

## CHILD ACQUISITION OF CZECH MODAL VERBS

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Abstract: The article presents a description of the acquisition of modal verbs and their grammatical forms in a Czech monolingual child. The author uses a corpus of transcriptions of audio recordings from age 2.8 to 3.6 which covers the phase of protomorphology and transition to morphology proper. Pragmatic function of verbs occurring in a child's speech is illustrated by examples, the occurrence of miniparadigms and gradual development of grammatical forms is documented. First the child produces only a limited number of forms – first just in repetitions, then the 3<sup>rd</sup> person singular present tense appears as a universal form. Finally the 1<sup>st</sup> person singular and plural forms appear. In parallel, the child learns to use the past tense, the future tense, conditional and passives.

Key words: Czech language acquisition, developmental psycholinguistics, child language, verbal grammatical categories, modal verbs

## 1 Introduction

This article will present how a child language corpus can be used to analyse first language acquisition in phases from the onset of speech to the acquisition of whole grammar paradigms. I present the description of developing grammatical categories of Czech modal verbs in a Czech monolingual boy at age 2.8 – 3.6 (years, months). Not only the formal aspects will be taken into consideration, but also the semantic and pragmatic aspects of employing modal verbs in dialogues.

## 2 Methodology

The article presents part of a longitudinal research of Czech language acquisition, namely verbal categories of modal verbs. The theoretical background is based on the developmental phases of pre-morphology, protomorphology and modular morphology/morphology proper (Dressler, W. U. (ed), 1997; Voelikova, M. D., Dressler, W. U. (eds), 2002; Bittner, D., Dressler, W. U., Kilani-Schoch, M. (eds), 2003; Voelikova, M. D., Stephany, U. (eds), 2009).

“In the pre-morphological stage, words are rote-learned and usually occur in their base form, with typically one form per lemma. The protomorphological stage manifests itself by the emergence of grammatical oppositions which develop into miniparadigms. Evidence of the first inflectional rules may be found. Passing into the stage of morphology proper, the children approach qualitatively, if not quantitatively, adult models” (Stephany, U., Voelikova, M. D. (eds.), 2009: 4). The development is gradual; there are transitional phases when some typical characteristics of two following stages co-exist. Although some innate capacities for language acquisition are taken into consideration, mostly external influence, e.g. input that a child receives from his environment, is seen as a source of language material for a child. The material is categorized into miniparadigms in which at least three different grammatical forms of a lemma exist; in this case it is three occurrences of different verbal person and number.

## 3 Data

To illustrate the development of Czech modal verb acquisition, I will quote from the corpus of a one Czech monolingual boy from the onset of usage of modal verbs till age 3 and half years, this phase illustrates the period of protomorphology and transition to morphology proper. I also present a quantitative analysis, although the child's development is still in progress and not all the verbal categories are present in his speech, e.g. 2<sup>nd</sup> person plural is not used at all. The boy has been recorded twice a month for 30 minutes at home in interaction with his mother or other adults. The audio recordings have been transcribed according to CHAT, which is a method used in the CHILDES

(Child Language Data Exchange System) database (MacWhinney, Snow, 1985, <http://childes.psy.cmu.edu>, <http://laboratorium.detskarec.sk>). Also diary data which have been prepared in parallel with the audio recordings are used, as the transcripts themselves illustrate only a part of the development in the analysed phase and other relevant phenomena could be neglected. It must be stated that a child acquires Common Czech (a substandard variety of Czech language) and not the Standard, as it is present in the input which he receives from the environment; the boy lives in Prague and his parents have university education.

The analysed period covers 11 months in the child's development. The total number of utterances was 4166. The total number of utterances containing verbs is 2167. As can be illustrated in table 1, the number of utterances containing verbs starts to increase at age 3.4 which is also the period in which the frequency of modal verbs increases.

Table 1: number of utterances containing verbs

age (year, month)	2.8	2.9	2.10	2.11	3.0
number of utterances	303	386	289	268	339
utterances with verbs	151	156	141	144	140
utterances with verbs %	50 %	40 %	49 %	54 %	41 %

age (year, month)	3.1	3.2	3.3	3.4	3.5	3.6
number of utterances	302	279	422	503	560	515
utterances with verbs	155	103	206	333	311	327
utterances with verbs %	51 %	37 %	49 %	66 %	56 %	63 %

## 4 Results

## 4.1 Occurrence of lemmas and their pragmatic function

The first modal verbs occur at 2.8 but only as repetitions. If mother asks, the child answers, repeating the modal verb in the same form as in mother's utterance, suggesting that he understands the meaning but he is not yet able to produce the correct form.

\*MOT: *tak, Mysličku, chceš malovat?*  
*so, Mysliček, would you like to draw?*  
\*MYS: *chceš, chceš*  
(verb *chtít* – 2<sup>nd</sup> person singular, the same form as in mother's question).

Sporadically modal verbs occur in spontaneous speech at age 2.9 – 3.2. However, real development of modal verbs starts at 3.3, so roughly at the same time when the total verbal production increases in the child's speech, we can observe the transitional phase from protomorphology to morphology proper. The first verbs that start to occur in spontaneous speech are *moci / can, chtít / want* and *muset / must*.

The verb *moci / can* is first used at age 2.9, in situations when reading supermarket offers:

\*MOT: *tak boty, ale ty si nekoupíme*  
\*MOT: so shoes, but we will not buy them  
\*MYS: *koupit*  
\*MYS: buy (inf)  
\*MOT: *v tom bys neuměl chodit*  
\*MOT: you wouldn't be able to walk in them  
\*MYS: *moh, moh, moh*  
\*MYS: could, could, could

The child uses a modal verb in reaction to an utterance containing another modal verb, however, its meaning is not fully appropriate. The form is probably past tense as at this age first occurrences of past tense form start to occur in lexical verbs. Similarly the verb *muset / must* is used at the same age (2.9):

- \*MOT: *no to jsou voříšky, ty jsem nekoupila, protože je nemůžeš jíst*  
 \*MOT: these are nuts, I did not buy them, because you cannot eat them  
 \*MYS: *muset*  
 \*MYS: must (inf)

Here the child again uses a modal verb in reaction to an utterance containing another modal verb. The infinitive *muset* probably signals the directive function – *you must buy it*. In the following months, the verb *muset* / *muset* is used in the directive function, signalling what his mother should do:

- \*MYS: *musí tam zaparkovat anto* (3.0)  
 \*MYS: must (3<sup>rd</sup> person singular present) park the car there

Here we can see that at the age 3.0 the child understands that modal verbs combine with lexical verbs. Verb *chtít* / *want* is used when a child expresses his own will, its frequency increases at the age 3.3 when the child also starts to use the personal pronoun *já* / *I*.

- \*MYS: *já chcu stát* (3.3)  
 \*MYS: I want to stand

Verbs *umět* / *to be able to* and *smět* / *to be allowed to* are acquired later, when we can observe a grammatical spurt and transition to morphology proper. Examples of age 3.6 are provided to illustrate the pragmatic function of modals. The child talks about his own skills using the modal verb *umět* / *to be able to* in the 1<sup>st</sup> person singular present tense:

- \*MYS: *já to umím* (3.6)  
 \*MYS: I am able to do it (complete puzzle)

Verb *smět* / *to be allowed to* is usually used to express directive function – prohibition:

- \*MYS: *máma nesmí tyhle zavíjat* (3.4)  
 \*MYS: mum is not allowed to close this (door)

Also the verb *moci* / *can* is used more often, expressing possibility:

- \*MYS: *a je to a můžu další vyházovat* (3.6)  
 \*MYS: and it is done and I can throw another (the child plays on a PC)

As can be seen, modal verbs are used mostly to express the child's own will (*chcu* / *I want*) or his skill (*umím* / *I am able to*). Verb *moci* / *can* expresses possibility. Verbs *muset* / *must* and *smět* / *to be allowed to* are used in the directive function. Using modals to express politeness is not observed at this stage of development.

**Table 2: occurrence of modal verbs in months**

lemmas	2.8	2.9	2.10	2.11	3.0	3.1
chtít	repetition		x			x
muset	repetition	x			x	
moci		x				
umět					x	
smět						

lemmas	3.2	3.3	3.4	3.5	3.6
chtít		x	x	x	x
muset	x	x	x	x	x
moci		x	x	x	x
umět		x	x	x	x
smět			x		x

#### 4.2 Miniparadigms and grammatical forms

“A miniparadigm is a non-isolated set of minimally three phonologically unambiguous and distinct inflectional forms of the same lemma produced spontaneously in contrasting syntactic or situative contexts in the same month of recording” (Bittner,

D., Dressler, W. U., Kilani-Schoch, M. (eds), 2003: XXXVIII). For the first months of modal verb occurrence it is typical that verbs occur only in one form – at the beginning in 2<sup>nd</sup> person singular, when the child repeats the adult's model, expressing a positive answer:

- \*MOT: *chceš hadr?* (2.8)  
 \*MOT: do you want a duster?  
 \*MYS: *chceš*  
 \*MYS: you want

Later the 3<sup>rd</sup> person singular present tense appears as the most frequent verbal form in the child's production, referring not only to things in his environment but also to any interactant, including himself:

- \*MYS: *ten to umí* (3.0)  
 \*MYS: he can (do) it (speaking about himself)

At age 3.2 the 1<sup>st</sup> person plural appears and the child combines modal verbs with lexical verbs:

- \*MYS: *musíme udělat novou (r)rybu*  
 \*MYS: we must make a new fish (from modelling clay)

At age 3.3, finally the 1<sup>st</sup> person singular appears and its frequency rapidly increases, often in the negative form:

- \*MYS: *já nechcu malovat fixou* (3.3)  
 \*MYS: I don't want to draw with a marker

We can observe a grammatical overgeneralization; the child uses *chcu* instead of *chci* to achieve regularity in the grammatical system. This is a clear example that the child has already started to build up a grammatical system and he understands the rules of how conjugation paradigms function. Real miniparadigms start to appear from the age 3.4. The child uses 1<sup>st</sup> person singular, 3<sup>rd</sup> person singular, 1<sup>st</sup> person plural and 3<sup>rd</sup> person plural in the present tense. 2<sup>nd</sup> person is not used at this stage of development.

One month later, at 3.5, future tense, past tense and conditional are added (2<sup>nd</sup> person is not used, other persons are frequently used both in singular and plural). Passive forms start to occur. Transition to morphology proper is obvious. Some more complicated forms are used, for illustration:

- \*MYS: *to musí bejt vyhozený* (3.5)  
 \*MYS: it must be thrown away

This form can be interpreted as passive, although the child does not use the correct form of passive participle (*vyhozeno*) but resultative adjective (*vyhozený*). However, in his input only adjectival forms are present as his parents use Common Czech and not Standard Czech.

- \*MYS: *nechtěla jsem je mít nahoře* (3.5)  
 \*MYS: I did not want to have them up there (he cannot reach plastic bags)

The child still uses the feminine ending when talking about himself as this form is more frequent in the input he receives. Past tense is formed correctly.

- \*MYS: *mohla by někde bejt* (3.5)  
 \*MYS: she could be somewhere (he is looking for a sock)

Here the child correctly uses the conditional form, with correct word order and correct meaning. Such a complicated form is used only a year later after the onset of speech. This is not a typical development as the child started to talk very late and developed advanced forms very quickly, but it is not unusual either. What is important, the stages described in scientific literature are present, although the timing is a bit delayed at first and then accelerated. Lay persons (mothers) often describe this

kind of development saying: *s/he did not talk at all and then started talking in sentences*. As was illustrated in our example, this is not really true.

## 5 Conclusion

It can be observed that communicative competence develops gradually in the child, initially he is able to produce only limited number of forms – first just in repetitions, then 3<sup>rd</sup> person singular present tense appears as a universal form. Finally 1<sup>st</sup> person singular and plural forms appear; this sequence can be observed for lexical verbs as well. In parallel, the child learns to use tenses – past tense and future tense appear in the same month. Surprisingly, the child, who was a late talker, quickly develops elaborate forms such as passives and conditionals. One possible interpretation could be that he has received quite complicated input from his environment which took a longer time to process. At the same time, the child had problems with pronunciation so that he started to speak at a phase when he had quite a good understanding of the Czech language.

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