Self-reference in early speech of children speaking Slovak

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Abstract
The study focuses on the process of being aware of own I in children acquiring Slovak language at an early age and living in a Slovak family. The aim of the research is to understand the process of acquiring the means by which children refer to themselves in the interaction with an adult person. The research uses the qualitative longitudinal method of individual case study. A child’s speech is researched from the very first occurrence of a self-reference mean in 16th month up to the upper limit of early age (36th month) and all that is based on audio-visual records transcripts. The following are researched: (a) succession of self-reference means acquisition in early childhood, (b) function of self-reference linguistic means, (c) process of child’s self-awareness. The results obtained based on the linguistic data in Slovak language are compared with the results of similarly focused researches in English, French, Polish, Russian and Bulgarian language. The research reveals some constants in the development of self-reference instruments that can be observed throughout various language-cultural environments. The research is a part of solutions within the grant project VEGA 1/0099/16 Personal and Social Deixis in Slovak Language.

Key words: self-reference, self-awareness, speech development, early age, Slovak language.

Introduction
At a human’s early age there is a period importance of which is assimilated to the Copernican Revolution in psychology (Piaget & Inhelder, 2014, p. 20-21). This analogy refers to the commencement of consciousness of own I, thus a discovery that there is a limit between the internal (that means my) world and the outer world.

Awareness of own I is, most likely, possible only in comparison with not-me and this opposite has various forms: I and you, mine and yours, own and somebody else’s, but also near and far, known and unknown. These opposites structure our day-to-day existence: starting with experiencing the feeling of closeness to
persons providing safety, care and contact at an early age, ending with mistrust against human otherness, fear of anything foreign or xenophobia.

The opposition of I versus you has, exclusive of any psychological and anthropological aspect, also a linguistic dimension. It is researched which role in constitution of opposition of I versus you is played by linguistically differentiated and culturally determined linguistic means using which the communication partners refer to themselves and other persons participating and not participating in communication (personal deixis; Levinson, 1983, p. 62, 68-72). The correlative term is a social deixis that reflects the differences of communicants arising from their social roles, status, relations between the speaker and the addressee or the speaker and the referent (ibid., p. 89-93). Instruments of personal and social deixis became the subject of numerous foreign researches focused on adult speech but also on how they are acquired by children in the process of ontogenesis of speech.

The aim of this study is to contribute to cognition of one aspect of personal and social deixis in the ontogenesis of speech of a child at an early age learning Slovak language. This aspect refers to oneself. The aggregate of non-verbal, lexical and grammatical means using which a child refers to himself at the time of a speech in the speaker’s position and which say about consciousness of own self, can be defined as self-reference. Research on that is remarkable from various points of view:

a) The variation of attention between aiming one’s attention to I and you is a constitutive element of dialogic interaction. That is why researching on development of self-reference means in child’s speech, development of child’s self-awareness and discourse competence (ability to participate in a dialogue) are also revealed at the same time.

b) The deictic expressions I and you are specific reference means. In the moment of speaking, they refer to individual participants of the speaking act, however, they do not identify a unique person, but his/her communication role. The pronoun I refers to each person in the speaker’s role, the pronoun you refers to any person in the addressee’s role. Therefore, the usage of personal pronouns I and you presumes not only the child’s ability to identify persons (also proper nouns require it), but in addition, the ability to notice changing roles in interaction. Another particularity of personal pronouns is that during interaction alternations they require the change of speaker/addressee’s perspective and use them in the mirror way: while the mother refers to herself using the pronoun I, the child is expected to refer to the mother using the pronoun you and vice versa. Changing the speaker’s and addressee’s perspective uniformly relates to the verbal person, personal pronouns in plural we, you, possessive pronouns my,
your, our, your (Pl), and that in all forms and mutual combinations. A sample of authentic communication between a child at an early age and an adult person documents that intentional simulation on the side of the adult person does not automatically lead to changing of perspective when using pronouns. At the beginning, the child inclines to own name with which the change of perspective neutralizes (1):

(1)  
child: These all are mine.  
father: Mine.  
child: No.  
child: Mine.  
father: What mine? Then whose? Mine or yours?  
child: (quiet).  
father: Mine or yours?  
father: (while pointing to the child).  
father: Who are you?  
child: I am Janka.  
father: So, whose are they?  
child: (after a while) Janka´s.

c) The majority of foreign studies focusing on ontogenesis of personal pronouns originated on the basis of a so-called non-pro-drop language (from "non pronoun-dropping"; language in which a personal pronoun is an obligatory part for identifying the verbal person). From the point of using personal pronouns, Slovak is one of the pro-drop types (from "pronoun-dropping"). Verbal persons are definitely distinguished by a grammatical morpheme and so the personal pronoun can be omitted ("kreslí-m" in 1st person Sg. : "kreslí-š" in 2nd person Sg.).

Previous research

The research focusing on learning personal pronouns in the non-pro-drop languages is continual and extensive, oriented to the following aspects:

a) relation between the ability of children at an early age to change the perspective of the speaker/addressee and the overall development of grammatical competence (Huxley, 1970);

b) relation between changing pronouns I and you and the ability to orient oneself in the space (Tanz, 1980, p. 49-69);

c) discovering the reasons that prevent children from learning changing the perspective (phenomenon known as pronominal reversal; Evans & Demuth,
2012, p. 162-191) and studying the agents supporting the change of perspective in a dialogue such as other person’s voice, the position of people, the dialogue (Orvig & Morgenstern, 2015, p. 155-180);

d) unconventional (= different from adult speech) and conventional means of personal deixis e.g. in French and English (Brigaudiot et al., 1994, p. 123-131), in German and Dutch (Sekerina, 2015, p. 213-239);

e) relation between children’s ability to use personal pronouns, social cognition and the theory of mind (Wechsler, 2010, p. 332-365);

g) pragmatic functions of early I-statements (Caët, 2012, p. 77-93).

In pro-drop languages, the research focuses on the relation of verbal flexion and personal pronouns: in Czech (Markova & Smolík, 2014, p. 61-79), Bulgarian (Stoyanova, 2009, p. 1-23), Polish (Smoczyńska, 1992, p. 203-228), Russian (Kiebzak-Mandera, 2008, p. 319-344), Russian compared to English (Gagarina, 2008, p. 229-259), Serbian (Savić, 1972, p. 59-67). While in foreign literature the means of personal and social deixis are the subject of the individual and comparative, longitudinal and experimental research, in Slovak the research of learning deixis at early age is only at the beginning.

**Aims of the study and research questions**

The aim of the research is to understand the process of learning means by which children learning Slovak refer to themselves. The study focuses on 3 main questions: (a) What is the succession of learning self-reference means at the early stage of speech development of in a child speaking Slovak? (b) What do self-reference means tell about self-awareness? (c) What are the specifics of the process compared to the results of researches in other linguistic-cultural environments?

**Methods of the study**

The material basis consists of audio-visual records of communication of one child in her family environment made by parents of the child aged from 5th to 36th month. Within the records, each month is represented by a one-hour record of the child’s communication with adult persons in ordinary situations of family life (play, eating, bathing, walk, visit). There is a transcript made from every such record by the means of literal and commented transcripts in the system Child Language Data Exchange System (CHILDES; MacWhinney & Snow, 1990, p. 457-472). The one-hour record transcript contains in average 1700 statements of the child and adult persons. The audio-visual records and transcripts of the communication present the trimodal corpus consisting of visual, acoustic and
transcribed data catching spontaneous communication. The data corpus is the source for the longitudinal research method. The coding method is used to analyse the data. Each non-verbal, lexical and grammatical mean used by the child to refer to himself has been assigned a specific code as from the very first occurrence of a self-reference mean in 16th month up to 36th month (early age limit). In total, there were 1476 statements registered in the transcripts in which the child referred to himself. The subject of the research is statements containing self-reference, but always as a part of the context in which they occurred. To illustrate, the samples of transcripts with the person marked (*JAN/child, *MOT/mother, *GMO/grand-mother, *FAT/father) and the child’s age (e.g. 1;03.15 = one year, three months and fifteen days) are used.

The aim of the research is not to verify hypothesis and to generalize their validity within the population of Slovak children, but the opposite – to formulate hypothesis on self-reference development. The qualitative research method or, more precisely, the individual case study with a so-called “dense description” corresponds the aim. It catches the development of one child’s speech but with many data in connection with verbal and non-verbal manifestations of the child in interaction and situation context. The quantitative method was used to increase to reliability of the study conclusions. The information on using the pronoun I was provided by parents of 1062 children aged 18 to 36 months. Presently, the data is freely available as a part of the database Wordbank. An open database of children’s vocabulary development (Frank et al., 2017, p. 677-694).

Data analysis and results
1. The adults’ focus on children

Before a child starts to produce self-reference means it is interesting to observe how adults turn to a child as a partner in a dialogue. The noticeable feature is the intensification of the means referring to the child. It manifests itself as changing verbal persons, verbal manner, singular and plural and various child’s name forms by the parents. In example (2) the adult person combines 2nd and 3rd person singular indicative, imperative symbiotic plural and two forms of the child’s name in the way that in 9 statements there are 11 means referring to the child. All the referential means of the adult persons progressively become the self-referential means of the child. And the question is, how the child orientates himself in this variety of linguistic means and how they progressively become the means of child’s own active vocabulary.
(2) *GMO: So where does Janinka have many cars?
  *JAN: ú.
  %act: Janka takes the cars out of a box.
  *GMO: There you have many cars.
  *GMO: Will you put them here into this box?
  *GMO: So, put.
  *GMO: Will we pour the cars out?
  *GMO: We will pour.
  *GMO: We will pour # this way.
  *GMO: There Janka has many cars.
  *GMO: Will you put everything in there?
  *JAN: Hm.
  %act: Janka transfers the cars from one box into another one.
  age: 1;03.15

2. Reference to oneself as reference to others

In the early stage of self-reference development a child refers to himself as to any other person, i.e. by the 3rd verbal person and a name. This non-conventional way of self-reference lasts more than a year (16th to 29th month) and after that, the dominant mean becomes the 1st person sg. as the conventional mean of self-reference in Slovak (Graph 1).

Graph 1: Frequency of 3rd person sg., child’s first name and 1st person sg. as self-reference means in a one-hour record of communication between the child and an adult person (child aged 16th to 36th month)
Self-reference by 3rd verbal person is first presented by mostly imperfective verbs using which the child verbally accompanies elementary demonstrations of biological functioning, movement and the status of (non)ownership of a thing in the “here and now” situation (has, doesn’t have, eats, sits, will give/gives, flies, goes, drinks, sings, dances). After the second year, the perfectives are on the increase in expressions of the child’s intention associated with the body and movement in the near future (will wear, will take away, will choose). The orientation to physical I is dominant in self-reference by 3rd person. Less frequently, it is used by the child to refer to absence of ability necessary to reach s goal (cannot open the door). In the initial stage of self-reference development a tendency to adapt to adult persons’ speech (speech entrainment) is observed. When the child uses 3rd person in the self-reference function, the adult repeats it and extends the statement using the child’s name (3). In the following stage, the name becomes a self-reference mean used by the child. Adult’s relation to speech is mentioned because self-awareness and reference to oneself presume a partner against whom an individual can be demarcated. At the same time, the interaction with an adult provides a guideline for orientation in linguistic means.

(3) *GMO: Click and we will sew a red apron, a nice a pron.  
*JAN: Wears.  
*GMO: Janka will wear it.  
age: 2;01.01

Graph 1 documents a temporary increase of 3rd person sg in 28th month. Quantity correlates with quality of the mean: 3rd person sg fulfils the self-reference function in a play with pretence of roles. The child refers to himself, but in a played role (child in the mother’s role: gives as mother, hangs). Such a case is considered as quasi-self-reference, a played one or false self-reference. Using 3rd person in played self-reference is observed when the child uses conventional self-reference means: 1st person sg, pronouns I, my, you are, with me, we, to us. Despite this, when pretending the role, the child goes back to 3rd person sg. that is the first self-reference form from the point of development. Using 3rd person sg in a played self-reference is interpreted as demonstration of distance from a pretended and thus fictive role. In the communication function „me as somebody else“ 3rd person sg reaches its peak and eliminates from child’s speech.

The preference of 3rd person sg in the self-reference function can result from corporeality (verbs in the 3rd person sg primarily present semantics of biological functioning, movement and activities associated with the body) and as well its “advantageousness” for the user at an early age (as opposed to 1st person sg no
changing of the speaker’s and the addressee’s perspective is needed, it neutralizes in 3rd person).

3. Self-reference by a name and inception of social I

Before the second year of age (22nd month) the child presents first manifestations of proprial self-reference (=reference to oneself by a name). It is created in aggregate with the tactile hand gesture. The first manifestations of proprial self-reference have doubled verbal – non-verbal nature. It is a complementary association of a gesture and a name in which “a word as a sticker names the similar content as the gesture” (Kapalková, 2008, p. 187). Pointing to someone/something belongs to first deictic gestures of transcultural nature that is registered by Kapalková (ibid., p. 183) in Slovak children aged 8th to 9th months. However, pointing to oneself can be observed with approximately one-year distance: the child turns the fingers of both hands to himself, touches the body and says her name. Referring to oneself is created along with understanding the pronoun you in a situation that induces positive emotionality (4a) and reciprocity (4b).

(4a)  
*MOT: This ball.  
*JAN: Vava (=Jana).  
%gpx: Janka touches herself with own hand.  
*MOT: Úúú you are very skilful.  
*JAN: Vava (=Jana).  
%gpx: Janka touches her belly with both hands and smiles.  
*MOT: Úúú you are very skilful!

age: 1.09.17

(4b)  
%gpx: Janka touches her mother by the hand.
*MOT: This is mummy’s hand.  
%gpx: Mother touches Janka by the hand.  
*MOT: And this is...?  
*JAN: Vava (=Jana).  
*MOT: Janka’s.

age: 1.09.17

Proprial self-reference of a child is a milestone after which mother’s self-reference changes. The frequency of the appellative mama (mama will help you) significantly decreases (Brestovičová, 2016, p. 129, Graph 1). In other words, simplified self-reference is in remission which is identified by the mother in a
unique and constant way (the appellative *mama* identifies a person while the 1\textsuperscript{st} person sg and the pronoun *I* identify a communication role). While a child refers to himself using 3\textsuperscript{rd} person (up to 22\textsuperscript{nd} month), mother uses the appellative *mama* in self-reference 7.7-times more frequently than the pronoun *I*. When the child starts to refer to himself by own name, the preference of the appellate *mama* decreases (23\textsuperscript{rd} – 32\textsuperscript{nd} month: 5.7-times more often *mama* than the pronoun *I*).

The stimulus for the change in mother’s speaking behaviour is due to the essential breakthrough in child self-reference. The deictic self-reference gesture together with a name are evaluated as outer manifestations of awareness of own existence. Own name has not only a naming function, but primarily the identification function. Using her name, the child demarcates himself as an autonomous individual in the social world. The actual data show that a name is created in a reciprocal contact with an adult and together with understanding the pronoun *you*. That is why a name in the self-reference function is considered to be the beginning of creation of social *I*.

4. First verbal person as a conventional self-reference mean

1\textsuperscript{st} person sg is created in parallel with own name (Graph 1). The motive for its usage is the child’s need to share own intentions to act with adults. The first verbal person tells about the child’s decision to reach an aim (*I will give, bring, open, comb, try, scoop up*). The focus on actions in the near future means that the child overcame so-called physical actions (= a state in which she does not think about what he is to do and completely engages himself in the action itself; Piaget & Inhelder 2014, p. 18). Physical actions are switched by actions with a conscious intention. The second motive for using 1\textsuperscript{st} person sg is experiencing a deficit problem that is either caused by physical or mental discomfort (*I cannot see, hear, I do not know*) or absence of an object needed to reach the aim (*I don’t have*). In next development the social dimension of forming *I* comes to the fore. The first verbal person is repeatedly registered in the following forms:

a) social conventions (*thank you, here you go*);

b) modal aspects of actions (*I want, I can, I have to*);

c) contrast between the social environment and own self (increase of verbs in negative: *I don’t want, I am not going, I won’t give, say, twist, I haven’t had breakfast*);

d) speaking for another person (for grand-mother: *I will give you one more little piece*; for father: *I am videoing Janka*).

The functions a) – d) show that the first verbal person is learned in the social context starting with learned social statements up to the conflict between own self and the social environment. The contrast of *I versus you* goes through the
stage of disaccord and refusal and then results in the combination of means referring to oneself and the addressee in the same statement (Do you think that I am cooking chocolate?).

From the grammatical point of view, time differentiation of 1st person forms increases.

This form is preferentially realized as an intention expressed by synthetic future of perfective verbs (I will comb). The time paradigm is supplemented by preterite oriented to the achieved result (I have painted, I have cut, I have taken away, I have already eaten, I have poured, I have given, I have decorated, I have chosen, I have taken out, I have told). In 30th month, the analytic future tense relating to an action with distant temporal perspective from the moment of speech (and after that I will cycle) is registered. Verbs in 1st person sg are semantically enriched by cognitive verbs (I will recognise, I have forgotten, I have made a mistake, I think, I remember). While 3rd person sg refers to physical actions, the 1st person sg means the step to the reference to mental actions.

5. Pronoun I as another stage of social development

The form of 1st verbal person is the stimulus for production of pronoun I (first occasional occurrence in 24th month; Graph 2). In Slovak as an inflected language, the reference to a speaker is coded in the grammatical morpheme -m, so the pronoun I is a facultative and non-economical component of self-reference from the point of grammar.

![Graph 2: Frequency of 1st person sg, verb and the pronoun I as self-reference means in a one-hour record of child’s communication with adults (child’s age: 16th – 36th month)](image-url)
Then, what is the motivation for using explicit self-reference (combination of a verb and the pronoun I)? The analysis of contexts uncovers social and pragmatic motivation.

Social motivation means that the child expresses information not only with regard to contents but also the relational dimension of a dialogue i.e. with regard to social distance from the partner in communication. The proof thereof is provided by two types of interaction contexts as the opposition to social closeness – social distance.

The first usage of I is recorded in repetition as the mean to express togetherness, social contact and closeness. They are rejoinders like me too (5a) saying about the need for affiliation to and social experience of the world with an adult person. The need for closeness is also expressed as attracting an adult’s attention in a situation when the child is not in his/her visual field and/or the adult is occupied with another activity (5b).

(5a)  
*FAT: I can hear a train.  
*JAN: I can also hear a train.  
age: 1.11;17

(5b)  
*FAT: And now I will go with the pawn and shoot your pawn.  
%com: Father manipulates with chess pieces.  
%com: Child is not interested in the game of chess, she is trying to open a box.  
*JAN: I am opening like this and I am closing like this.  
age: 2.07.15

On the other side the explicit self-reference appears when the child is emphasizing on her own contribution to a common activity with an adult or to a common result (6a). The child demarcates herself more significantly against the social environment in the contrasting position when she corrects the adult person, does not agree, refuses, presents her will i.e. when the social distance from the adult person enlarges (6b).

(6a)  
*MOT: And we are painting.  
*MOT: Thiiiis way.  
*JAN: I am putting into soil.  
age: 2.06.18
The interaction contexts (5-6) show that the awareness of own I is continuously created in two perspectives: the egocentric one that presents the demarcation of oneself against surroundings (I versus you), but also the contact one that reflects the need to belong to someone and to experience the world jointly (I and you).

Pragmatic motivation is presented by child’s communication intentions understood as an aim that the child is to reach by the statement. Pragmatics of child’s I-statements is researched in connection with pragmatics of mother’s speech focused on the child which is the most frequent interaction context for her. (Pragmatics of I-statements of the mother of the same child, whose speech is under research in this study, was studied by Brestovičová, 2016, p. 131-135.) Preferentially represented pragmatic functions (PF) of I-statements of the child and her mother are partially identical, partially specific (Table 1). Preference means that four functions present 75 % of all context realisations recorded in the transcripts from 6th to 36th month in the mother’s speech and from 24th to 36th month in the child’s speech.

<table>
<thead>
<tr>
<th>Pragmatic Function</th>
<th>Child</th>
<th>Mother</th>
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</thead>
<tbody>
<tr>
<td>intention</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>text routine</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>will</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>refusal</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>attitude</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>speaking for another</td>
<td>-</td>
<td>+</td>
</tr>
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</table>

Table 1: Central pragmatic functions of I-statements in child-mother communication (+ dominant representation, - peripheral representation in communication)
Intention and text routine are dominants of PF in the child as well as the mother. An intention can be interpreted as a decision to do something. Mother informs a child about her actions in the near future, she accompanies the child by words during activities that she is to do, prepares the child for them, tries to attract her attention and participation. The intention in the speech of monitored child’s mother is the most preferred pragmatic function of I-statements at all. Through the PF intention, the mother presents the world to the child as a sequence of intentional activities that she has decided to do (You know Janka, I am going to cheer you up 6th month; I will open it for you and let’s put the beans in 14th month; and I will finally comb your hair 25th month; choose for me and I will sing and we will record 30th month; so I will taken them 35th month). The child verbalizes her intention when she is attracting the attention of an adult or when child’s efforts for autonomy in actions did not meet with acceptation on the side of the adult (7). While the mother acts in the role of a companion around the world of adults’ actions, the PF intention is the mean to achieve attention and autonomy for the child.

(7) *MOT: So, cut your cabbage and celery.
*MOT: I will grind!
*MOT: Aha.
*JAN: I will grind.
*sit%: Mother wants to help the child.
*JAN: I will grind.

The text routine is presented by the statements that mother reproduces/reads and the child repeats/imitates (...and I would thread, if I had such legs, passage from a song). They present imitation of I-statements that the child reproduces as text blocks and that is why it is not possible to decide whether the child understands individual components and what their real effect to active production is.

PF will and refusal with the typical structure I + I (don’t) want are dominants in child’s speech. This structure presents a prototype of negative demarcation of oneself towards surroundings (8a) and it is specified as a mean to express will to own/not to own an object (I want this, I don’t want to have a teddy), to achieve certain situation (I want it to be open), decide on the selection from alternatives (I don’t want to go up anymore). On the contrary, PF will in mother’s statements is rare (only one occurrence in 30 records). But, it is important to say that negative demarcation in child’s speech becomes softer, namely in the way that the child expresses the purpose or cause of her will or refusal. The reasoning is enhanced
by development of syntactic relations (operators because, in order to start to appear), but mainly, it is a demonstration of forming empathy and tact towards a partner, i.e. the ability to see situations from the addressee’s perspective. Firstly, the syntactic demandingness of a statement and the newness of pragmatic function cause that the child temporarily “returns” to the primary self-reference by the name (8b).

(8a)  *GMO: Come, let’s have a look at how beautiful tulips we have here.
       *JAN: I no!
       age: 2.06;18

(8b)  *GMO: So give a small one.
       *JAN: This is not for Janka because I am working with that.
       age: 2;05.15.

PF speaking for another and attitude are specific central PF in mother’s speech. Using the pronoun I in speaking for another person provides the child with an illustration of the pronominal self-reference function. Any person in the role of a speaker is referred to using the pronoun I by the mother (I am a pig, look, I have nice red paws 10th month; I am a brave foot soldier and I will not leave it like that 33rd month). By the end of the early age, speaking for another becomes a part of a role play or narration also in the child’s speech (I am a big elephant – and I am a teddy hungry already). Child’s ability to use the pronoun I in speaking for another is considered evidence that the child starts to understand the nature of pronoun I. Until then, she used it only as an individual identification mean. However, in speaking for another person she uses the pronoun I in self-reference for everyone who acts in the communication role as a speaker.

To the central PF statements of mother also belongs attitude, namely the preferential one (Actually, I should have rather taken the warm trousers.) or a doubt associated with care about a child (Oh, but whether I am able to dress you in it – So, I don’t know if it tastes you). In child’s speech the expression of attitude starts to appear rather sporadically but definitely before turning 3rd year of age. The linguistic indicator is rather in the preferential attitude (I would rather prefer the cabbage one).

A child, whose speech is the object of the longitudinal research, sporadically uses the pronoun I from 24th month; by the end of early age its frequency significantly increases (Graph 2). Let’s compare the data from the case study with quantitative data from the parent’s questionnaire. Table 2 shows that in 24th month the pronoun I is registered by two thirds of children’s parents in the
sample. By the end of early age the share of children in which parents can see the pronoun *I* in production culminates between 89-100%. From the point of quantitative data and time limits the speech development in the monitored child can be deemed typical.

<table>
<thead>
<tr>
<th>Age of children in months</th>
<th>22</th>
<th>23</th>
<th>24</th>
<th>25</th>
<th>26</th>
<th>27</th>
<th>28</th>
<th>29</th>
<th>30</th>
<th>31</th>
<th>32</th>
<th>33</th>
<th>34</th>
<th>35</th>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of children producing pronoun <em>I</em></td>
<td>66</td>
<td>73</td>
<td>76</td>
<td>78</td>
<td>88</td>
<td>77</td>
<td>87</td>
<td>85</td>
<td>86</td>
<td>83</td>
<td>100</td>
<td>91</td>
<td>96</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2: Percentage of children aged 22 – 36 months from the sample N = 1062 children, whose parents confirm the production of pronoun *I* (http://wordbank.stanford.edu/analyses?name=item_trjectories)

**Discussion**

Third verbal person and name as self-reference mean

The stage of 3rd person sg (without using pronoun *I*) is denoted as pre-pronominal and it is confirmed by researches in other pro-drop languages: in Spanish and Italian (Clark, 1986, p. 687- 782), in Polish (Smoczyńska, 1992, p. 203-228), in Russian (Kiebzak-Mandera, 2008, p. 335), in Bulgarian (Stoyanova, 2009, p. 23). Self-reference researches in non-pro-drop languages pay attention to self-reference and accordance. Huxley (1970, p. 154) observes using the name and the verb in speech of a boy called Douglas (9). „In example (2;3-2;7) the verb does not agree with the third-person form of the subject. It can be construed either as agreeing with the subject on semantic grounds (the subject is the speaker and therefore first person), or as being unmarked, or as echoing a second-person command made to Douglas by someone else. Example 9 (2;7) comes from a period in which Douglas sometimes used *I* alone, sometimes Douglas alone, and sometimes both in combination. When Douglas is used, agreement is sometimes third-person, sometimes first person. In the repetition of sentence frames in example 9 (3;1) the verb form does not change in concord with the subject, Douglas as a speaker used first-person. He adheres to a semantic concept of person, rather than a syntactic one.” In Slovak, the forms of verbs are clearly differentiated and in child’s speech we notice exclusively syntactic accordance with 3rd person sg. (child about himself: *Janka is eating*, never *Janka am eating*). It means that the preference of semantic accordance before the syntactic one is not a constant feature in speech development. Expression of accordance can be associated with the type of language.
We have mentioned that the first usage of own child’s name is accompanied by a gesture. It seems that a gesture is not only an individual demonstration in speech development. Lepskaja (1988, p. 52) mentions that, while in the language there were no personal pronouns, the subjectivity was expressed by a gesture – the speaker pointed to own body. The remains of the state can be observed in some languages where expressions with the function of personal pronouns have been created from parts of the body (e.g. in Vietnamese mình means, depending on the context, body as well as the pronoun I).

The origin of name as a self-referential mean was observed in emotional interaction with an adult. Morgenstern & Brigaudiot (2005) researching speech development in children speaking French counted on the impact of adults’ emotional expressions to the development of personal deixis. The authors presume that children are able to distinguish adults’ emotional comments about them (comments about themselves) by which extraordinariness of children is emphasized while the authors count on the influence of positive and negative emotionality (congratulations, reproaches). Emotionality is deemed to be the stimulus for repetition of children’s statements containing their name. Similarly, Caët (2012, p. 87) in the study on self-reference development in a child speaking French mentions that despite mother referring to the child by the name and only rarely by 3rd person, it happens just when she speaks about an extraordinary situation associated with the child. The extraordinariness is supported by mother’s emphatic intonation. Brigaudiot et al. (1994, p. 14) evaluated using the name in self-reference as a condition “for entry into own self”. Even the data in our case study documents that after a child “discovers” his name and increases the frequency of its usage, the use of conventional self-reference means intensifies as well (1st person sg and pronoun I).

The similarity of research results in Slovak on one side and French/English on the other side can be also found in reciprocal interaction contexts that stimulate the production of self-reference means and means referring to an addressee. Brigaudiot et al. (1994, p. 13) mentions that self-reference is formed in interaction containing a reciprocity relation (in French à moi – à toi, donne – tiens, à Guillaume – à maman). The research in Slovak but also in English and French show that learning to self-refer requires situations with reciprocal relation between the speaker and the addressee. In other words, the production of „I“ happens in parallel with understanding “you”. I presume that learning
alternate perspective grows beyond the borders of linguistic means and reaches as far as to role alternation and experiencing reciprocity in non-verbal alternations between a child and an adult. In the diagnostic tool *Communication Behaviour Test I* for children aged 8 to 16 months (Kapalková et al., 2010) that is created based on authentic communication between children and parents in Slovak environment, from 32 items focused on testing adult speech understanding a one fourth of commands based on the reciprocal relation of child and adult (*give the teddy, take the teddy, give a kiss, say bye, throw the ball, go to daddy, come to mama, send a kiss, roll* [=roll the ball], *stroke*) and from 15 gestures almost one half has a reciprocal basis (e.g. a child passes objects to another persons, a child stretches hands out towards an adult so that he could take him in the hands etc.).

Pronoun *I* in speech development

Foreign studies discuss whether learning pronouns using which a child refers to himself and an addressee is associated with sibling relations. It is thought about a so-called sibling effect (sibling effect) according to which the younger child takes more advantage from the speech of older one or, that the only child has less opportunities to monitor alternating perspectives of the speaker and the addressee and, therefore, also words and forms requiring the alternation of perspective are developed more slowly (Deutsch et al., 2001, p. 284-315).

The research of Stojanova in Bulgarian (2009, p. 20) supports this tendency, however, on the other side Smoczyńska (1992, p. 203-228) in the case study in a child speaking Polish growing with an older sibling, observes no profit from the sibling effect. The child under research in our study is the only child in the family at the time of records and despite the period of self-reference by 3rd person and name lasts up to 29th month (Graph 1), the child also continuously uses conventional self-reference means. The start of systematic production of the pronoun *I* is observed in the time when the ability is confirmed by three fourths of parents in the researched sample (24th month, Table 2).

To compare, let’s present the development in other languages. Brigaudiot et al. (1994, p. 10) observes the start of using the pronoun *I* in three children learning French and English in the following way: Peter in English since 2;00; Juliette and Guillaume in French since 2;04. Caët (2012, p. 83) observes the grammatical subject in majority of verbs by which the child refers to himself since the age of 2. There are 2 conclusions from the comparison:

(a) Neither child learning a non-prop-drop language uses a subject pronoun automatically as a part of verbal form. The pronoun is either completely omitted or, instead of a pronoun, they use a pre-verbal sound first (so-called
filler). It occurs in situations when the child experiences a problem and desires attention. Using a subject pronoun depends on the semantics of the verb. Caët (2012, p. 82) observes the absence of subject in verbs want, can, know and go for the longest time.

(b) The fact that the child is an only child in the case study has no negative influence on the production of pronoun I (but also other self-reference means).

When analysing I-statements, we have defined two groups of functions related to the relational part of communication and pragmatics. Brigaudiot et al. (1994, p. 11) states that children speaking French use self-reference to express affiliation to someone (moi aussi – me too) first, in a child speaking English the first statement given is no me go home too (ibid., p. 10). At the same time, demonstrations of comparison, contrast, otherness, opposition of a child towards others occur among self-reference means in early speech. The need of affiliation (me too) and autonomy (I versus others) at the same time are recorded in early speech in Slovak, too. The differences are, naturally, in linguistic expressions: while in Slovak the marker of social position is the combination of I + 1st person, in French it is the combination of personal adjectives and personal pronouns and the verb (moi + verb or moi + je + verb). Similarly, in English Orvig and Morgenstern (2015, p. 164) mention the pronoun me, by which children in early age emphasize on the contrast I versus others. However, the structure me + verb (me working a railroud) is not a conventional part of adult speech. The origin of the constructions in child speech is explained by the authors as imitation of question fragment (Do you want to me write? Me write.). Regardless the type of language, a personal pronoun acts as a marker of child’s social position in interaction with an adult at an early age.

In development of pragmatic functions of I-statements Brigaudiot et al. (1994, p. 123-131) mentions the succession: will, intention, opinion, feeling and information on an action actually in progress and later on a past action. Will and intention (Table 1) belong to the group of central functions also in discourses of a child learning Slovak. Other pragmatic functions (opinion, feeling, information) are registered as a part of a wider centre and periphery of pragmatic functions also in the speech of a child speaking Slovak. Primary functions of I-statements from the point of reflection of relations between a speaking child and an adult as well as from the point of pragmatics are not dependent on whether the personal pronoun is an obligatory or facultative component of statement.
Conclusion

The development of means using which a child refers to himself at early age is dynamic. First, the child refers to himself as to any other person (3rd verbal person). At the end of early age he is able to use the pronoun I also in speaking for another person.

Between the given poles we observe modification of self-reference means and their functions. The third person of the verb first refers to a physical I and later the child uses it in a pretended self-reference during a symbolic play. In a two-word statement there is a structure of 3rd person with the child’s name. Using his name, the child starts to identify himself as an autonomous individual in the social world, the social I comes into existence. The name is the stimulus for the 1st person of the verb, the conventional mean of self-reference in Slovak. Semantics of verbs and pragmatics of statements with 1st person give evidence about the fact that so-called physical actions are alternated by actions with a conscious intention. From implicit self-reference, development heads to explicit self-reference by pronoun I. I-statements testify about the child’s ability to formulate contents of a statement with regard to social distance from a communication partner. Dominant pragmatic functions of I-statements (will, intention, refusal and text routine) show the growing autonomy of the child and the need of social closeness, decreasing dependence on the situation context „here and now“, but also the joy in imitation.

Child’s self-reference is created in the interaction context that is preferentially provided by the mother and her speech is oriented to the child. The change of self-reference behaviour of the child is reflected in the changes in how the mother refers to herself. This way, she supports child’s self-reference development.

The comparison of self-reference development in Slovak with foreign researches results shows numerous identical tendencies in the succession of self-reference means, in pragmatism as well as the relational side of child’s communication with an adult (emotionality, reciprocity, social closeness and distance of partners). This proves that self-awareness at an early age is also formed by constants independent on a concrete type of language and cultural environment.

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References


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