Interdisciplinary, Cross-Cultural Research of Preschoolers' Linguistic Consciousness

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Abstract: Results of a blended research are presented in this paper, which aim at cross-culturally comparing 4-5-year-old Russian and Hungarian preschoolers' *verbal image of the world* or *linguistic consciousness*. The interdisciplinary approach mingled the pedagogical approach with a psycholinguistic perspective, applying both the psycholinguistic theories of speech activity and linguistic consciousness, and the concept of childhood as a social construction. The prevailing methodology relied on the association experiment, complemented by the shoulder-to-shoulder method. Triangulation was ensured by the application of corpus linguistic methods for the analysis of the collected linguistic information. As a result of the study numerous universalistic (e.g. concept of *family*, perception of a *child*) as well as culture- and language-bound features (e.g. religious references) of Russian and Hungarian preschoolers' linguistic consciousness were identified. Numerous effects of globalization were revealed including brand names, info-communication tools, and cartoons.

1. Introduction

An effective tool of cross-cultural comparative investigation is the association experiment, developed by the Moscow School of Psycholinguistics [1]. In this paper, ten stimulus words were selected for the association experiment - *friend, child, family, water, black, toy/game, devil, home/house, foreigner,* and *angel* - aiming at comparing Hungarian and Russian 4-5-year-old pre-school children's *verbal image of the world* or *linguistic consciousness* [2]. The results obtained were analyzed applying both psycholinguistic and pedagogical approaches and theories, and were contrasted with Russian and Hungarian data from large corpora [3,4].

2. Methods

In order to compare Russian and Hungarian pre-school children's linguistic consciousness the aforementioned ten stimulus words were investigated with two respondent groups, comprising

100-100 Hungarian and Russian pre-school children from the age group 4-5, respectively. Associations were collected and compiled into corpora for easier analysis.

The (psycho)linguistic approach was complemented with equal significance by the pedagogical perspective, initially by the selection of the stimulus words that well characterize the investigated age group, subsequently by applying the shoulder-to-shoulder method [5]. In consent with early childhood experts [6], children are considered in this research as 'actors' determining their own life.

3. Results

In this paper, cumulated results of the collected data from responses to the ten stimulus words are presented. Adjectives, nouns, and verbs are grouped separately and presented in order of frequency, displaying the top 10 reactions in each case, similarly to the 10 most frequent key single-words.

3.1. Adjectives

The 10 most frequent adjectives collected in the course of this research (Table 1.) display a high level of congruence in the Hungarian and Russian respondent groups. Preschoolers in both groups use, thus their linguistic consciousness heavily relies on adjectives of a generally positive value (*good*, *kind*, *nice*). Only one adjective with a negative denotation (*bad*) appeared in the top-10 results, in both groups. The *small-big* dichotomy appears in both respondent groups, while colors (*white* and *black* in both groups, *red* and *blue* in the Hungarian group) are also heavily present in preschoolers' linguistic consciousness.

Table 1. Ten Most Frequent *Adjectives* from Own Research and from Araneum corpora

	Adjectives *from own research*			Adjectives *from Araneum corpora*	
	Hungarian	Russian		Hungarian	Russian
1.	jó (**good**)	маленький (**small**)	1.	magyar (**Hungarian**)	белый (**white**)
2.	kedves (**kind**)	хороший (**good**)	2.	nagy (**big**)	российской (**Russian**)
3.	fekete (**black**)	большой (**big**)	3.	jó (**good**)	различных (**different**)
4.	kicsi (**small**)	белый (**white**)	4.	új (**new**)	большой (**big**)
5.	nagy (**big**)	черный (**black**)	5.	fontos (**important**)	новый (**new**)
6.	piros (**red**)	добрый (**kind**)	6.	európai (**European**)	разных (**various**)
7.	fehér (**white**)	красивый (**nice**)	7.	megfelelő (**appropriate**)	различные (**divers**)
8.	szép (**nice**)	настоящий (**real**)	8.	kis (**small**)	основные (**basic**)
9.	kék (**blue**)	плохой (**bad**)	9.	szép (**nice**)	данной (**given**)
10.	rossz (**bad**)	разный (**different**)	10.	nemzeti (**national**)	настоящее (**real**)

Research findings are compared with the Hungarian (Araneum Hungaricum Maius) and Russian (Araneum Russicum Russicum Maius) corpora of the large-scale, comparable Araneum corpus family (Table 1.) – both corpora consisting of 800-900 million words. Besides discrepancies (i.e. the presence of adjectives referring to nations and geographic regions: *Hungarian*, *Russian*, *European*), noteworthy resemblance is identified including the *small-big* dichotomy, the presence of positive notions (*good*, *nice*, *real*) and of colors (*white*).

3.2. Nouns

The most remarkable lexical items of preschoolers' linguistic consciousness in both countries are persons surrounding them, including parents (*mother* in first and *father* in third place in both groups; see Table 2.) and *friend*s. A key element of both Hungarian and Russian linguistic consciousness on the basis of the large-scale, country-wide Araneum corpus family is *man*/*person* (человек, ember).

Table 2. Most Frequent *Nouns* from Own Research and from Araneum Corpora

	Nouns *from own research*			Hungarian	Russian
	Hungarian	Russian	1.	ember (**man/person**)	время (**time**)
1.	anya (**mother**)	мама (**mother**)	2.	év (**year**)	года (**year**)
2.	gyerek (**child**)	человек (**person**)	3.	nap (**day**)	работы (**work**)
3.	apa (**father**)	папа (**father**)	4.	szó (**word**)	России (**Russia**)
4.	játék (**toy/game**)	дом (**house/home**)	5.	világ (**world**)	компании (**company**)
5.	barát (**friend**)	игрушка (**toy**)	6.	Isten (**God**)	день (**day**)
6.	család (**family**)	ребенок (**child**)	7.	rendszer (**system**)	случае (**case**)
7.	ház (**house**)	семья (**family**)	8.	pont (**point**)	области (**region**)
8.	anyuka (**mom**)	друг (**friend**)	9.	dolog (**thing**)	жизни (**life**)
9.	ruha (**clothes**)	вода (**water**)	10.	város (**town**)	человек (**person**)
10.	víz (**water**)	цвет (**colour**)			
	Nouns *from Araneum corpora*				

3.3. Verbs

In order to more properly depict the linguistic consciousness of the two investigated groups, modal verbs and substantive verbs were omitted from the top 10 results of both the research results and the Araneum frequency list (Table 3.).

Table 3. Most Frequent *verbs* from Own Research and from Araneum Corpora*

	Verbs *from own research*			Verbs *from Araneum corpora*	
	Hungarian	Russian		Hungarian	Russian
1.	játszik (**play**)	знать (**know**)	1.	tud (**know**)	является (**seems**)
2.	tud (**know**)	играть (**play**)	2.	mond (**said**)	позволяет (**allow**)
3.	szeret (**like/love**)	жить (**live**)	3.	áll (**stand**)	следует (**follow**)
4.	lakik (**live**)	любить (**like/love**)	4.	kerül (**cost**)	делать (**do**)
5.	válaszol (**reply**)	пить (**drink**)	5.	sikerül (**succeed**)	получить (**receive**)
6.	felnő (**grow up**)	делать (**do**)	6.	jelent (**mean**)	имеют (**have**)
7.	mond (**say**)	дружить (**be friends**)	7.	történik (**happen**)	купить (**buy**)
8.	csinál (**do**)	помогать (**help**)	8.	kap (**receive**)	сказать (**say**)
9.	megy (**go**)	летать (**fly**)	9.	készül (**prepare**)	происходит (**happen**)
10.	beszél (**speak**)	говорить (**speak**)	10.	tesz (**put**)	находится (**located**)

*Note: *Modal verbs and substantive verbs are excluded*

The core verbs as lexical elements of Hungarian and Russian preschoolers' linguistic consciousness include *play, like/love*, *know*, *do*, and *live*, as well as verbs connected to speaking (*reply*, *say*, *speak*). *Like/love* and *play* are clearly over-represented in the preschoolers' responses when compared to the Araneum database. A culture- and language-bound item in the Russian results is *дружить* (*be friends*), widespreadly used by Russian children.

3.4. Key Single-Words

Key single-words were identified using the Sketch Engine corpus linguistic tool. Key single-words are defined as one-word units (individual words) that appear more frequently in the focus corpus than in the reference corpus. These lexical items well depict the peculiarities of preschoolers' linguistic consciousness in the Russian and Hungarian context (Table 4.).

Table 4. Most Frequent Key Single-Words in Preschoolers' Associations

	Hungarian		Russian	
	Association	Freq.	Association	Freq.
1.	legózik (**play lego**)	13	братик (**bro**)	31
2.	babakonyha (**dollhouse**)	11	лего (**lego**)	15
3.	lego (**lego**)	8	прятки (**hide and seek**)	16
4.	bújócska (**hide and seek**)	9	догонялки (**play tag**)	7
5.	babázik (**play with dolls**)	10	ребёнок (**child**)	5
6.	szarv (**horn**)	28	дружить (**be friends**)	49
7.	Jézuska (**little Jesus**)	14	сестрёнка (**little sister**)	5
8.	társasozik (**play board game**)	6	домик (**small house**)	4
9.	plüss (**plush**)	12	крылышко (**little wing**)	10
10.	bújócskázik (**play hide and seek**)	6	крыльев (**wings**)	3

*Note: *Proper names and double occurrences are excluded*

Lego proves to be a key lexical element in the case of both Russian and Hungarian children, appearing in number 1 (*play lego*) and 3 (*lego*) position in the Hungarian and in the second place in the Russian results (*lego*). Children predominantly associate to either toys surrounding them (*lego*, *dollhouse*, *plush*), or games they play (*hide and seek*, *tag*, *board game*, *playing with dolls*).

Counter to Hungarian children, Russians mention friends and family members more typically, including *bro*, *little sister* and *child* – this is not apparent in the Hungarian sample.

References to religion can be grasped in the Hungarian associations including *Jézuska* (*little Jesus*). Russian children meanwhile mention *wings* and *little wings* (*крылышко*) in the context of their attempt to describe an angel.

4. Summary

A multidisciplinary perspective merging pedagogical, linguistic and psychological aspects in investigating Russian and Hungarian children's linguistic consciousness yielded in valuable results. An association experiment was conducted with 100-100 preschoolers in Russia and Hungary, applying the shoulder-to-shoulder method. The outcome revealed universalistic features of 4-5-year-old children's linguistic consciousness including the perception of the *family* or of a *friend*.

Children characterize themselves as well as their friends as *small*, *kind*, *good*, *nice* persons – predominantly with positive features.

Language- and culture-bound dissimilarities were revealed including religious references (*little Jesus*) and unique lexicon of specific etymology (*дружить: be friends; маленький-малыш: small-kiddy*).

Effects of globalization were pinpointed through the identification of brand names (*lego*, *Duplo*, *Trudi*), cartoons, and info-communication tools (mobile phones, tablets, computers). The research results suggest that lego plays a notable role in the linguistic consciousness of both Hungarian and Russian pre-school children.

Generally, the investigation based on the association experiment, complemented by the shoulder-to-shoulder method proved to be an appropriate and effective tool in mapping and cross-culturally comparing Hungarian and Russian preschoolers' linguistic consciousness. The research will hopefully be extended to further countries in the near future.

Capacities of Hungary.

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