Language tasks: An overview

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Aims

➢ A pilot study to investigate the acquisition of basic verbs by pupils in primary and lower secondary education (two focus groups: 7-10-year-olds and 11-14-year-olds). It involves:

- • 5 types of language tasks grouped into 4 variants to be executed online at: **http://ibl.bas.bg/igrasglagoli/** (beforehand there were three short questionnaires: age, grade level, sex);
- • A set of 188 verbs, of which 70% were verbs considered to be part of the core vocabulary (acc. to a set of criteria).

➢ To test basic competencies for recognising verbs' senses and their arguments (or participants in the situations referred to by the verbs – the semantic frame elements)

Hypothesis

➢ Children have acquired a set of words (core vocabulary) in their educational and family environment

➢ These are words and expressions that are used spontaneously everyday, in all spheres of life, in both oral and written speech.

➢ The basic vocabulary reflects the most essential phenomena such as concepts and situations related to nature, everyday life, spiritual and material culture, feelings, states, actions.

The stimuli

➢ **Verbs** → refer to everyday activities and situations such as eating and drinking, movement, perception, speech, weather, etc.

➢ **Picture stimuli** → selected from datasets of free images (such as MultiPic (Duñabeitia et al. 2018), etc.); illustrating mostly participants in the situations defined by the verb (agent, theme/patient, instrument, location, etc.).

➢ **Context** →verbs are used in sentences (and in short texts).

How the verbs were selected

➢ The place of the verb in the Bulgarian WordNet (among its synonyms and in the hyponym-hypernym trees); the semantic classes (the so-called semantic primitives (Miller 1995); and the membership of synonym sets to the subsets of base concepts (BCS) in WordNet.

➢ The frequency of the verbs in the Bulgarian National Corpus (BulNC) (Koeva et al. 2012) (verbs with more than 10 occurrences per 1 million words) in texts of different domains and genres + the membership of the verbs in a small corpus containing textbooks on Bulgarian language, environment, native land, fine arts, music, technology, intended for primary schools (7- to 11-year-olds).

➢ The verbs are matched to a list of meanings acc. to the study "Test-based age-of-acquisition norms for 44 thousand English word meanings" (Brysbaert 2017) (AoA).

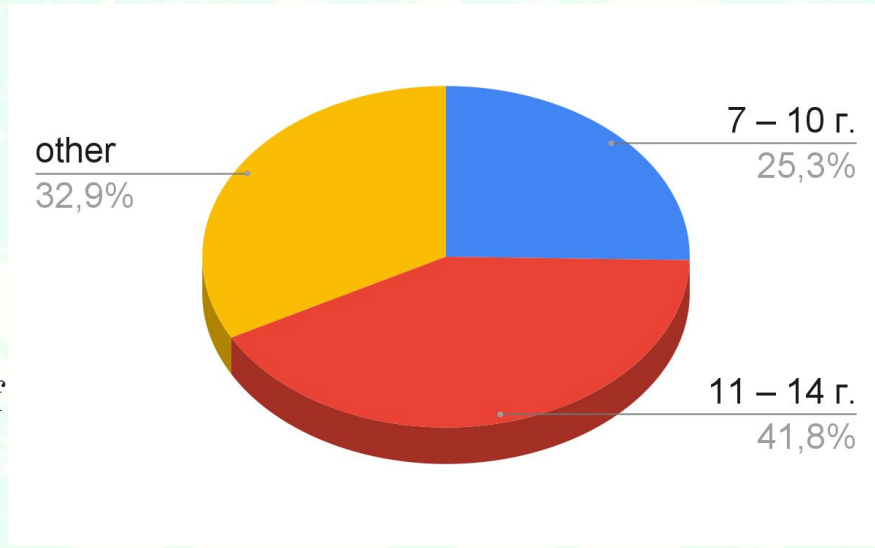➢ This information was matched and then cross-checked by linguists.

Verbs

Verb	AoA	1-4 grades	BSC	BulNC	semantic class	Synset in BulNet	Definition in BulNet
пиша	write 'to put on paper' 2;	195	1	200.57	verb.communication	пиша:5	communicate or express by writing
играя	play 'to have fun' 2;	184	0	313	verb.social	играя:5	be at play; be engaged in playful activity; amuse oneself in a way characteristic of children
чета	read 'to learn what printed words mean' 2;	85	2	75.97	verb.cognition	чета:1; прочитам:1; прочета:1	interpret something that is written or printed

The database is created by Ivelina Stoyanova.

Respondents

557 respondents of

other
32,9%

7 – 10 г.
25,3%

11 – 14 г.
41,8%

Language tasks 1

➢ Association tasks involving picture stimuli representing participants in the situation referred to by the verb.

➢ Respondents might choose any verb from a set of 4 verbs where at least 1 refers to the main sense and is assumed to be part of the basic vocabulary, without additional encoding of the manner of action (which may be encoded by prefixes, suffixes, etc.).

➢ Results: respondents preferred verbs from the core vocabulary.

Language tasks 1

Мъжът...

☐ избяга
☐ бяга
☐ тича
☐ подтичва

Frequency				
	1 - 4 grades	BCS	WN	BulNC
run away	10	0	4	101,33
run	**32**	**1**	**2**	**35,13**
run	**6**	**1**	**2**	**35,13**
trot	0	0	3	21.84

Result		
	7 – 10	11 – 14
run away	2.3%	1.4%
run	**51.2%**	**49.6%**
run	**39.5%**	**44.7%**
trot	7%	4.3%

Language tasks 1

С ухото... .

☐ подслушвам
☐ чувам
☐ подочувам
☐ слушам

Frequency				
	1 - 4 grades	BCS	WN	BulNC
eavesdrop	0	0	3	18,4
hear	**47**	**1**	**1**	**304,87**
overhear	0	2	2	45,42
listen	**63**	**2**	**1**	**66,32**

Result		
	7 – 10	11 – 14
eavesdrop	4,8%	3,4%
hear	**73,8%**	**79.3%**
overhear	2.4%	0%
listen	**19%**	**17.2%**

Language tasks 2

➢ Association tasks involving picture stimuli representing a participant of the situation referred to by the verb.

➢ Respondents had to choose among 10 verbs from different synsets described by different frames with different arguments where 5 are expected to be chosen (the most evident choice); 2 are appropriate to a certain degree, and 3 are completely inappropriate.

➢ Results: respondents recognised the meaning and have acquired the knowledge about the participants and the situation which the picture may imply.

Language tasks 2

Самолетът _____.

Самолетът _____.

Самолетът _____.

Самолетът _____.

Самолетът _____.

| лекува | излита | минава | прелита | прегръща | лети | пътува | мълчи | бръмчи | кръжи |

	7 – 10	11 – 14
heal	0%	0%
take off	19.4%	21%
pass	*9.4%*	*12.6%*
fly over	16.9%	18.5%
embrace	0%	0.8%
fly	20.6%	21%
travel	9.4%	6.7%
hush	0%	0%
hum	*10%*	*8.4%*
hover	14.4%	10.9%

Language tasks 2

	7 – 10	11 – 14
stop	*9.1%*	*7.8%*
<u>**swim**</u>	<u>**8%**</u>	<u>**7.5%**</u>
hush	0%	1%
shore	**12.5%**	**11.4%**
continue	*4.5%*	*7.25%*
sail	**22.7%**	**20.3%**
<u>tweet (!!!)</u>	<u>6.8%</u>	<u>5.9%</u>
wear off	0%	0.7%
depart	**17%**	**18.3%**
transport	**19.3%**	**19.9%**

Language tasks 3

Изберете тези глаголи, които според Вас

са свързани с **ядене и пиене.**

☐ горя
☐ дъвча
☐ гриза
☐ бръсна
☐ бия
☐ мия
☐ бягам
☐ пия
☐ хапвам
☐ гълтам

Semantically related verbs associated with a simple general description involving information about their semantic class. "Choose verbs that are associated with **eating and drinking**." (verb.consumption)

	7 – 10	11 – 14
burn	0%	0.7%
chew	**19.2%**	**21.1%**
nibble	**19.2%**	**17.1%**
shave	0%	0%
beat	1%	0.3%
wash	1%	0.3%
run	1%	0%
drink	**20.2%**	**20.7%**
snack	**19.2%**	**20.7%**
swallow	**19.2%**	**19.1%**

Language tasks 3

☐ спи
☐ носи
☐ духа
☐ скача
☐ сънува
☐ реши
☐ вали
☐ ръси
☐ гърми
☐ грее

Choose the "verbs that describe a state of the **weather**".
(verb. weather)

	7 – 10	11 – 14
sleep	0%	1.2%
wear	0.7%	1.2%
blow	**22.4%**	**21.9%**
hop	0.7%	1.2%
dream	0.7%	1%
decide	0%	0.8%
rain	**22.4%**	**22.3%**
sprinkle	**11.6%**	**8.7%**
thunder	**21.8%**	**21.9%**
shine	**19.7%**	**20.5%**

Language tasks 4

➢ Verbs in a context in sentences which are thematically related and associated with the respondents' everyday life.

➢ The task combines the three stimuli – verbs + images + context – which is, probably, the reason for the highest correctness of the answers

➢ Over 80% true answers.

Language tasks 4

Изберете подходящия глагол.

Какво правя сутрин?

Сутрин обичам да _____ вкусна и здравословна храна.

Ето сега _____ портокали за любимия сок.

Преди това _____ едно яйце в тенджера.

В момента _____ домата на парчета.

Взех филийки хляб, за да ги _____ в тостера.

Когато филийките са готови, ще ги _____ с масло.

След това _____ сол върху филийките.

Върху филийките _____ и малко кашкавал.

Накрая _____ портокалов сок в голяма чаша и _____ с наслада вкусната напитка.

препека	сварих	ще настържа	ще изпия	намажа	ще налея	ще пopъся	изцеждам	ям	режа

"**What do I do in the morning?**"
In the morning I like to.........(eat) delicious and healthy food.
Now I......... (am squeezing) my favorite orange juice.
Before that, I ....(boiled) an egg in a pot.
I ....(am cutting) the tomato into pieces.
I took some slices of bread to............ (toast) them in the toaster.
When the slices are ready, I will .... (spread) some butter on them.
Then I .... (will sprinkle) salt on the slices.
I ....(will grate) some cheese on top of the slices.
Finally, I ....(will pour) orange juice into a large glass and .... (will drink) the delicious drink.

Language tasks 5

These tasks are designed to gather information about the respondents' ability to acquire knowledge in a more complex situation.

These tasks are the most difficult ones and combine a complex of stimuli – the respondents have to take into account lexical, grammatical and morpho-semantic specifics of the verbs (of concrete and abstract meanings, from all semantic classes, i.e., cognitive verbs, verbs of emotions, stative verbs, motion verbs, etc.).
A choice may involve:

    a paronym of the correct verb (a)
    a verb that does not meet the requirements for the form (b)
    a verb that does not meet the semantic requirements of the context (c)
    a verb similar in meaning but with a syntactic realization that is incompatible with the context (d)

Language tasks 5

Алиса **скучаеше (страдаше, доскучаваше (b), нуждаеше)** и си мислеше **(приспиваше, успиваше, колебаеше)** дали да **набере (прибере, отнесе, обере (a)** един букет от маргаритки в тежката следобедна горещина.

*Alice was beginning to **get bored (hurt, dreary, needy)** and she was **considering in her own mind (sleeping, getting sleepy, hesitating)** whether to **pick (gather, carry, reap)** a branch of daisies in the hot afternoon.*

През това време един Бял Заек със светлочервени очи **подскочи (посочи, поклати (b), изсмя)** край нея.

*At the same time a White Rabbit with pink eyes **ran (pointed, swayed, laughed)** close by her.*

Language tasks 5

Това не **се стори (оказа, престори, помисли)** необикновено на Алиса и тя не **се изненада (изстрада, измисли, сметна (b)** дори когато чу **(слуша, попита, нахлу)** как Заека **си говори (въобразява (d), внушава (d), спори)** „О, божичко, божичко!".

There **was (appears, pretends, thinks)** *nothing so very remarkable in that; nor did Alice* **think it (hurt it, dreamed it, solved it)** *so very much out of the way to* **hear (listen, ask, invade)** *the Rabbit* **say to itself (pictured it, dreamed it up, instilled it)***, 'Oh dear! Oh dear! I shall be late!'*

По-късно, като **размисли (замисли (b), измисли, сметна)**, реши **(разреши, представи, каза (d)**, че това е доста необичайно.

When she **thought it over (thought it off, thought it up, considered it)** *afterwards, it* **occurred to her (decided, wondered, said)** *that she ought to have wondered at this.)*

Language tasks 5

➢ Many errors and incomplete answers:
A total of 260 respondents filled in at least one verb position, with only 5% of respondents correctly filling in all positions in the task given, while 68% of responses were incomplete or incorrect, or possibly arbitrary.

➢ Alternative choices are possible.

➢ Difficulties: reflexive verbs (esp. obligatory reflexive verbs), causation (in a sequence of actions):
Most errors were made with polysemous verbs, verbs of perception and cognition such as мисля 'to think', изглеждам 'to look', or abstract verbs such as измъкна 'to pull out', свия 'to shrink', вися 'to hang', as well as verbs with low frequency of use such as здрача се 'to dusk', тъмнея 'to get dark', some of which are not exactly core vocabulary

Conditions

The choice may be influenced by:

- The environment: online and non-controlled
- Implication of an official testing situation (by the Institute for Bulgarian Language).
- Respondents are inclined to select one answer ("the most correct one").
- The picture.
- The ordering of the verbs.

Some conclusions

- Respondents recognise the basic verbs.
- Respondents know the meaning of the verbs (*to sail* vs. *to swim*) and correctly associate them with a given situation (the plane and the boat produce sounds...)
- Respondents are well aware of the verbs that are part of specific thematic areas.
- Difficulties are observed with abstract verbs (and meanings) and the choice within a longer text.

Online

Задача 4. Кои от думите ще използваш, ако разказваш по картинката?

Избери глаголите, които според теб са подходящи за дадената картинка. Може да посочиш най-много пет глагола и най-малко един.

Самолетът _____.

Самолетът _____.

Самолетът _____.

Самолетът _____.

Самолетът _____.

| прелита | лети | прегръща | кръжи | пътува | излита | бръмчи | мълчи | минава | лекува |

http:// ibl.bas.bg/ igrasglagoli/

Thank you for your attention!