate from semantic view (out of ignorance, slip of the tongue). **Words that are used incorrectly in terms of their meaning are substituted by more suitable ones while performing the reconstruction.**
Moreover, the reconstructed text includes exclusively standard and correctly formed word forms. **Input substandard words and incorrectly formed word forms are changed** while performing the reconstruction.

The form and the lemma of an m-node (of the `m` type) does not necessarily correspond to the token of the corresponding w-node (of the `w` type).

The following can be substituted:

- **Substandard and Wrongly Formed Word Forms**,
- **Semantically Inappropriate Words**,
- **"Non-Dictionary" Words**,
- **Syntactically Incomplete and Incorrect Constructions**,
- **Unintelligible Text Span**.

4.2.3.1 Substandard and Wrongly Formed Word Forms

Substandard and wrongly formed word forms are substituted at the m-layer by standard forms so that the reconstructed text is written in the "standard Czech".
The form of lexical units is changed for the following reasons:

A. word form is substandard.
It is the case of using a word that includes a substandard ending or a substandard (general Czech) change of a sound within the word:

Example:
how are you doin'?
How are you doing?

From the stylistic point of view the standard word forms can be divided into standard literary forms, neutral forms and colloquial forms. No stylistic changes are made in the course of the reconstruction. If the speaker uses e.g. standard colloquial word form, it is not changed to the standard neutral word form.

The **standard** word forms (colloquial) include for example:
mohu and *můžu (=I can)*; *mažu* and *maži (=I grease)*, *mažou* and *maží (=they grease)*, *kopu* and *kopám (=I am kicking)*, *řežu* and *řezám (= I am cutting)*.
sousedi, komunisti besides *sousedé*, *komunisté (=neighbors, communists)*;
nesem, žijem, kupujem, můžem besides *neseme, žijeme, kupujeme, můžeme (=we carry, we live, we buy, we can)*;
moct besides *moci (=to be able)*;
myju, *žiju, kupuju, lyžuju* besides *myji*, *žiji, kupuji, lyžuji (=I am washing, I am living, I am buying, I am skiing)*;
myjou, *žijou*, *kupujou*, *lyžujou* besides *myjí*, *žijí*, *kupují*, *lyžují (=they are washing, they are living, they are buying, they are skiing)*;
oni sází, *se vrací, chybějí* besides *sázejí*, *se vracejí*, *chybí (they are betting, they are coming back, they are missing)*;
komunizmus besides *komunismus (=communism)*.
tadyhleto, tuhleto, tenhle, tamhlety, tyhlety, tohleto, těhle (=this, these)
teďka, dneska (=now, today)
taky (=too)

On the contrary, the following word forms are perceived **substandard**:
woulda, shoulda, coulda
'cos, 'cause
'cept,'deed,'tween
gotta, gonna, wanna
c'mon, d' you

The word *yeah* in the meaning of "yes" is substituted by the standard word *yes*. If such a word has a different function, it is deleted.

B. word form is formed wrongly.
The word form incorrectly expresses value of a different grammatical category.

Examples:
he wanted to get there quick
He wanted to get there quickly.

this cars was returning emptier
These cars were returning empty.

NB! Expressive words, dialectal words and vulgar words are not substituted with their standard counterparts. Therefore, the words such as: *kids, mum, mommy, crew, stuff, hovel, paw, bucks* are not changed.

Strongly expressive, vulgar or dialectal words are put into quotation marks.

4.2.3.2 Incorrectly Used Words in Terms of Meaning

The words that are used incorrectly in terms of meaning are substituted by more appropriate semantic counterparts.
Substitution of autosemantic words, i.e. substitution of one autosemantic word by another autosemantic word, should always be considered carefully. It should be made only in cases

when there is a semantic divergence: the autosemantic word does not match the context at all, and it is obvious that it was used by mistake or out of ignorance.

The words that have been used incorrectly in terms of their expressed meaning are substituted particularly in case that the speaker used any of the following words instead of the "correct" word:

A. word with similar pronunciation but with totally different meaning (the so-called paronym).
The speaker confused the "correct" word with a different word, s/he stumbled.

Example:
it is a hysterical moment
It is a historical moment.

B. word with very similar meaning but inappropriate for the given context.
It is confusion of the "correct" word with a related word of a similar meaning that is, however not appropriate or slightly inappropriate for the given context. The speaker may have used the "incorrect" word because of his/her advanced age and difficulties finding words or because of the fact that s/he have lived abroad for a long time and confuses some words, or simply out of ignorance.
The incorrectly used words might be both autosemantic words and auxiliary words (e.g. *so that* instead of *that* which is more appropriate).
Such words are corrected only in case that the word used by the speaker is unlikely to occur in the given context in a written text, and the output reconstructed text would sound awkward without its substitution.

Examples:
there is someone's birthday and nameday so that we a~ we sit down, we meet and we are chatting you know, we are celebrating
There is someone's birthday and nameday so we sit down, we meet and we are chatting and celebrating.

only when we spend evening in a pub so that we drink something
Only when we spend evening in a pub so we drink something.

so I started to tell what beautiful pictures she has
I started to say what beautiful pictures she has.

Mr Zelenka tendered outstanding services to these activities
Mr Zelenka rendered outstanding services to these activities.

lots of *inhale* business friends were afraid to engage me *inhale* because they were afraid that they would have less contacts with Czechoslovakia
Lots of business friends were afraid to engage me because they feared that they would have fewer contacts with Czechoslovakia.

so then I finally EHM accepted the offer to go to Salzburg to try to get out of a mess *inhale* a small company that got into difficulties because of their inability to organize the business
Finally, I accepted the offer to go to Salzburg to try to get out of a mess a small company that got into difficulties because of their inability to run the business.

so I always remind t~ this the extent to which the work is easier these days
I always realize the extent to which the work is easier these days.

4.2.3.3 "Non-Dictionary" Words

Some types of "non-dictionary words" (incorrectly used foreign words, slips of the tongue, incomplete words etc.) are substituted by appropriate expressions. Reconstruction of "non-dictionary" words is described in details in a separate section, see 5.2 *Reconstruction of "Non-Dictionary" Words*.

Examples:
and I think we we~ *breath* in *begin* some gardens *end* in Prague
I think we were in some gardens in Prague.

I had a fantastic binner
I had a fantastic dinner.

4.2.3.4 Syntactically Incomplete and Incorrect Constructions

The spontaneous speech is arranged linearly which means that the speaker cannot go back to delete and correct wrong words and in fact the speaker never knows in advance what exact words s/he is going to use to say what s/he wants to say. As a result, the syntactic structure of spontaneous speech is often imperfect and damaged in many ways. Even thought the speaker may be aware of some imperfections of the speech, s/he does not have to correct them.
However, the sentences in the reconstructed text are correct in terms of syntax. They do not include incorrect constructions, anacoluthons, contaminations and other inappropriate types of utterance. Incorrect syntactic constructions are substituted by appropriate syntactic opposites.

Incorrect syntactic constructions include:

A. contamination and other incorrect constructions.
Contamination is the alteration of constructions that are used with verbs or action nouns that are different one from another (and similar in terms of meaning or possibly sound). The new construction is considered improper. All incorrect prepositional phrases and case forms are substituted.

Examples:
I said my parents that I wanted to leave
I told my parents that I wanted to leave.
or: *I said to my parents that I wanted to leave.*

Mr Zelenka rendered outstanding services for these activities
Mr Zelenka rendered outstanding services to these activities.

B. attraction.
Attraction, or syntactic assimilation, is an inappropriate adjustment and adaptation of an expression to the previous or following expression. The given expression influenced by adjacent or another expression gets the form that differs from the one that is appropriate from the viewpoint of grammatical dependency.

Example:
they looked after the child whom I knew
They looked after the child who I knew.

C. zeugma.
Zeugma signifies neglecting different construction of two verbs with different constructions, or their action nouns. There is one dependent part of a sentence that is attached to both verbs, but in fact each verb should be used in a separate verb phrase.

Examples:
at a dance event he met and talked to his first girlfriend for the first time
At a dance event he met his first girlfriend and talked to her for the first time.

it surprised me and I did not agree with his opinion
His opinion surprised me and I did not agree with it.

D. anacoluthon.
Anacoluthon is a deviation of appropriate construction of the utterance. The beginning of the utterance that is further developed and specified in a complex way or interrupted by an interjection is connected to the remaining text in an inappropriate way.

Examples:
by various disappointments that we did not expect and the impact of which we could not anticipate even though we tried to be far-sighted and objective were brought to us by the course of life
Various disappointments that we did not expect and the impact of which we could not anticipate even though we tried to be far-sighted and objective were brought to us by the course of life.

with the name of the author who lived in the USA where he published the majority of his professional work is certainly familiar to you
The name of the author who lived in the USA where he published the majority of his professional work is certainly familiar to you.

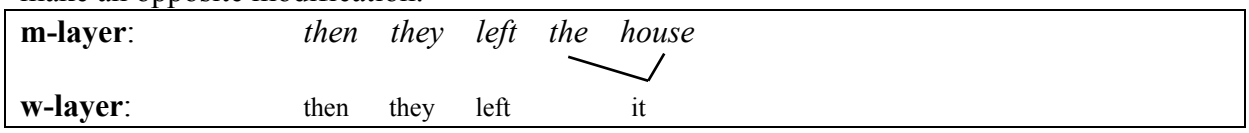
and EHM regarding the boy who spoiled the photography according to his father *breath* he is nowadays a well known painter who used to EHM give lectures on the faculty of philosophy *breath* in Prague
The boy who spoiled the photography according to his father is nowadays a well known painter these days who used to give lectures on the faculty of philosophy in Prague.

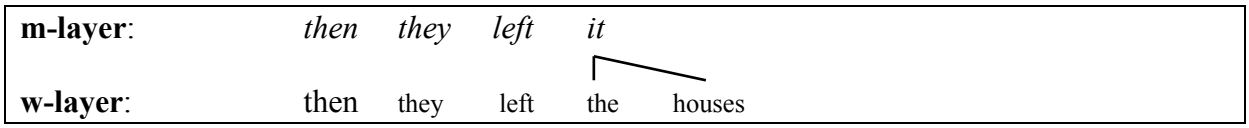
because *begin* Pavel Nedvěd *end* , *breath* he EHM comes from *begin* Skalná u Chebu *end* and he came to~ EHM to the team, I think he came *breath* to *begin* the one of Viktorka *end spk2* and when he had no place *spk1* EHM *spk2* to~ to live , he lived EHM with *begin* Pepík Žaloudek *end breath* in *begin* Nejřany.
Pavel Nedvěd comes from Skalná u Chebu.
I think he came to the team of Viktorka.
And since he had no place to live, he lived with Pepík Žaloudek in Nýřany.

here maybe they are a bit fewer I don't know, I didn't count them but *breath* the most often there were 60 of us singers , *breath* and he lead us , he is there as a conducter conductor also professor *begin* Bohumír Liška *end* , *breath* who worked as a conducter conductor in the *begin* National Theatre later on
Maybe they are a bit fewer here, I don't know, I didn't count them but the most often there were 60 of us singers.
We were lead by the conductor Profesor Bohumír Liška who worked as conductor in the National Theatre later on.

What kind of student Jarda Kracík was?
good , good student *breath* he was a very good student and it always I even don't remember that the students I know who are nowadays p~ perhaps more famous than *begin* Jarda Kracík *end* , nowadays for example *breath begin* Jirka Kučera *end* , who is a coach of the first te~ team or who was in the national team and was a skipper there , *breath* so I could name man~ many of them so all of them were good students , very good students , or at least good students
He was a very good student.
It has always been so, all the students I know who are nowadays perhaps more famous than Jarda Kracík were very good students, or at least good students.
For example Jirka Kučera who is nowadays a coach of the first team or who was in the national team and was a skipper there.
I could name many and many of them.

E. reasons of coreference.
The reconstructed text at the m-layer follows the rules of textual coherence. It is sometimes desirable to substitute a deictic expression (captured at the w-layer) by a full lexical expression so that the text is cohesive and maintains correct coreferential relations between individual parts of sentence that have the same reference; sometimes it is more appropriate to make an opposite modification.





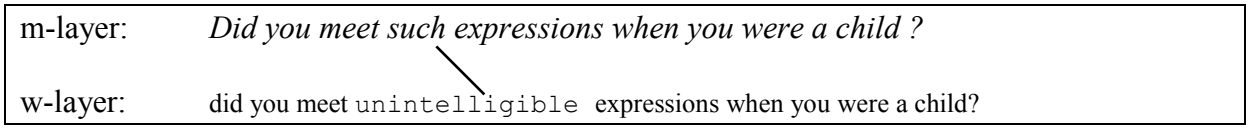
Other examples:
Petr was catching the train at the last moment Honza was doing so too however he did not catch it then
Petr was catching the train at the last moment.
However, Honza did not catch it then.

he poured me a cup of coffee then he took some sauce and passed it to me
He poured me a cup of coffee, then he took some sauce and passed the coffee to me.

and we were sitting on the bench with the lady until dinner
We were sitting on the bench with lady Nováková until dinner.

4.2.3.5 Unintelligible Text Span

If possible, we try to deduce the meaning of unintelligible text spans (at the w-layer represented by the `nonspeech` type w-nodes, with the `unintelligible` value) on the basis of their context (usually with the help of general expressions that do not have any special connotation). All m-nodes (of the `m` type, except for the punctuation) that represent the text the meaning of which has been deduced include references to the w-nodes of the `nonspeech` type with the `unintelligible` value.



If the meaning of the text cannot be deduced, follow the rules mentioned in 4.2.5 *Annotation of discourse-relevant non-speech events*. Comprehensive information to be found in *4.2.3.5 Unintelligible Text Span*.

4.2.4 Changes of Word Order

The grammatical word order of reconstructed sentences at the m-layer does not disturb the cohesion of the text.

The order of nodes at the m-layer does not have to correspond to the order of nodes at the w-layer.

Examples:

in the room there were five of us
There were five of us in the room.

in the last June it was
It was in the last June.

there we went by car
We went by car there.

to Zvolen I went with him
I went with him to Zvolen.

4.2.5 Annotation of Discourse-Relevant Non-Speech Events

Reconstructed text that follows the rules of written text does not primarily include marks for non-speech events. Discourse-irrelevant non-speech events are deleted without substitution during the reconstruction. (see 4.1.1 *Deletion of Discourse-Irrelevant Non-Speech Events*).

Discourse relevant non-speech events, i.e. those that carry a meaning that contributes to the content of the utterance **are captured in the reconstructed text primarily by the means of written text**, i.e. particularly with the help of punctuation and word order.

Such a method is used for example in case of :
- sentences uttered with emphasis (exclamation mark),
- longer pauses (dash),
- word uttered with irony (quotation marks)
- emphasized word (word order, functional sentence perspective).

However, there are lots of non-speech events that influence the meaning of the utterance and that cannot be captured with the help of standard means of written text (ironic laughter, whispering, sudden rising of voice etc.). At the m-layer, such **discourse-relevant non-speech events** are captured by a **special type of m-node, the m-node of the `nontext` type**. The m-node of the `nontext` type is associated with the `type` attribute where the annotator (in his ro her own words) describes and interprets the meaning of the non-speech event.

Examples of descriptions:
laugh
sniggers
gives a loud cough
hesitates (silence)
nodded in greeting the most probably

agrees
nods in agreement
lowered his/her voice
preceding word pronounced aloud
gave a whistle

The m-node of the `nontext` type always makes a part of a sentence (the sentence, or the s-element can even be formed only by this special m-node).

If there are some non-speech events captured at the m-layer with the help of the m-node of the `nontext` type, there are references from such m-node to the corresponding w-nodes (of the `nonspeech` and `background_begin` type).

m-layer:	[spk1] *It happened?*	[spk2] *<most probably nodded in agreement*
w-layer:	[spk1] well and it happened	[spk2] `silence`

m-layer:	[spk1] *It happened?*	[spk2] *<agrees>*
w-layer:	[spk1] well and it happened	[spk2] `EHM`

m-layer:	[spk1] *We wanna go home.*	[spk2] *<nods in agreement>*
w-layer:	[spk1] we want to go home	[spk2] `EHM`

m-layer:	*<sniggers> Are you serious?*
w-layer:	`background_begin laugh` are `uh` you serious huh `background_end`

m-layer:	*I was a grand <previous word emphasized> master.*
w-layer:	well I was a grand master

Even the **unintelligible text span** that is captured at the m-layer by the w-node of the `nonspeech` type (with the `unintelligible` value) is often discourse-relevant.
The discourse-relevant unintelligible text span is at the m-layer substituted primarily by the text that was deduced (see 4.2.3.5 *Unintelligible Text Span*). However, if such substitution cannot be made (the meaning of the text cannot be deduced), the unintelligible text span is at the m-layer represented by the m-node of the `nontext` type with the text saying *unintelligible* in the `type` attribute. Again, there is a reference between corresponding nodes.

m-layer:	*Did you meet <unintelligible> expressions when you were a child ?*
w-layer:	did you meet `unintelligible` expressions when you were a child

See also 5.3 *Unintelligible text.*

5 Other Rules, Conventions and Examples

5.1 Reconstruction of Numbers

Various numerical data captured at the w-layer in the way they were uttered (i.e. in words) are put down at the m-layer in the way that is standard for a written text (i.e. in words or in numbers).
If the number that is put down in words at the w-layer is changed into digits, such change is considered the orthographical modification (see 4.1.3.1 *Numbers and Digits*).

Basic rule: **One-word numbers are reconstructed with the help of the numbers written in words, multi-word numbers are reconstructed with the help of digits.**

Examples:

three
three

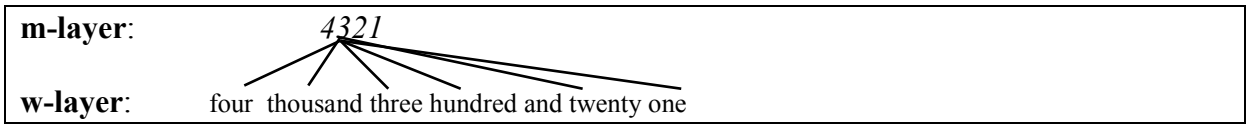
twenty-three
23

one hundred and one
101

twenty-sixth
26.

eight times
eight times

twenty-five times
25 times



NB! There is a reference (to the corresponding ordinal number) even from the m-node that represents the period after the ordinal number.

5.1.1 Expressing Quantity

When reconstructing numbers that represent a quantity of the object that is counted, we follow the rule mentioned in at the beginning of this section: one-word numbers are reconstructed with the help of numbers written in words, whereas multi-word numbers are reconstructed with the help of digits.

Examples:

he found two crowns
He found two crowns.

he was forty-five years old
He was 45 years old.

each third person stepped out from the row
Each third person stepped out from the row.

he ended twenty-fifth
He ended 25.

one thousand three hundred and eleven crowns
1 311 crowns

a million of people
a million of people

one million people
1 000 000 people

one million two hundred thousands people
1 200 000 people

maybe some twenty-five , thirty *breath* children were attending the primary school in those *begin* Litohlavy
Maybe 25, thirty children were attending the primary school in Litohlavy.

Note: When writing numbers in digits, individual orders are separated with a space and the integer is always represented by on m-node.

Reconstruction of **decimal numbers** is similar to the one of integers: one-word decimal numbers in words and multi-word numbers with digits. An exception is represented by a number of the *"one-word and half"* type that is reconstructed in words in non-mathematical contexts.

Example:

three point five hours
3,5 hours

two tenths of an hour
0,2 hour

a half of cake
a half of cake

He was two years and a half
He was two years and a half.

three and a half hours he was working
He was working three hours and a half.

thirty-eight hours and a half he was working
He was working 38,5 hours.

for the food tokens you could get money too , let's say three crowns fifty and one hundred times three crowns fifty is three hundred and fifty crowns , which was a considerable sum of money back then
For the food tokens you could get money too, let's say Kč 3,50, and 100 x Kč 3,50 is 350 crowns, which was a considerable sum of money back then.

Note: A decimal number written in digits represent one m-node.

In mathematical, physical and other contexts that usually use a method of number notation different from the one that is set by the basic rule for the reconstruction of numbers, we use this standard method to notate the number in the reconstructed text. If there is a doubt, we follow the basic rule for the reconstruction of numbers.

Examples:

one plus two equals three
1 + 2 = 3

one and two is three
One and two is three.

in the one to three ratio
in the 1 : 3 ratio

Number standing before an abbreviated physical symbol is always reconstructed by means of digits. One-word numbers standing before a physical mark written in words are reconstructed by means of words.

Examples:
it is thirty kilometers
It is thirty kilometers.

it is thirty k m
It is 30 km.

it is thirty-one kilometers
It is 31 kilometers.

a thirty watt bulb
a 30W bulb

I caught a fish that weighted six kilograms twenty.
I caught a fish that weighted 6,20 kg.

it is our cottage in Železná Ruda, we however own only a half, because it is too big, it is thirteen meters times thirteen meters.
It is our cottage in Železná Ruda.
However, we own only a half, because it is too big.
It is 13 x 13 m.

Attributive connection of number and a word is reconstructed by analogy to the basic rule: if it is a multi-word number in standard context, it is reconstructed in the "number in digits+word" form; if it is one-word number in standard context, it is reconstructed in the "number in words+word" form.

Examples:
dvacetiletý muž (= a twenty years *(=adj.)* old man)
dvacetiletý muž

desetiprocentní roztok (=ten per cent *(=adj.)* solution)
desetiprocentní roztok

pětadvacetiletý muž (a twenty-five years *(=adj.)* old man)
25letý muž

šedesátivoltová žárovka (=a sixty volt *(=adj.)* bulb)
60V žárovka

Note: The number+word (letter) connection is represented by one m-node. The number+symbol connection (e.g. *10%*) is represented by two m-nodes.

5.1.2 "Sticker" Numbers

The sticker numbers represent the digits or numbers that are used to mark, i.e. to put numbers to certain objects (phone number, fax, house number, postal code, serial number, document numbers, number that makes part of a product name, IP address, birth number),

Since the identical sticker number (particularly the one with more digits) can be uttered in various ways, the following rule is applied for the transcription of sticker numbers into the reconstructed text:

The sticker number is written in accord with the standard convention for the notation of the given sticker number in the written text (without regard to the way the number was pronounced). **Sticker numbers are written with digits**.
In case that it is not clear whether the sequence of numbers that is uttered is meant to be a single number or a sequence of various numbers, the individual numbers are put down (with digits) and separated with commas (even in case of single figures).

Examples:
my number was six eight seven
My number was 687.

he lives in Purkyňova eight
he lives in Purkyňova 8

telephone four six five one zero eight zero zero three
telephone 465 108 003

the winner was the racer number five
The winner was the racer number 5.

the product was labeled thirty-two one zero twenty-five
The product was labeled 32, 1, 0, 25.

Note: The single sticker number is always represented by one m-node; e.g.: the phone number *465 108 003* is a single m-node.

5.1.3 Time Data

5.1.3.1 Year

Years are primarily written with digits.

The methods of reconstruction of different alternatives of expressing years are described in the following examples. The word *year* is (in Czech) always inserted before the year itself.

Příklady:
it was in the year of fourty-five
It was in the year of 1945.

it happened in the year of sixty-eight
It happened in the year of 1968.

it was in the year of fourty-five
It was in the year of 1945.

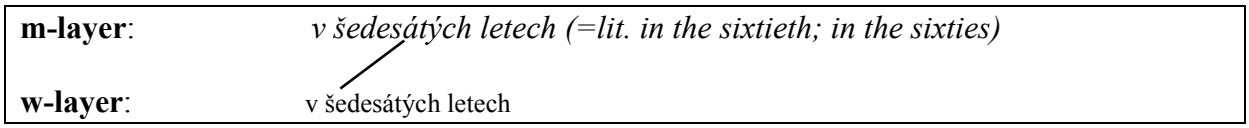
it happened in the year of sixty-eight
It happened in the year the year of 1968.

my husband's mum died in the year of fifty-two
My husband's mum died in the year of 1952.

so since the year of fifty-five in fact I live in Domažlice
Since the year of 1955 in fact I live in Domažlice.

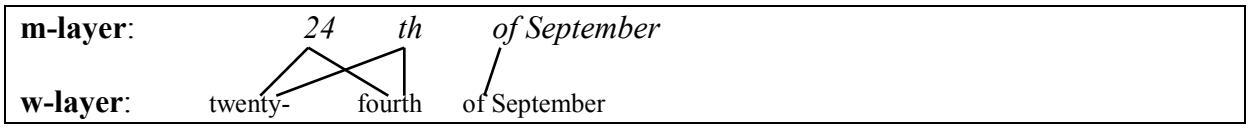
5.1.3.2 Decade

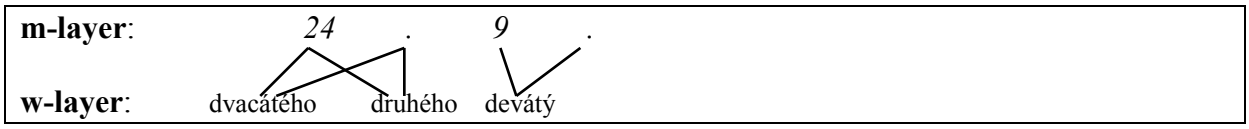
Decades (years) are captured primarily with ordinal numbers written in words.



5.1.3.3 Date

Days in a date are reconstructed primarily with digits, months are reconstructed with the names or numbers (in digits) of months, depending on the way the date was uttered. Compare the two following examples.





However, days can be reconstructed with words in a "narrative" context, especially in case of a one-word number.

Example:
in the first of January we left on the twelfth we stopped and we didn't get there until the twenty-eighth
On the first of January we left, on the twelfth we stopped and we didn't get there until 28th.

5.1.3.4 Time

Hours are reconstructed according to the following two examples (digital time in numbers, other types in words).

Note: There is a dot (without space) between hours and minutes in the time data, i.e. *13.35*. Digital time in the form of number+dot+number is represented by a single m-node.
Examples:

he came at three p.m.
He came at three p.m.

he came at fourteen twenty-five
He came at 14.25.

it was after one o'clock
It was after one o'clock.

It was twenty-one o'clock
It was 21 o'clock.

he came fourteen hours, twenty-five minutes ago
He came fourteen hours, 25 minutes ago.

he came in (*lit.*) fifteen zero zero
He came in 15.00

5.2 Reconstruction of „Non-Dictionary“ Words

This section explains the rules that describe how to manage the so-called “non-dictionary” words during the reconstruction. “Non-dictionary” words are considered the words that are not commonly used in the Czech vocabulary – these are foreign words (including foreign proper names), unknown words, newly-created words and various slips of the tongue and corruptions of known words.

The annotator’s task is to assign a lemma (a form) even to these non-dictionary “words” on the basis of the rules described below. Cases when the annotator is not able to resolve the final form of the word are marked in the annotator’s note of the `form` type (see also 5.5 *Annotator’s comment*).

5.2.1 Foreign Expressions

The speaker may utter words in a language that differs from the one of the original utterance. (i.e. in this case in a language other than Czech). S/he may utter several words in English, German or Yiddish. The speaker might utter foreign expressions in various ways, it is usual to make the original foreign expression Czech somehow (an inflected ending is added).

While notating foreign expressions at the m-layer the following rules are applied.
Multi-word non-czechized forms of foreign words are written in the form that is standard for the given foreign language (i.e. not a phonetic transcription).
Various czechized forms of foreign words are written in the codified czechized form (in case of loanwords for which the czechized form is available) or in the form that is standard for the given foreign language (i.e. without the czechized ending for example). If there are various possibilities how to write the word, then we choose the form that is closest to the word that was really uttered by the speaker.

Examples:
we called them agrutke which means the leadership
We called them agrutke, which means the leadership.

in English it’s called identity card [ajdentyty kárt]
In English it’s called identity card..

Citation context. However, if it’s desirable to capture the word that the speaker really uttered (i.e. because there is a reaction to the bad pronunciation/form further in the dialogue, the speaker wants to emphasize the unusual pronunciation/form), we write the expression phonetically and put it into quotation marks.
Such cases of the so-called citation contexts (when the word is not used because of its meaning but when it is used because of its pronunciation or form) is marked in the annotator’s comment of the `metalanguage` type (see also 5.4 *Citation Contexts*).

Example:
And he pronounced it as identity [i:dentiti] instead of identity [aidentiti]
He pronounced it as „edentity“ instead of „identity“.

he did not speak German but I know that he mangled the name ur~ urláb to the ulráb , *breath* that he writes there that he would like to the ulráb EHM get home
He could not speak German but I know that he mangled the name urlaub to "ulráb".
He writes there that this "ulráb" would like to get home.

The word is put into quotation marks also in cases when it is a compound of a foreign base and a Czech ending. Thus, a new word is created that cannot be simply transferred to the reconstructed text neither in its original foreign form nor in a correct Czech form.

Example:
we were parling whole two hours
We were "parling" whole two hours.

Note: According to the rules for the w-layer annotation the foreign expression at the w-layer are to be written basically in the same way that we now mention for the m-layer, i.e. in the form that is standard for the given foreign language or as a loanword, in the czechized form, and their real pronunciation should be placed in a special attribute of a w-node (it is represented in square brackets here). Foreign expressions are written directly in their phocetic pronunciation only in cases when the annotator was not able to find out a correct transcription of foreign words. Therefore, foreign expressions should be adopted from the w-layer to the m-layer without changes in the most cases. We comment on the errors at the w-layer in the annotator's note of the `w-token` type.

5.2.2 Foreign Proper Names

Reconstruction of foreign proper names follow the similar rules as the reconstruction of general foreign expressions (see 5.2.1 *Foreign Expressions*). It is applied that the foreign proper is written at the m-layer in the form that is usual for the Czech text (i.e. the one that is codified). If there are various possibilities, we choose the form that is closest to the word that was really pronounced by the speaker.

Generally known proper and general names that have their Czech (czechized) form are subject to declension.
If the "correct" Czech form of a name is not known, i.e. the "correct" foreign (German, Polish, English, etc.) form is used in Czech, we use this form. The foreign form is usually not subject to declension.

Examples:
we lived in Maisel street [majsl]
We lived in Maisel street.

Franc Cimermann company from Freudentl, which is Bruntál nowadays
Franc Cimermann company from Freudentál, which is Bruntál nowadays

they took us to Osvětim [osvěčim] (*=Auschwitz)*
They took us to Osvětim.

Citation context. If it is desirable to capture the word that the speaker really uttered, such expression is put in quotation marks (and it is marked in the `metalanguage` annotator's comment; see 5.4 *Citation contexts*).

5.2.3 New Words and Unknown Words

Various newly created words, unusual vulgarisms, less known (unknown) dialectal words are written in quotation marks at the m-layer.

Example:
we were parling whole two hours
We were "parling" whole two hours.

5.2.4 Slip of the Tongue

Slips of the tongue are substituted by proper word forms. It is a special type of substitution.

Examples:
then the locotomive came
Then the locomotive came.

yeah it was something, the holocost
It was something, the Holocaust.

Citation context. In cases when the slip of the tongue is relevant for the further development of the dialogue – the speaker responds to it in a way – the "slipped" form is included in at the m-layer, put in the quotation marks and marked with the annotator's comment of the `metalanguage` type (see also 5.4 *Citation contexts*).

5.2.5 Incomplete Words

Incomplete words (that were not completely pronounced) are substituted by complete words. It is a special type of substitution.

Example:
then the locomo~ came
Then the locomotive came.

Citation context. Only in cases when the incomplete word is relevant for the further development of the dialogue – the speaker responds to it – the "incomplete" form is included at the m-layer, put in the quotation marks and marked with the annotator's comment of the `metalanguage` type (see also 5.4 *Citation contexts*).

5.2.6 Spelled Words

At the w-layer the spelled words are captured in the same way they were spelled. At the m-layer they are always captured with (capital) letters separated with spaces.
Note: Each letter represents a single m-node.

Examples:
my name is Dana DI: EI EN EI
My name is Dana, D A N A.

5.2.7 Abbreviations

The abbreviations that are spelled when pronounced should be transcribed at the w-layer in the way they are really written (the real pronunciation is captured at a special attribute). At the m-layer the abbreviations are written in the correct way, including the size of letters.

Note: The abbreviation is always represented by a single m-node.

Examples:

it was the IBM [ai bi: em] company
It was the IBM company.

in the USSR [iu es es ar]
in the USSR

pencil paper etc. [e t c]
pencil, paper, etc.

pencil paper et cetera
pencil, paper et cetera

it was about thirty km [kei em]
It was about 30 km.

it was about thirty kilometers
It was about thirty kilometers.

5.3 Unintelligible Text

The unintelligible text span is at the w-layer captured by the w-node of the `nonspeech` type, with the `unintelligible` value. At the m-layer the unintelligible text span is captured only in cases when it is discourse-relevant, i.e. when it is obvious that it includes an important piece of information and this piece of information is unintelligible.

At the m-layer, the discourse-relevant unintelligible text span is primarily substituted by the text that has been deduced (see 4.2.3.5 *Unintelligible Text Span*). However, if such substitution cannot be made (the meaning of the text cannot be deduced on the basis of the context), it is at the m-layer represented by the m-node of the `nontext` type with the *unintelligible* text (see 4.2.5 *Annotation of Discourse-Relevant Non-Speech Events*).

There is always a reference (or more) leading from the "deduced" m-nodes of the `nontext` type to the corresponding w-node.

m-layer: *Did you meet such expressions when you were a child ?*

w-layer: did you meet `unintelligible` expressions when you were a child

m-layer: *Could you pass me the* `<unintelligible>`*, please?*

w-layer: Could you pass me the `unintelligible`, please

If it is obvious that the unintelligible text span includes a (unintelligible) nonsensical hubble-bubble that is obviously discourse-irrelevant, the unintelligible text span has no opposite at the m-layer.

m-layer: *There were five of us in the room.*

w-layer: `unintelligible` there were five of us in the room

Note: There might be a span of the speaker's utterance at the w-layer that is marked as unintelligible (by the w-node of the `nonspeech` type with the `unintelligible` value) but that is intelligible for the annotator when s/he listens to the record. In such a case the annotator has to put down which "unintelligible" word s/he understands, i.e. how to correct the w-layer, in the annotator's comment of the `w-recognize` type. Thus, during the reconstruction the "unintelligible" text spans are handled as if they were captured at the w-layer in the same way that is mentioned in the annotator's comment. The span is reconstructed with the help of allowed modifications. Potential references lead to the single "incorrect" w-node with the `unintelligible` value.

5.4 Citation Contexts

Citation context is perceived as the expressions in which the attention is not paid to the usual usage of words but to their semantic, phonetic or graphical form instead. The word (phrase or clause) in the citation context is usually introduced by nouns that signify that the usual meaning of the word or words is not in question. Such words include: *notice, word, text, question, mark, term, sentence, expression, statement, meaning* etc. Also, the meaning of the meta-usage is usual for the verbs such as: *to mean, to signify, to mark, to write, to pronounce* etc.

The words in the citation context are usually put in the quotation marks and marked with the `metalanguage` annotator's comment (the text of the comment can be left empty). If there is a whole phrase or sentence in the citation context, it is sufficient to mark only the leading part of sentence in the citation context with the annotator's comment.

Examples (the underlined words are assigned the `metalanguage` annotator's comment):
The original meaning of the word "šebah" is seven.
There are two dominant letters in the adjective "český" and it is "č" and "s".
"Sky full of stars above me and etical code inside me" reads the inscription on the memorial tablet in Russian and German.
The Germanism "klika" (i.e. the handle) is used in the meaning of "good luck" and also means "the handle to open the door".
a notice reading „Romanies are not served here"
The declaration "I love you" and the word "to depart" have been profaned by people..
The initial meaning is perceived „the hook", „a hooked object".
There will be a visible text on the products that contain freons, reading that "The product contains substances that destroy the ozone layer of the Earth".

5.5 Annotator's Comment

The so-called annotator's comment, the `comment` attribute is used in the annotation in order to record the annotator's various comments concerning the annotation that s/he performed.
In order to make the later processing of the comments easier, there are several types of such comments.

5.5.1 Annotator's Notes Denoting Errors at w-layer

The reconstruction distinguishes between the "mistakes" made by the speaker and the errors of forms and lemmas of word units, caused by (automatic) transcription (the word was not identified correctly). The "mistakes" caused by the speaker are corrected by the reconstruction of the new text at the m-layer, whereas transcription errors should be removed straight at the w-layer, i.e. the tokens that were identified incorrectly should be corrected on the basis of listening to the audio record.

During the reconstruction the annotator cannot alter the w-layer. If the annotator finds some errors at the w-layer, s/he has to mark them with the help of one of the below mentioned annotator's comments and then reconstructs the text as if there has been no error at the w-layer.

5.5.1.1 w-token

The **`w-token`** comment serves to record the incorrectly identified w-nodes, i.e. in cases when a word at the w-layer has been transcribed incorrectly. The errors in the w-nodes that lack their opposites at the m-layer are to be recorded in the annotator's comment for a (nearest) m-node.
NB! A recorded slip of the tongue (provided that the speaker really made the slip of the tongue) is not transcription error at the w-layer.

Examples:
and then grammy stood up and left
Then granny{`w-token`} *stood up and left.*

women was sad
Women were{`w-token`} *sad.*

5.5.1.2 w-missing

The **`w-missing`** comment is used in case of missing word or whole text span at the w-layer. The whole missing text span that has been identified is to be typed in the nearest m-node , i.e. the correction of the w-layer is to be defined here.
The missing text span does not have to be identical to the corresponding reconstructed text span at the m-layer, therefore it is obligatory to type in the text of the comment.

Example:
and then came *inhale* the man and his wife *cough*
Then came the man and also {`w-missing`: *also ehm*} *his wife.*

5.5.1.3 w-recognize

The **w-recognize** comment is used in cases when there is a w-node with the unintelligible value at the w-layer which means that a text span was not recognized, while the annotator managed to recognize the text. The whole missing text span that has been identified is to be typed in the nearest m-node , i.e. the correction of the w-layer is to be defined here.
The recognized unintelligible text span does not have to be identical to the corresponding reconstructed text span at the m-layer, therefore it is obligatory to type in the text of the comment.

Example:
and then came *inhale* the man and *unintelligible*
Then came the man and also {w-recognize: *also ehm his wife cough*} *his wife.*

NB! This case is to be distinguished from the case when the meaning of the text has been deduced (the text is really unintelligible) – in such a case the w-recognize comment is not to be used.

5.5.1.4 w-speaker

The **w-speaker** comment is used in cases when the change of the speaker is not marked at the w-layer. The comment is to be typed in the nearest m-node before the opposite of which the identification of change of the speaker is missing at the w-layer.
At the same time it is necessary to change the value of the w-speaker.rf attribute in the heading of the segment. It is not obligatory to type in the text of the comment. If there is no text in the comment, it is to be perceived as follows: the change of the speaker is to be completed before the w-node that refers to the m-node with the comment, and the speaker is to be identical to the one in the given segment. In more complex cases the description of the issue is to be typed in the text of the comment.

Example:
spk1 Is it right like this ? Well yeah.
spk1 *Is it right like this?*
spk2 *Yes, it is* {w-speaker} .

5.5.1.5 other

The **other** comment is to be used for other types of errors at the w-layer.

5.5.2 Other Annotator's Comments

5.5.2.1 metalanguage

The **metalanguage** comment is used to mark the citation context (see 5.4 *Citation contexts*). The words in the citation context are usually put in the quotation marks and marked with the metalanguage annotator's comment. If there is a whole phrase or a clause in the citation context, it is sufficient to mark only the governing part of the sentence in the citation context.
It is not obligatory to type in the text of the comment.

Example:
a notice reading Romanies are not served here
a notice reading „Romanies are not served here{`metalanguage`}*“*

5.5.2.2 form

The **`form`** comment is used to capture uncertainty in the lemma or form of a word. The **`form`** annotator's comment is to be used when the annotator is not sure about the final form of the word (particularly in case of foreign, unknown, the so-called "non-dictionary" words; see 5.2 *Annotation of „non-dictionary“ words*), but it can also be applied in case of uncertainty about capital and small letters, etc.
It is not obligatory to type in the text of the comment.

Example:
my names Jiří [Be:m]
My name is Jiří Boehm{`form`}

5.5.2.3 other

The **`other`** comment is to be used for other types of annotator's comments.
In such a case it is obligatory to type in the text of the comment.

6 Templates

This chapter describes the instructions and model templates for the reconstruction of sentences and phenomena that are frequently repeated.

6.1 Templates for Talking Head

Introduction.
Dobrý den.
Jmenuji se Petra a budu si tu s vámi teď chvíli povídat.
Ještě než začneme, je mě dobře slyšet? (`stype`: `question`)
Ráda bych si s vámi popovídala o vašich fotkách.
Začněme třeba s touhle. (`stype`: `instruction`)
Začneme třeba s touhle. (`stype`: `information`)
Co je na ní vidět?

In the course of the interview.
Dobře. (it is not to be attached to the following question or instruction)
Řeknete mi ještě něco o téhle fotce?
Chcete mi říct ještě něco k téhle fotce?
Povíte mi k tomu ještě něco?
Chtěla byste k tomu ještě něco dodat?
Co byste mi ještě řekl k této fotce?
Podíváme se na další fotku, nebo chcete ještě něco dodat? (`stype`: `question`)

Podíváme se na další fotku. (not: *Tak se podíváme na další fotku.)*
Přejdeme na další fotku. (`stype`: `information`)
Jdeme na další.
Jdeme dál.
Vrátíme se k fotce.

Co je na ní vidět?
Copak to máme tady?
Co je tohle za fotku?
Co tady můžeme vidět?
Kdo je na téhle fotce?

Termination.
Bohužel nám vypršel čas.
Vypršel čas.

Dobře. (it is not to be attached to the following question or instruction)
Tohle byla poslední fotka.

Děkujeme vám za váš čas.
Moc hezky se mi s vámi povídalo.
Počkejte chvilku, kluci vás přijdou vysvobodit. (`stype`: `information`)

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