# Bilingualism and access to a third language

## Access to the Spanish language by Russian-Romanian bilinguals

Dr Daniela Antonchuk

**UAB**
Universitat Autònoma
de Barcelona

# Table of contents

# Introduction

"Bilingualism is a multidisciplinary subject par excellence. It touches upon so many aspects of human behavior: it is a fruitful area for the study of language contact; it is intriguing for the way that it relates to the human mind; it reflects social behavior and the organization of society; and it can shape educational systems"

(Morris Jones, B., Singh Ghuman, 1995, p. 1).

# Introduction

Bilingualism has also connection with the neuroanatomical organization, implying greater cognitive flexibility and heightened sensitivity in a bilingual individual.

# Objectives of the research

**Problematic:**

Russian-Romanian bilingualism. Bilingualism between two different families of languages in respect of the comprehension of the Spanish language without its prior learning or studying.

**Objective:**

Analysis of the ability of informants to understand a language they do not know proceeding from the "language baggage" acquired during their lives, implying the difference in the way of thinking and analyzing acquired language data, thus, resulting in more successful understanding capacity.
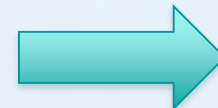
# Objectives of the research

**Tasks**

General corpus creation, its division into 3 corpuses and data categorization

Corpuses transformation into questionnaires for the experiment

Revelation of comprehension grade in each of the groups of informants using the created questionnaires

Comparison of acquired results and revelation of the group of informants with the highest comprehension results

Conclusions and hypothesis confirmation / refutation

# Objectives of the research

**Hypothesis:**

Bilingual people, presenting bilingualism between two different families of languages (Russian-Romanian bilingualism) comprehend and then acquire more efficiently a language from one of the families of languages they speak natively (the Spanish language) in comparison with the monolingual individuals presenting any of the languages considered in the bilingual individuals (Russian and Romanian monolinguals).

# Informants

- **<u>Russian monolinguals</u>** (Russia, Saint-Petersburg)

  *Native language: Russian. No knowledge of Romanian or Spanish.*

- **<u>Romanian monolinguals</u>** (Romania)

  *Native language: Romanian. No knowledge of Russian or Spanish.*

- **<u>Russian-Romanian bilinguals</u>** (Moldova)

  *Native languages: Russian, Romanian. No knowledge of Spanish.*

**2 groups according to the age:**

1st group:  20-30 years old
2nd group: 35-50 years old

NB: all the informants have similar social, cultural and educational backgrounds

# Methodology

1. **Field definition**

   Lexical and communicative
   Public writings of urban transports of Barcelona:
   metro, bus, tramway and the urban train "Renfe" ("Cercanías")
   (considering transport security, administration and orientation)

2. **Corpus creation**

   General corpus ➡ 3 corpuses with the following material:
   1. word forms
   2. statements
   3. texts

# Methodology

**3.** | Obtained data categorization |

### 3.1 WORD FORMS

Labels proposed by the group EAGLES for the morphosyntactic annotation of lexicons and corpus:

| ETIQUETTES | | | |
|---|---|---|---|
| **Position** | **Attribute** | **Value** | **Code** |
| *Column 1* | *Column 2* | *Column 3* | *Column 4* |

# Methodology

New additional elements introduced:

e.g.

C – for the comparative form

for adjectives and adverbs:

*mejor*     *bueno*     *AQ0CS0C*

*más*     *mucho*     *RGC00*

| ADJETIVES | | | |
|---|---|---|---|
| Position | Attribute | Value | Code |
| 1 | Category | Adjective | A |
| 2 | Type | Qualificatory | Q |
| 3 | Grade | Appreciative | A |
| 4 | Gender | Masculine | M |
|  |  | Feminine | F |
|  |  | Common | C |
| 5 | Number | Singular | S |
|  |  | Plural | P |
|  |  | Invariable | N |
| 6 | Case | - | 0 |
| 7 | Function | Participle | P |
|  |  | Comparative | C |

| ADVERBS | | | |
|---|---|---|---|
| Position | Attribute | Value | Code |
| 1 | Category | Adverb | R |
| 2 | Type | General | G |
| 3 | Function | Comparative | C |
| 4 | - | - | 0 |
| 5 | - | - | 0 |

| No. | Word form | Lemma1 | TAG1 | Lemma2 (optional) | TAG2 (optional) |
|-----|-----------|--------|------|-------------------|-----------------|
| 109 | bicicleta | bicicleta | NCFS000 | | |
| 110 | bienes | bienes | NCMI000 | | |
| 111 | billete | billete | NCMS000 | | |
| 112 | billetes | billete | NCMP000 | | |
| 113 | boca | boca | NCFS000 | | |
| 114 | bordo | bordo | NCMS000 | | |
| 115 | borde | borde | NCMS000 | | |
| 116 | botón | botón | NCMS000 | | |
| 117 | botones | botón | NCMP000 | | |
| 118 | brazos | brazo | NCMP000 | | |
| 119 | buen | buen | AQ0MS00 | | |
| 120 | busque | buscar | VMMP3S000 | | |
| 121 | cabinas | cabina | NCFP000 | | |
| 122 | cables | cable | NCMSP000 | | |
| 123 | cada | cada | DI3CS00 | | |
| 124 | caídos | caer | VMP00PM00 | | |
| 125 | caja | caja | NCFS000 | | |

Total number: 969 word forms

## 3.2 STATEMENTS

A structural characteristics scheme with subsequent codification symbols:



Statements

Sentential Sentences (O)

Non-sentential Phrases (F)

According to the number of personal verbal forms

According to syntactical relations between members

According to speaker's behaviour
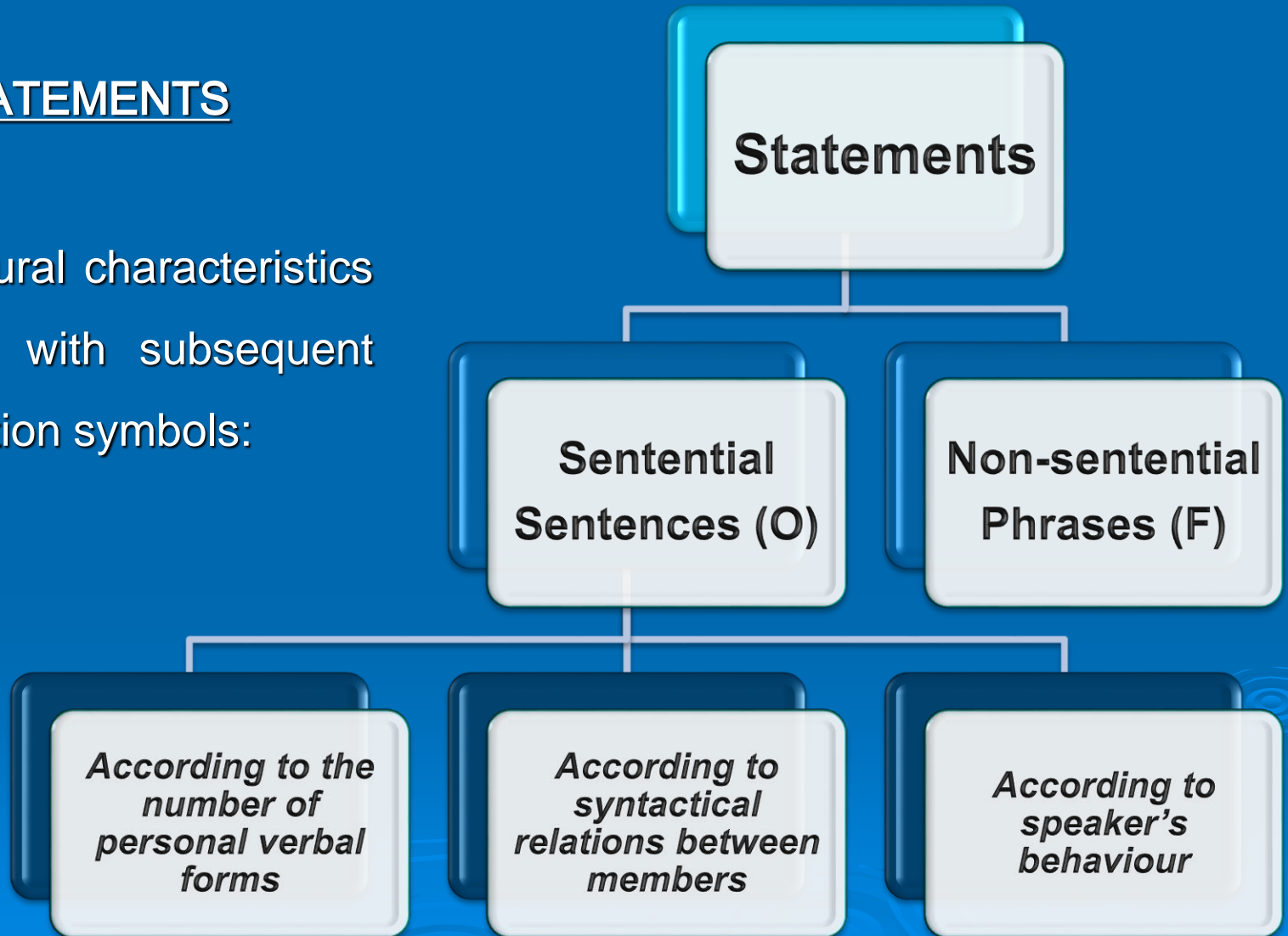
| No. | Statement | Code |
|---|---|---|
| 105 | Estación de Ferrocarril | F |
| 106 | Estación Marítima | F |
| 107 | Estación terminal | F |
| 108 | Este colectivo tiene preferencia en el uso de los ascensores. | OSPPreActTrNproA |
| 109 | Evacúe con rapidez, pero no corra | OAdvsIPre0IntrNproExh |
| 110 | Existe un ejemplar del Reglamento de viajeros a disposición de los usuarios en todas las estaciones. | OSPPreActIntrNproA |
| 111 | Extracto de las disposiciones contenidas en el reglamento de la ley de ordenación de los transportes terrestres. | F |
| 112 | Familias monoparentales y numerosas | F |
| 113 | Facilita el trabajo de los inspectores | OSIPre0TrNproExh |
| 114 | Facilite el trabajo a los inspectores | OSIPre0TrNproExh |

Total number: 322 statements

# 3.3 TEXTS

A scheme representing texts categorization model and combinations occurred in corpus:
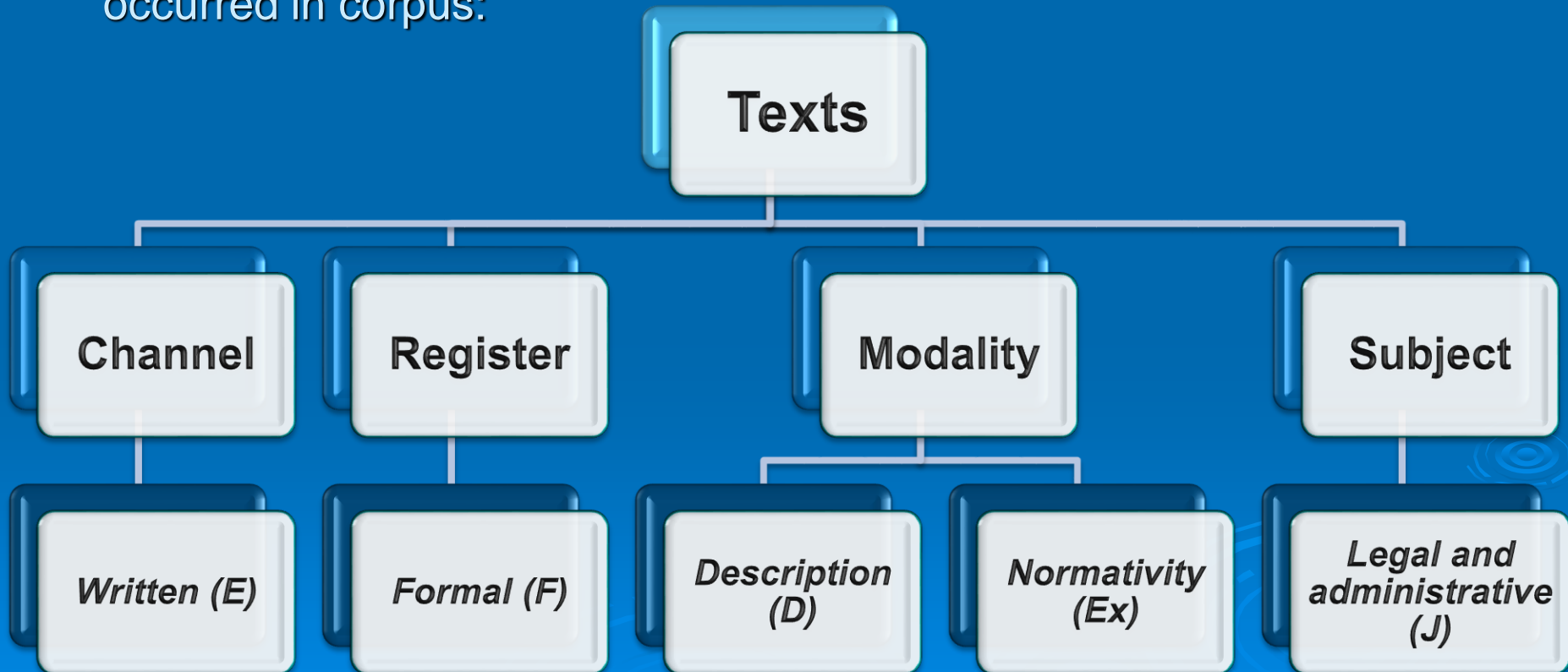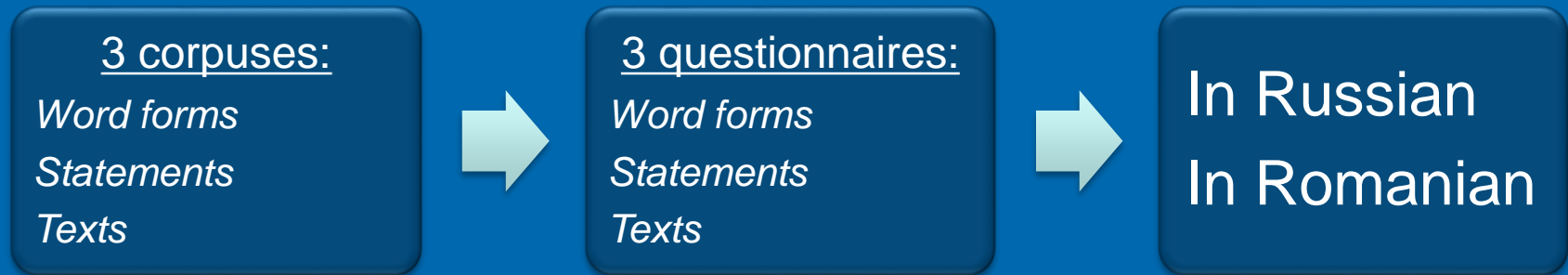
| No. | Text | Code |
|---|---|---|
| 1 | 10 desplazamientos integrados en todos los modos de transporte según las zonas a atravesar (de 1 a 6 zonas). Título multipersonal y horario. | EFExJ |
| 2 | 50 desplazamientos integrados en todos los modos de transporte según las zonas a atravesar (de 1 a 6 zonas). Validez: 30 días consecutivos desde la primera cancelación. Título unipersonal y horario. | EFExJ |
| 3 | 70 desplazamientos integrados en todos los modos de transporte según las zonas a atravesar (de 1 a 6 zonas). Validez: 30 días consecutivos desde la primera cancelación. Título multipersonal y horario. | EFExJ |
| 4 | Aparato de alarma paro de escalera. El uso indebido será castigado por la ley art. 11.2 APT. C) del reglamento de viajeros de este ferrocarril. | EFExJ |
| 5 | Apertura de puerta en caso de emergencia: 1.Romper el vidrio de la caja de la maneta. 2.Accionar la maneta. 3.Abrir la puerta manualmente. Terminantemente prohibido el uso indebido. | EFDJ |
| 6 | ¡Atención! Con luz roja, puerta fuera de servicio. Utilice las otras puertas. No entrar ni salir con luz amarilla intermitente. | EFDJ |

Total number: 32 texts

# Methodology

4.   **Experiment**

| 3 corpuses: | 3 questionnaires: | In Russian |
| --- | --- | --- |
| *Word forms* | *Word forms* | In Romanian |
| *Statements* | *Statements* | |
| *Texts* | *Texts* | |

**Strategy: from the most general to the most concrete**

**The 1st questionnaire to be filled in – TEXTS**
**(three different questions proposed with three answer options)**

## TEXT №1

10 desplazamientos integrados en todos los modos de transporte según las zonas a atravesar (de 1 a 6 zonas). Título multipersonal y horario.

**Care este tipul acestui anunţ?**

What is the type of this message?

- ○ a. instrucţionare
- ○ b. descripţiune
- ○ c. interdicţie

**Cui acest text este adresat?**

Who is this text addressed to?

- ○ a. pasagerilor, doritori de-a scimba mijlocul de transport
- ○ b. conductorilor mijloacelor de transport
- ○ c. pasagerilor, doritori de-a procura un bilet de transport

**Care sunt scopurile şi sarcinile comunicări?**

What are the aims and tasks of the message?

- ○ a. transmiterea informaţiei despre tipul biletului de transport
- ○ b. transmiterea informaţiei despre regulile folosirii mijloacelor de transport
- ○ c. transmiterea informaţiei despre tipurile mijloacelor de transport

« Back    Continue »

6% completed

The 2nd questionnaire to be filled in – STATEMENTS

(six different grades of comprehension proposed for one to be marked):

**1. I do not understand either the sentence on the whole or its constituents.**

**I understand…**

2 …only separate words in the sentence, but not the meaning of the whole sentence.

3 …only the general sense of the sentence, although many words are unclear to me.

4 …the meaning of the sentence, although some words are unclear to me.

5 …completely the whole sentence, although i am not sure about the meaning of one (two) words.

6 …completely the whole sentence and its constituents.

## Alegeți cea mai bună descriere a modului în care ați înțeles aceste enunții:

1 - Nu înțeleg propoziția în ansamblu, nici cuvintele constituente.
2 - Înțeleg doar câteva cuvinte într-o propoziție, dar nu înțeleg sensul propoziției întregi.
3 - Înțeleg doar sensul general al propoziției, deși multe dintre cuvinte nu sunt înțelese.
4 - Înțeleg sensul propoziției, deși unele cuvinte nu sunt înțelese.
5 - Înțeleg pe deplin propoziția întreagă, deși nu sunt sigur de sensul al unui (două) cuvinte.
6 - Înțeleg pe deplin propoziția întreagă și toate cuvintele constituente.

**1. 10 desplazamientos integrados en todos los modos de transporte según las zonas a atravesar (de 1 a 6 zonas)**

1  2  3  4  5  6

I do not understand either the sentence on the whole or its constituents.

I understand completely the whole sentence and its constituents.

**2. 50 desplazamientos integrados en todos los modos de transporte según las zonas a atravesar (de 1 a 6 zonas)**

1  2  3  4  5  6

Nu înțeleg propoziția în ansamblu, nici cuvintele constituente.

Înțeleg pe deplin propoziția întreagă și toate cuvintele constituente.

## The 3rd questionnaire to be filled in – WORD FORMS
## (three different translation options proposed):

**Part of speech enquiring**

| 304 | el | Что это?<br>a. предлог | b. артикль **x** | c. наречие |
|---|---|---|---|---|

**Different translation options within the same part of speech and form**

| 160 | civil | a. цивильный | b. гражданский **x** | c. городской |
|---|---|---|---|---|

**Different translation options within the same part of speech but a different form**

| 379 | fichero | a. файл **x** | b. зажигалка | c. фишка |
|---|---|---|---|---|

**Different translation options from different parts of speech**

| 414 | gratis | a. гранит | b. бесплатно **x** | c. гравировать |
|---|---|---|---|---|

**Identical translation options for different parts of speech**

| 509 | línea | a. линия **x** | b. линейка | c. линейный |
|---|---|---|---|---|

UAB
Universitat Autònoma
de Barcelona

## Alegeți traducere corectă:

Choose the correct translation

**1. a**
Ce-i asta?

○ a. articol

○ b. substantiv

○ c. prepoziție

**2. (no se) abalance**

○ a. nu v-a aruncați

○ b. nu v-a balansați

○ c. nu v-a așezați

**3. abandonar**

○ a. a arunca

○ b. a lăsa

○ c. a părăsi

**Romanian**

**Russian**

**1. a**
Что это?

○ a. предлог

○ b. артикль

○ c. существительное

**2. (no se) abalance**

○ a. (не) балансируйте

○ b. (не) прыгайте

○ c. (не) садитесь

**3.abandonar**

○ a. покидать (выходить)

○ b. бросать

○ c. отказываться

# Results comparative arrangement. Texts

*Russian-Romanian bilinguals, The Russian language, 1st age group*

| | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | 6 | | | 7 | | | 8 | | | 9 | | | 10 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | c | c | b | b | a | c | a | c | a | a | c | c | a | a | c | c | c | b | b | c | b | a | a | b | a | b | c | a | c | b |
| TX1RUSROM11 | c | c | b | b | a | c | a | c | a | a | c | c | a | a | c | c | c | a | b | c | b | a | b | b | a | a | b | a | c | b |
| TX1RUSROM12 | a | c | b | c | a | c | b | c | a | a | c | c | a | a | c | c | c | b | b | c | b | a | a | a | a | b | c | a | c | b |

26 correct — TX1RUSROM11
24 correct — TX1RUSROM12

Table 17

*Russian monolinguals, The Russian language, 1st age group*

| | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | 6 | | | 7 | | | 8 | | | 9 | | | 10 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | c | c | b | b | a | c | a | c | a | a | c | c | a | a | c | c | c | b | b | c | b | a | a | b | a | b | c | a | c | b |
| TXRUS11 | a | b | c | c | a | c | b | b | b | b | a | c | a | a | c | c | c | c | c | c | c | a | b | a | b | b | b | a | c | b |
| TXRUS12 | c | b | c | b | b | c | a | a | a | a | c | c | a | a | c | c | c | c | b | c | b | c | a | a | c | a | c | a | c | b |

13 correct — TXRUS11
21 correct — TXRUS12

Table 1

# Results comparative arrangement. Texts

*Russian-Romanian bilinguals, The Romanian language, 1st age group*

| | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | 6 | | | 7 | | | 8 | | | 9 | | | 10 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | b | c | a | a | c | c | c | c | a | b | b | a | c | b | b | a | b | c | a | c | b | c | b | a | a | c | c | a | b | c |
| 18 correct — TX2RUSROM11 | a | c | b | b | a | c | c | c | c | b | b | c | c | b | b | a | b | b | c | b | a | b | b | a | a | c | b | a | b | c |
| 24 correct — TX2RUSROM12 | b | c | a | a | c | c | c | c | a | c | b | b | a | b | a | a | b | c | c | c | b | c | b | b | a | c | c | a | b | c |

Table 21

*Romanian monolinguals, The Romanian language, 1st age group*

| | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | 6 | | | 7 | | | 8 | | | 9 | | | 10 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | b | c | a | a | c | c | c | c | a | b | b | a | c | b | b | a | b | c | a | c | b | c | b | a | a | c | c | a | b | c |
| 12 correct — TXROM11 | a | a | b | b | c | b | c | b | b | c | b | a | c | b | b | a | b | b | c | c | b | a | b | c | b | a | b | b | c | b |

Table 9

## General results comparison

The results obtained for the bilingual group of informants were higher in comparison to those obtained for both Russian and Romanian monolinguals:

| | | Correct answers (%) | Correct answers | Correct sets of questions (%) | Correct sets of questions |
|---|---|---|---|---|---|
| **Russian monolinguals** | *1st age group* | 65.1% | 62.5 | 43.75% | 14 |
| | *2nd age group* | 65.28% | 62.7 | 33% | 11 |
| **TOTAL** | | 65,19% | 62.6 | 38,37% | 12.5 |
| **Romanian monolinguals** | *1st age group* | 34,37% | 33 | 3,12% | 1 |
| | *2nd age group* | 72,91% | 70 | 53,12% | 17 |
| **TOTAL** | | 53,64% | 51.5 | 28,12% | 9 |
| **Russian-Romanian bilinguals The Russian language** | *1st age group* | 78.64% | 75.5 | 77% | 18 |
| | *2nd age group* | 71,35% | 68.5 | 35.93% | 11.5 |
| **TOTAL** | | 74.99% | 72 | 56.46% | 14.75 |
| **Russian-Romanian bilinguals The Romanian language** | *1st age group* | 80,18% | 77 | 56,24% | 18 |
| | *2nd age group* | 75% | 72 | 56.24% | 18 |
| **TOTAL** | | 77,59% | 74.5 | 56,24% | 18 |

# Results comparative arrangement. Statements

*Russian-Romanian bilinguals. 1st age group.*
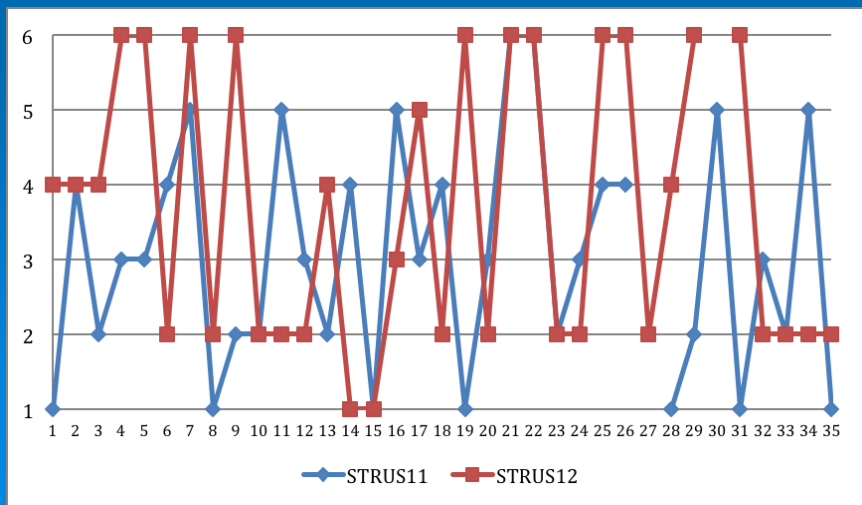
*The Russian language*
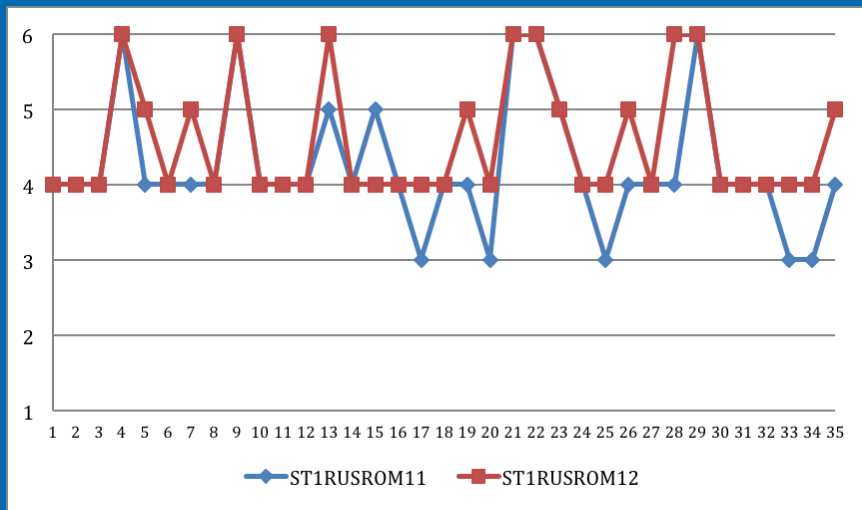


Figure 49

*Russian monolinguals. 1st age group. The Russian language*



*Russian-Romanian bilinguals. 1st age group.*
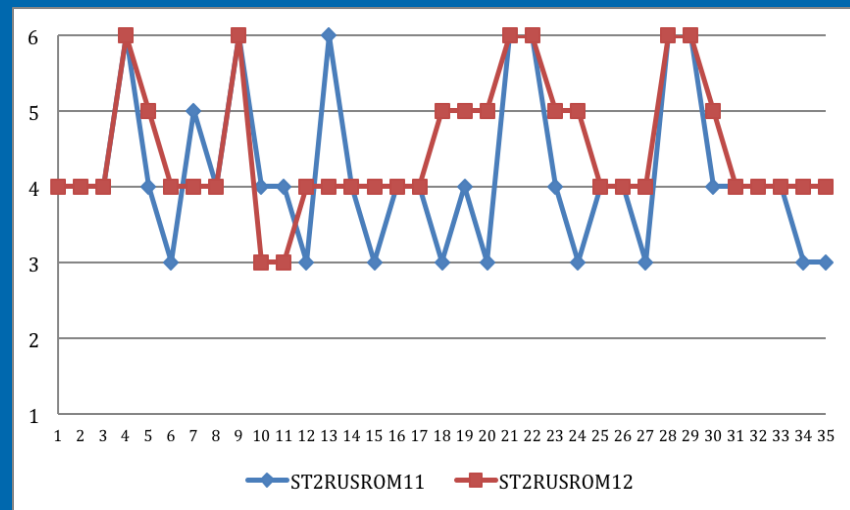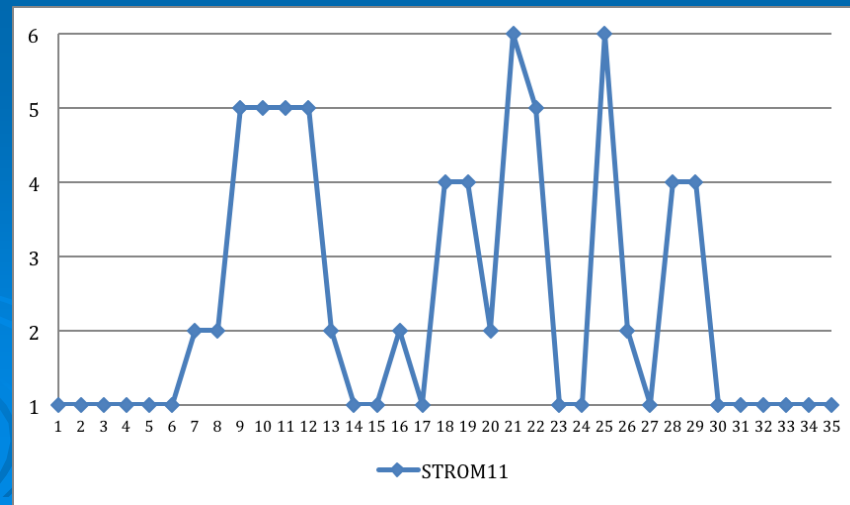
*The Romanian language*



Figure 61

*Romanian monolinguals. 1st age gr. The Romanian language.*

The statements with the highest degree marked (i.e. 6) by all these informants:

| 4 | 20:30H - finalización del servicio | F |
|---|---|---|
| 5 | A partir del 1 de septiembre de 2012 nuevas tarifas de transporte público | F |
| 7 | Abrir la puerta manualmente | F |
| 9 | Acceso a Metro | F |
| 13 | Actuación en caso de emergencia | F |
| 19 | Asientos reservados | F |
| 21 | ¡Atención! | F |
| 22 | Autobuses de la zona | F |
| 25 | Ayuda a la evacuación | F |
| 26 | Ayude, si puede, a personas con movilidad reducida. | OSIPre0TrNproExh |
| 28 | Billetes y tarjetas | F |
| 29 | Buen viaje | F |
| 31 | CAPITULO V. Prohibiciones y obligaciones en la utilización de los transportes ferroviarios. | F |

Phrases and simple sentences are understood the best

## General results comparison

The average understanding degree grades for the bilingual group of informants were higher than those for Russian and Romanian monolinguals:

| | | Average understanding degree (out of 6) |
|---|---|---|
| **Russian monolinguals** | *1st age group* | 2.81 |
| | *2nd age group* | 2.14 |
| **TOTAL** | | **2.47** |
| **Romanian monolinguals** | *1st age group* | 1.6 |
| | *2nd age group* | 2.5 |
| **TOTAL** | | **2.05** |
| **Russian-Romanian bilinguals** **The Russian language** | *1st age group* | 4.34 |
| | *2nd age group* | 4.02 |
| **TOTAL** | | **4.09** |
| **Russian-Romanian bilinguals** **The Romanian language** | *1st age group* | 4.08 |
| | *2nd age group* | 4.05 |
| **TOTAL** | | **4.06** |

# Results comparative arrangement. Word forms



**Russian-Romanian bilinguals. Russian WF1RUSROM11**

39% — Incorrect answers
61% — Correct answers
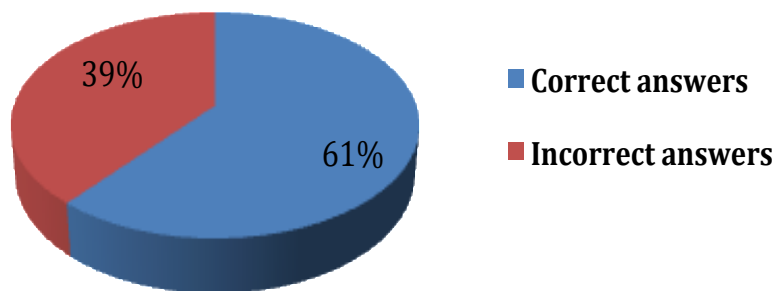
Figure 103

**Russian-Romanian bilinguals. Romanian WF2RUSROM11**

36% — Incorrect answers
64% — Correct answers
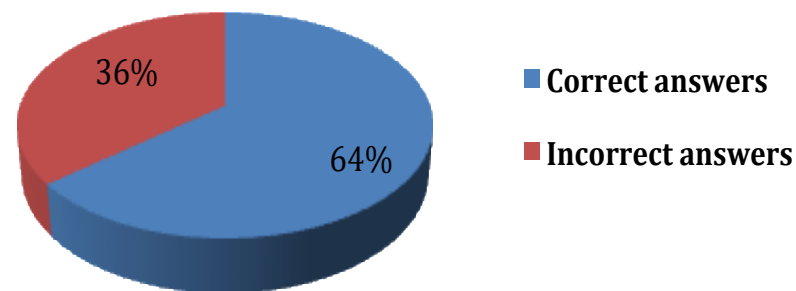
Figure 104

**Russian monolinguals**

35% — Incorrect answers
65% — Correct answers
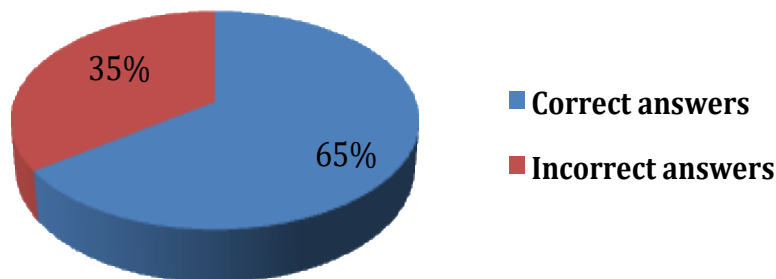
**Romanian monolinguals WFROM11**
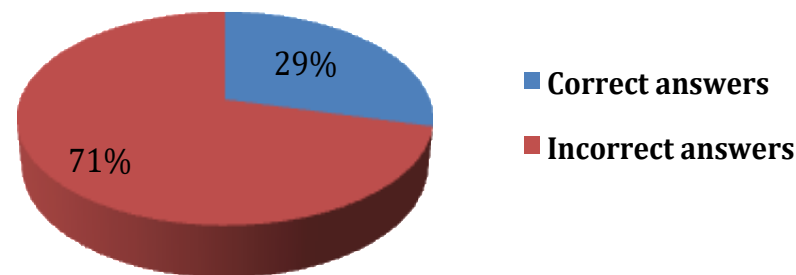
29% — Correct answers
71% — Incorrect answers

Figure 102

## General results comparison

The average understanding grades obtained for the bilingual group of informants were higher than those of the Romanian informant and two Russian individuals:

| | | Correct answers | Correct answers % |
|---|---|---|---|
| **Russian monolinguals** | *1st age group* | 783 | 80% |
| | *2nd age group* | 358 | 37% |
| | | 686 | 70% |
| | | 440 | 45% |
| | **TOTAL %** | | **51%** |
| **TOTAL GROUP %** | | | **65 %** |
| **Romanian monolinguals** | | 281 | **29 %** |
| **Russian-Romanian bilinguals The Russian language** | | 594 | **61 %** |
| **Russian-Romanian bilinguals The Romanian language** | | 621 | **64 %** |

# Conclusions

1. Bilingual individuals manifested significantly higher results in respect to other two groups of informants as regards the questionnaires "Text" and "Statement".

2. In relation to the questionnaire "Word form", the Russian-Romanian bilingual informant manifested higher results in comparison to those acquired by the Romanian monolingual individual and two individuals from the Russian monolingual group.

# Conclusions

After having considered all the aspects we can state that the hypothesis was confirmed:

Bilingual people, presenting bilingualism between two different families of languages (e.g. Russian-Romanian) comprehend and then acquire more efficiently a language from one of the families of languages they speak natively (e.g. Spanish) in comparison with the monolingual individuals presenting any of the languages considered in the bilingual individuals (i.e. Russian and Romanian monolinguals).

# Conclusions

This is resulted from the creation of specific strategies involving a possible particular development of brain functioning in reference to the comprehension of a third language.

# Bibliography

Baetens Beardsmore, H (1986), *Bilingualism: basic principles*, Multilingual matters LTD., Clevedon, Avon, England.

Baker, C. (1990), *Key Issues in Bilingualism and Bilingual Education*, Multilingual matters LTD., Clevedon, Philadelphia.

Bloomfield, L. (1973), *Language*, Comptom printing LTD., London, Aylesbury.

Hamers, J. F., Blanc, M. H. A. (2000), *Bilinguality and bilingualism*, Cambridge University Press, UK.

Koschat, F., Wagner G. (1994), *Bilinguale Schulen*, Wien.

Kroll, J. K., De groot, A. M. B. (2005), *Handbook of bilingualism: Psycholinguistic Approaches*, Oxford University Press, UK.

Morris Jones, B., Singh Ghuman, P. A. (1995). *Bilingualism, education and identity*. Cardiff.

Renard, R. *Changement de paradigme culturel: de l´Un au Multiple*. Université de Mons.

Wei, L., Moyer, M. G. (2008). *The Blackwell Guide to Research Methods in Bilingualism and Multilingualism*, UK.

Zamalloa, K .A., Buxo, J. M. and others. (1978), *Bilingüismo y biculturalismo*, Ediciones CEAC, Barcelona.

…Thank you for your attention!