

*The Good Place:*

a classroom viewing experience for learning,  
reflecting upon and researching

# University as an institution

Teaching → teaching innovation (learning contents and learning outcomes): portfolio, project work, problem-solving, gamification

Social service → APS projects from year 2 on

Research: labs, theoretical, society-oriented, classroom-research

## Estudiants de Comunicació Audiovisual participen en un projecte d'Aprentatge-Servei

Publicat el dijous, 28 setembre 2017



Estudiants del grau de Comunicació Audiovisual han participat en un projecte de l'APS (Aprentatge-Servei), un grup de treball de l'ICE que fa una proposta docent i de recerca que pretén integrar el servei a la comunitat i l'aprenentatge acadèmic per tal que els estudiants es formin mentre treballen sobre necessitats reals de l'entorn amb l'objectiu de millorar-lo.



En aquest cas, els estudiants de CAV han col·laborat amb estudiants de la Facultat de Medicina en una campanya de conscienciació social sobre la importància de fer un bon ús dels antibiòtics. En el marc de l'assignatura Projectes II, van elaborar tres vídeos que combinen la ficció amb el gènere policíac, amb la pretensió de promoure el consum responsable d'antibiòtics.

Ara, el projecte s'ha començat a difondre i els estudiants el van presentar el passat 20 de juny al [XXXVII Congreso de la Sociedad Española de Farmacología](#) amb la comunicació «An academic service-learning activity in higher education to promote responsible use of antibiotics». El mes d'octubre, seran a Sevilla al [VIII Congreso Nacional y III Internacional de Aprendizaje-Servicio Universitario \(Aps-UB\)](#) amb el póster «Divulgación del uso responsable de los antibiòticos mediante un proyecto de Aprendizaje-Servicio en la Universidad de Barcelona». Per assistir al congrés, dos estudiants de CAV han rebut un ajut de la Facultat.



El producte és present a diversos concursos, però, sigui quin sigui el veredict final, alumnes i professors coincideixen a afirmar que l'experiència de treballar en equip amb persones provinents de diversos àmbits ha estat molt positiva i gratificant.



Grup de Recerca en Adquisició de Llengües  
Language Acquisition Research Group

HOME

MEMBERS

COLLABORATORS

PROJECTS

PUBLICATIONS

PRESENTATIONS

DOCTORAL THESES

MORE...

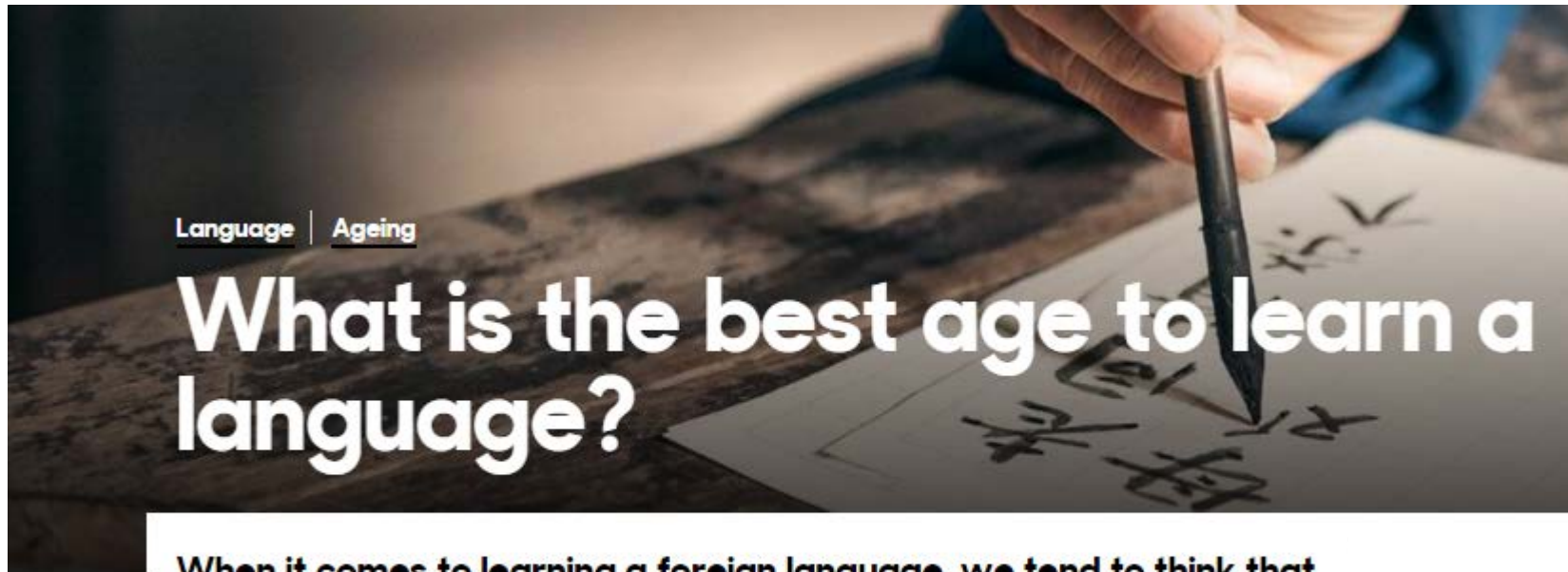


## GRAL Research Group

The GRAL Research Group (GRAL is the Catalan acronym for *Grup de Recerca en Adquisició de Llengües*) initiated its activity in 1995 with the study of the effects of age on foreign language learning. This study culminated with the publication of the book *Age and the Rate of Foreign Language Learning* (2006) edited by C. Muñoz and published by Multilingual Matters as well as various book chapters and articles in journals such as *Applied Linguistics*, *International Journal of English Studies*, *Spanish Applied Linguistics*, *IRAL* and *Eurosla Yearbook*.

<http://www.ubgral.com/>

# Barcelona Age Factor Project (BAF)



Language | Ageing

## What is the best age to learn a language?

**When it comes to learning a foreign language, we tend to think that children are the most adept. But that may not be the case - and there are added benefits to starting as an adult.**

—  
By Sophie Hardach

26 October 2018

<http://www.bbc.com/future/story/20181024-the-best-age-to-learn-a-foreign-language>

# Carmen Muñoz Lahoz







in 2017, worldwide  
Netflix **109.5** million subscribers  
HBO had **137** million  
subscribers

an adult person watches on average  
**3.81 hours of TV** and spends 1.89  
hours online

62.9% of the  
population watch  
TV series (MECD,  
2015), more and  
more in English

In Spain in 2017 over six million  
media users joined Pay-TV  
platforms, and **50% of the  
population with internet access  
watched TV series** in platforms  
such as Netflix or HBO.



# Linguistic snapshot

- watching TV series in English as a habit
- teachers recommending watching TV in English

What for? And then, subtitles or captions?  
And which genre?

Pronunciation? Vocabulary? Grammar? Listening comprehension?

# Theoretical background

## **Subtitled TV series**

Simultaneous presentation of L1/L2 text + L2 sound + video

Verbal and non-verbal information

Real language input

Fun activity, range of multimedia materials available





# Theoretical background

## **L1 subtitles** (standard subtitling)

Recommended for **low levels**  
Improve **listening comprehension**  
Foster **automatic reading**

Danan, 2004  
Plass & Jones, 2005  
Peters et al., 2016

## **L2 subtitles** (bimodal subtitling or **captioning**)

**Positive** effects  
Associate **aural** and **written** forms  
Develop **segmentation abilities**

Vanderplank, 2010  
Borrás & Lafayette, 1994  
Charles & Trenkic, 2015

# WHAT WE KNOW



There is general **consensus** that simultaneous exposure to soundtrack in the FL and subtitles is *beneficial* for language learning.

Input > input processing > intake > output

It benefits **comprehension** and **vocabulary acquisition** (Yuksel & Tanriverdi, 2009).

Depends on:

language configuration of soundtrack/text (L1 subtitles, L2 or reversed); target language (Winke et al. 2013); proficiency (Muñoz, 2017; Suárez & Gesa, 2017; Muñoz & Chandy, 2016); age (Muñoz, 2017) (see Vanderplank, 2010 for a research synthesis).

# Vocabulary + subtitles

- mainly university students
- different conditions
- input enhancement

Genres + subtitles/captions

Grammar + subtitles/captions

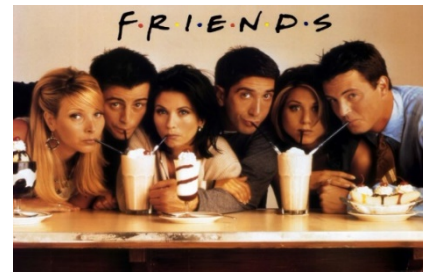
# Genres



**Expository documentaries** speak directly to the viewer, often in the form of an authoritative commentary employing voiceover or titles, proposing a strong argument and point of view.



The Merriam Webster dictionary defines ‘**edutainment**’ as “entertainment (as by games, films, or shows) that is designed to be educational.”



A **sitcom** is a genre of comedy performance in which recurring characters take part in humorous storylines centered on a common environment, such as a family home or workplace.



The **police procedural** drama is a subgenre of detective fiction that depicts investigations into several unrelated crimes in a single episode. Unlike traditional mysteries, police procedurals often reveal the perpetrator's identity to the audience early in the episode.

# Genres

A2 – B1 level: from 18 to 70 years of age

What do you think was the genre that helped to learn more vocabulary?

# Genres

A2 – B1 level: from 18 to 70 years of age

Results: documentary > sitcom > police procedural > edutainment

The role of the visual element + Individual Differences: motivation, proficiency, learning experience, age, aptitude, inhibition, working memory, aptitude...

We did a series of cognitive and proficiency tests to see our individual differences.

These can be trained, e.g. Lumosity app.

You can tailor your learning process.



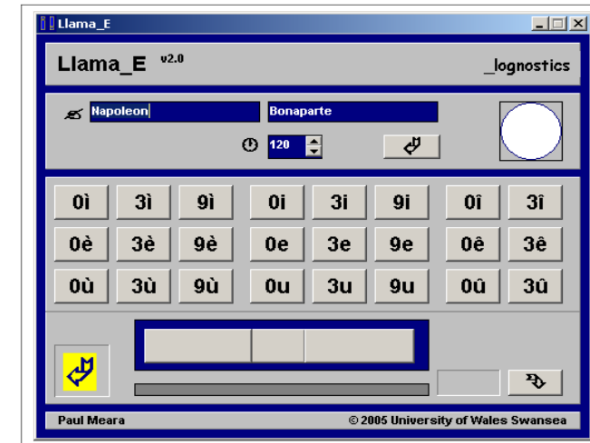
# Theoretical background: LLAMA



B: Vocabulary learning  
(word + image)



D: Phonetic memory  
(no subtitles)



E: Sound-symbol  
correspondence  
(subtitles in L2 - captions)

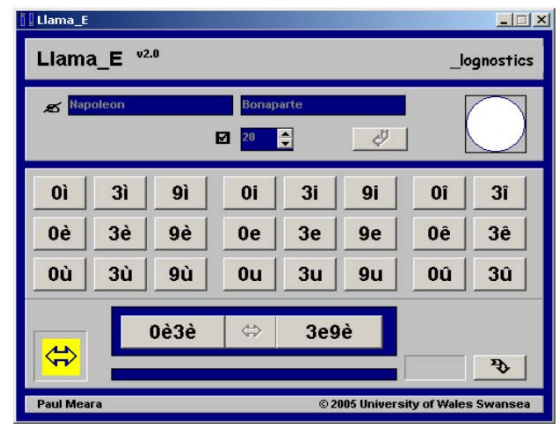
# LLAMA



B: Vocabulary learning



D: Phonetic memory



E: Sound-symbol correspondence



F: Grammatical inference

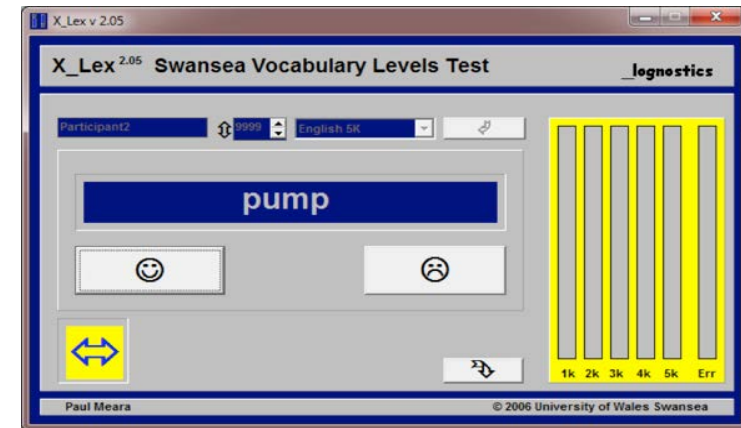
# Proficiency

- *OPT* – Listening and grammar (Allan, 2004)

- 1 I gather you've been having trouble with your **earing** **hearing**.
- 2 A number of students are expected to join the advanced **composition** **conversation** class.
- 3 This beard of mine is awfully itchy. I'll be glad when it **goes** **grows**.
- 4 I doubt if he's very comfortable in his **present** **prison** bed.
- 5 Have you played **Dennis** **tennis** very much recently?
- 6 Martina lives in a great big **freezing** **Friesian** barn.
- 7 Do you have any idea how long ago it was **found** **founded**?
- 8 Your letter must have crossed with **my own** **mine**.
- 9 One thing I really **loved** **loathed** in the late nineties was the style of the clothes.
- 10 My sister says **he's** **she's** a very nice person.

1	_____
2	_____
3	_____
4	_____
5	_____
6	_____
7	_____
8	_____
9	_____
10	_____

- *X\_Lex* / *Y\_Lex* (Meara & Miralpeix, 2006)



# Reading span – Working Memory

Not so relevant for adults

## Noticing / form - sound recognition

Have you seen/heard these words?

Noticing/attention → essential for learning

**Prior to** any other process

Multimodal input → cognitive (over)load

# Theoretical background

## **Dual Coding Theory** (Paivio, 1986, 2007)

**Verbal** and **non-verbal** systems

**Independent functioning** but **interaction**

**Activation** of one system **stimulates** the other

Greater **depth of processing** and better **recall**

## **Cognitive Load Theory** (Chandler & Sweller, 1991; Sweller, 1994)

- Brain's **limited cognitive capacity**, should not be overloaded
- Multimodality may increase cognitive load (CL)
- **Subtitles** as a tool to **reduce CL** in language acquisition settings

## **Cognitive Theory of Multimedia Learning** (Mayer, 2002, 2009)

“Students learn more deeply from a multimedia explanation than from a verbal explanation” (2002: 62)



# Vocabulary ... what happened?

Grade 6, Grade 10 & University students: different ages, different proficiency, different in individual differences

Several conditions:

With captions (L2/FL), without subtitles, with subtitles in Spanish (grade 6), no series viewing.

# Vocabulary – 1<sup>st</sup> study

Group A with captions + Group B no series viewing

# Vocabulary

- Instruments:

- Listening / grammar part of the *Oxford Placement Test* (Allan, 2004)
- *X\_Lex / Y\_Lex* (Meara & Miralpeix, 2006)
- LLAMA aptitude test (Meara, 2005)
- *I Love Lucy* TV series: 8 episodes of 22 mins approx. = 3 hours of multimodal input
- English audio + English captions (intervention)
- 5 Target Words (TWs) and 3 Target Expressions (TEs) per episode
- Total of 40 TWs and 24 TEs



# Methodology

## INTERVENTION GROUP (N=39)

### 1. PRE-TEST

(40 TWs + 24 TEs, form and meaning recall)

### 2. 8 VIEWING SESSIONS

#### 2.1. PRE-TASK

#### 2.2. EPISODE (x8)

#### 2.3. VOCABULARY POST-TASK

(5 TWs and 3 TEs, form recall and meaning recognition)

### 3. POST-TEST

(40 TWs + 24 TEs, form and meaning recall)

## CONTROL GROUP (N=23)

### 1. PRE-TEST

(40 TWs + 24 TEs, form and meaning recall)

### ~~2. 8 VIEWING SESSIONS~~

#### 2.1. PRE-TASK

#### ~~2.2. EPISODE (x8)~~

#### 2.3. VOCABULARY POST-TASK

(5 TWs and 3 TEs, form recall and meaning recognition)

### 3. POST-TEST

(40 TWs + 24 TEs, form and meaning recall)

# Methodology

## PRE- and POST-TEST

**1. A continuación escucharás veinte palabras. Escríbelas en inglés y tradúcelas al castellano o catalán. Si de alguna palabra conoces más de un significado, escríbelo. Escucharás cada palabra un total de dos veces.**

Palabras

	Inglés	Castellano - Catalán
1		
2		
3		
4		
5		

# Methodology

## PRE-TASK

### “Lucy Visits Grauman’s”

1. Fill in the blanks with the appropriate words; the first letter is already given for you. Use the definitions to help you.

- A) My father tends to use a c\_\_\_\_\_ to open the door because it is always blocked.
- B) If your partner s\_\_\_\_\_, it is really difficult to sleep with him / her! What a noise!
- C) Please, give me a big h\_\_\_\_\_ of bread. I’m starving and I haven’t eaten anything since yesterday.
- D) I always like to t\_\_\_\_\_ i\_\_\_\_\_ the blankets before I go to bed.
- E) The children were playing on the beach with their b\_\_\_\_\_ and spades.

#### Definitions

- A) A straight iron bar, usually with a curved end, used for forcing open boxes and moving heavy objects.
- B) To breathe noisily through your nose and mouth while you are asleep.
- C) A large piece of something that has been cut or broken from a larger piece.
- D) To make somebody feel comfortable in bed by pulling the covers up around them.
- E) An open container with a handle, used for carrying or holding liquids, sand, etc.



# Methodology

## VOCABULARY POST-TASK

### "Lucy Visits Grauman's"

1. Escucharás cinco palabras en inglés. Cada palabra se va a repetir dos veces. Di qué significan estas palabras (opción a, b, c...). Si no sabes qué quiere decir alguna palabra, elige la opción (f) 'No lo sé'.

1) \_\_\_\_\_

- a) Pala
- b) Palanca
- c) Taberna
- d) Guardián
- e) Arrugar
- f) No lo sé

2) \_\_\_\_\_

- a) Traición
- b) Implorar
- c) Roncar
- d) Resonar
- e) Pasear
- f) No lo sé

3) \_\_\_\_\_

- a) Masivo
- b) Oportunidad
- c) Envase
- d) Cubo
- e) Bolsillo
- f) No lo sé

4) \_\_\_\_\_

- a) Enchufar
- b) Arrojar
- c) Cubrir
- d) Estallar
- e) Extraño
- f) No lo sé

5) \_\_\_\_\_

- a) Negar
- b) Gracioso
- c) Placa
- d) Trozo
- e) Bebido
- f) No lo sé

2. Completa las siguientes expresiones en inglés. Ayúdate del contexto o definición que se da en cada caso.

a) Si mientes a alguien o le quieres mantener al margen para que no descubra la realidad:

You are throwing him/her \_\_\_\_\_ the \_\_\_\_\_

b) Cuando alguien o algo te pone la piel de gallina, puedes decir:

It \_\_\_\_\_ me \_\_\_\_\_!

c) Cuando alguien parece haber perdido su sano juicio, le dices:

You are \_\_\_\_\_ of your \_\_\_\_\_!

# Research Questions

1. Does **sustained exposure** to captioned TV series lead to vocabulary learning?
2. Does **aptitude** have an effect on vocabulary learning from captioned TV series?
3. Do **proficiency** level and **vocabulary size** have an effect on vocabulary learning from captioned TV series?

# Results RQ1: Post-test

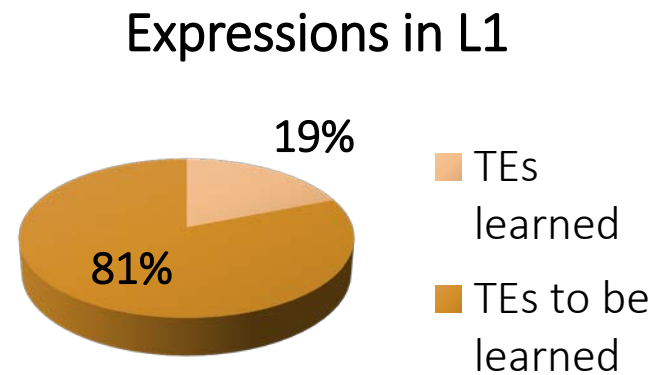
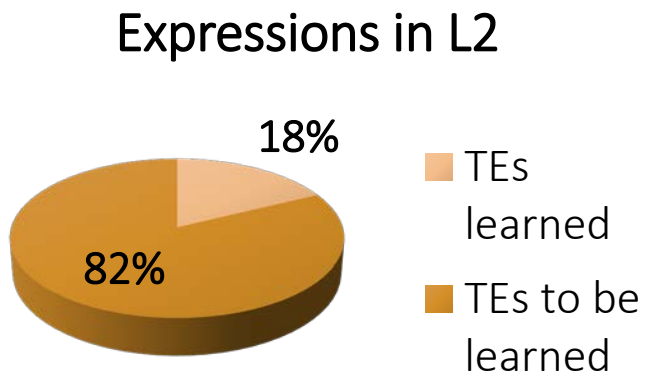
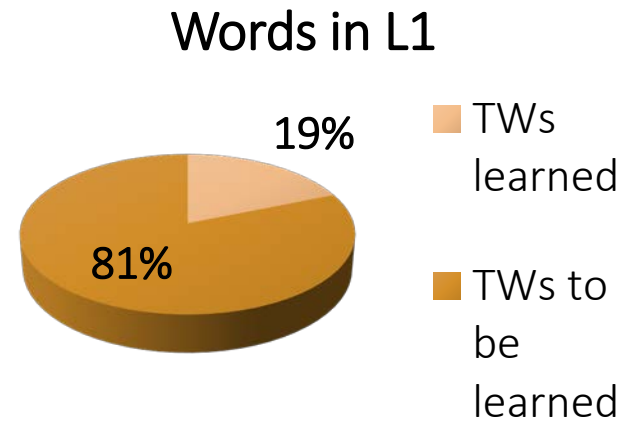
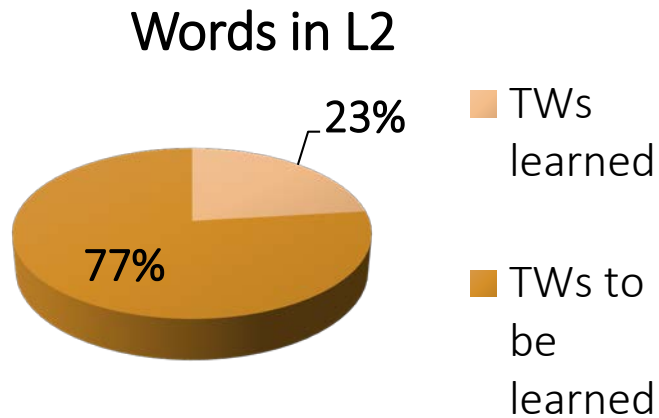
Group	Form words in L2	Meaning words in L1	Form expressions in L2	Meaning expressions in L1
Intervention	.000	.000	.000	.000
	92% huge	205% huge	52% very large	122% huge
Control	.000	.000	.000	.000
	142% huge	387% huge	50% very large	188% huge

Mann-Whitney U Test Control vs. Intervention - No significant differences

	Form words in L2	Meaning words in L1	Form expressions in L2	Meaning expressions in L1
Post-test	.246	.150	.377	.661
Gains	.545	.468	.558	.572

# Results RQ1

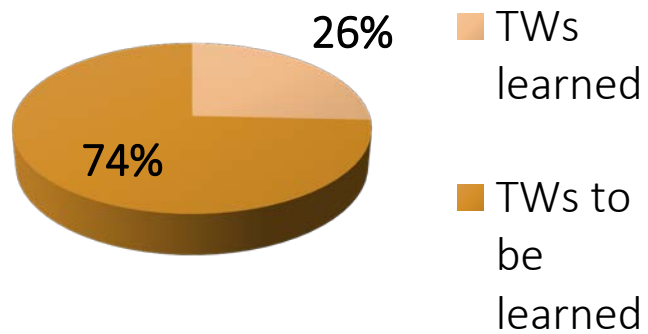
Increase **not significant** in size for the **Intervention** group.



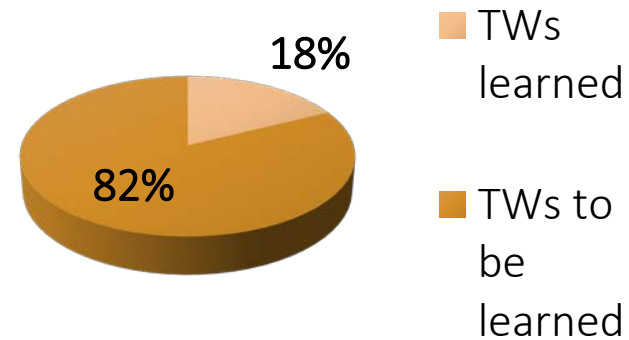
# Results RQ1

Increase **not significant** in size for the **Control** group.

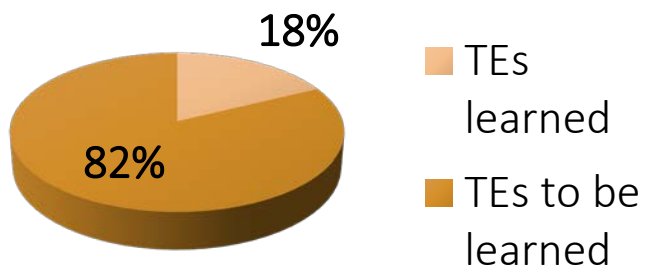
### Words in L2



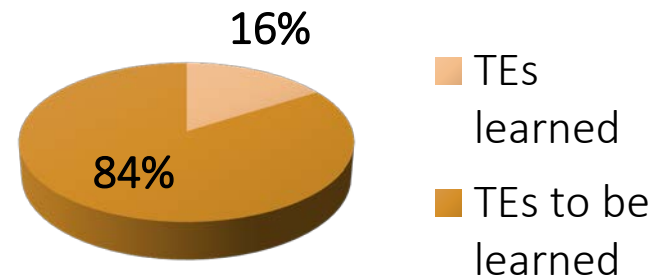
### Words in L1



### Expressions in L2



### Expressions in L1



# Results RQ2

## Intervention

	LLAMA B	LLAMA D	LLAMA E	LLAMA F	LLAMA TOTAL
Gains TWs L2	.095	.133	.177	.255	.191
Gains TWs L1	.344* .016	.126	.211	.100	.255
Gains TEs L2	.018	.023	-.083	-.056	.005
Gains TEs L1	.054	.201	.017	.020	.091

\* $p$  0.05 level – 2-tailed  
\*\* $p$  0.01 level – 2-tailed

# Results RQ2

## Control

	LLAMA B	LLAMA D	LLAMA E	LLAMA F	LLAMA TOTAL
Gains TWs L2	.295	-.047	.423* .022	-.154	.251
Gains TWs L1	.231	.079	.277	.018	.392* .032
Gains TEs L2	.289	.210	.295	.014	.431* .020
Gains TEs L1	.345	.207	.294	.208	.509** .007

\* $p$  0.05 level – 2-tailed

\*\* $p$  0.01 level – 2-tailed

# Results RQ2

## Intervention

High (N=21) > Low (N=18) aptitude

Only in LLAMA D (phonetic memory)  $p.050$  for Meaning of TWs  
(Spearman correlation)

## Control

- High (N=14) > Low (N=9) aptitude

Only in LLAMA Total (B+D+E+F)  $p.004$  for Meaning of TEs (Spearman correlation)



# Results RQ3: Vocabulary Size & Proficiency

## Intervention

	Vocab. size	OPT Listening	OPT Grammar	OPT Total
Gains TWs L2	.278* .045	.461** .002	.473** .001	.510** .000
Gains TWs L1	.309* .030	.331* .020	.392* .007	.421** .004
Gains TEs L2	.123	.175	.120	.158
Gains TEs L1	.361* .018	.337* .013	.598** .000	.560* .000

\* $p$  0.05 level – 2-tailed  
 \*\* $p$  0.01 level – 2-tailed

# Results RQ3: Vocabulary Size & Proficiency

## Control

	Vocab. size	OPT Listening	OPT Grammar	OPT Total
Gains TWs L2	.206	.058	.257	.110
Gains TWs L1	.365* .043	.493** .008	.540** .004	.509** .007
Gains TEs L2	.121	.116	.228	.138
Gains TEs L1	.522* .005	.423* .022	.635* .001	.622** .001

\* $p$  0.05 level – 2-tailed  
 \*\* $p$  0.01 level – 2-tailed

# Conclusion



- Intentional learning
- Learning strategies
- Proficiency
- Vocabulary size

- Cognitive aptitude(s)
- Extra exposure



# Vocabulary 2<sup>nd</sup> study

- Instruction > non-instruction
- Always certain gains (and partial knowledge!)
- High proficiency > Low proficiency
- Attention to certain part of language (e.g. vocabulary) may be affecting negatively some other aspects (e.g. comprehension)
- Image helps learning language (different to traditional activities)
  - *co-occurrence helps adults*
  - *in kids, it's time on screen that helps (co-occurrence may produce cognitive overload)*
- Meaningful context

Grammar + pronunciation

What happened this year?

What have we done?

Group A: with captions

Group B: without captions

# Pronunciation study: aim

Explore the effects of captions, in particular token frequency and saliency on the “**non-intentional**” learning of L2 usually mispronounced words.

# Pronunciation

area	3821	5	done	24737	19
award	657	5	earth	5074	16
bird	2318	9	minute	19252	17
crisis	849	5	honest (dins d'honestly i dishonest)	3689 (1390 – 132)	12
event	1345	8	murder	5717	22
failure	1021	6	parent	670	10
women	9978	6	whole	19660	17
giant	1380	7	world	23216	16
half	10156	8	monk	376	11
heart (també dins de sweetheart)	12453 (3272)	8	hour	8277	12
10 words			10 words		

talk (també a talks i talking)	43605 (25385 – 1216)	49
live(s/d)	17574 (7124 – 3368)	27
first	42869	32
work - també a working	40699 – 12775	50
great	41864	55
5 words		

apparently	0	steak	0
blood	1	youth	0
cough	0	tongue	0
cousin	2	spatial	0
debt	0	rear	0
favourite	0	key	2
fruit	2	height	0
fur	0	occur	1
hotel	0	owe	2
literature	0	thorough	0
mountain	2		
scene	1		
rough	0		
recent	0		
serious	1		



# Pronunciation: 100-word test

Target words: usually mispronounced

25 target words: appearing in the series → 13 mispronounced on purpose, 13 well-pronounced

25 usually mispronounced words: not appearing in *TGP* or with minimal frequency

50 distractors: 25 easy words well-pronounced + 25 easy words mispronounced deliberately

**Warning** : Item analysis to be done yet (Validity, reliability).

# Results

	Pre-test /100	Post-test/100
Group A	76.07	72.95
Group B	78.55	79.74
All	77.27	76.22

No significant differences between Group A and B either on the Pre- (.144) or the Post-Test (.302).

Significant differences pre-/post- in All  $p < .007$

Group A → significant differences  $p < .011$

Group B → non-significant differences  $p < .300$

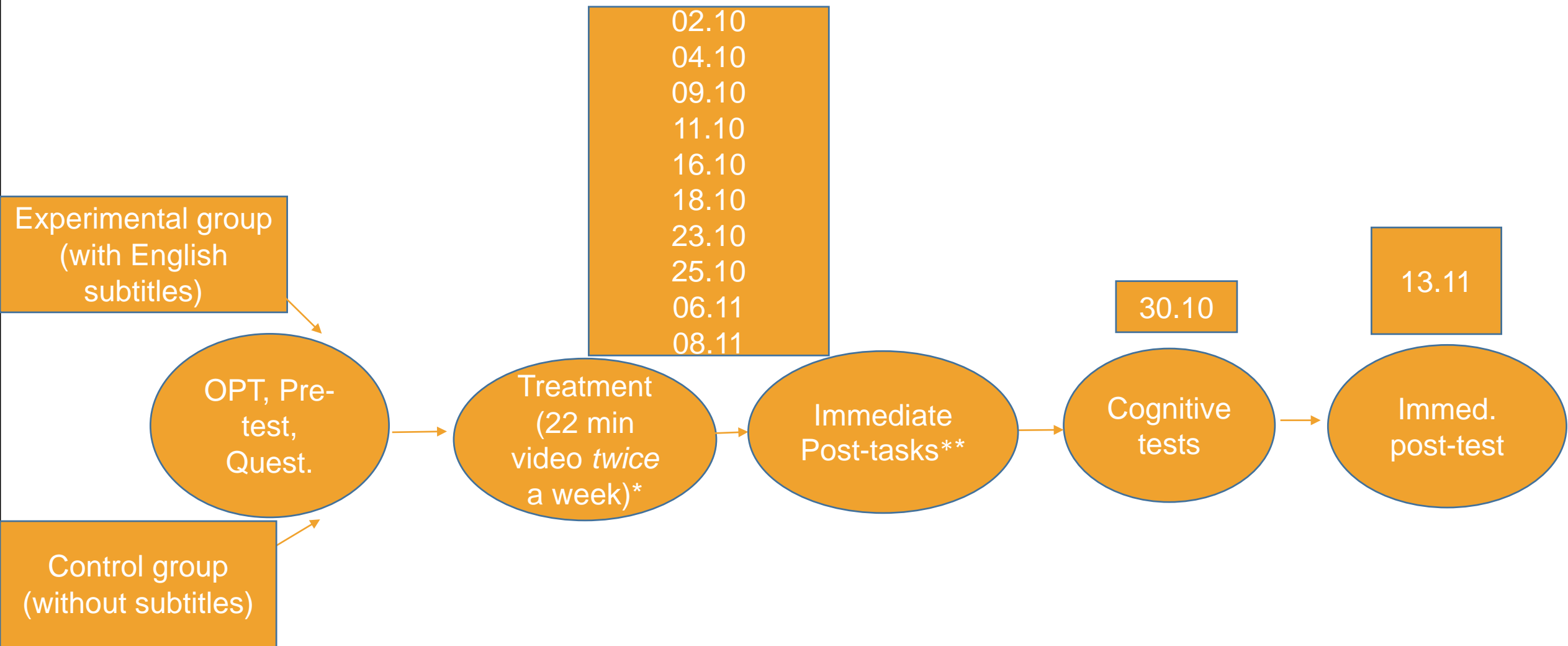
**In a nutshell, no TV series or captions effect.  
Warning: Lots of data cleaning to be made yet.**

# Grammatical constructions

29 transformations (15 grammatical structures) + 23 “more simple” kind of items contained in 10 episodes of *TGP*.

## Aim:

Explore the effects of captions, in particular token frequency and saliency on the “**non-intentional**” learning of L2 constructions.



\*Participants are also required to complete an on-line weekly survey about their viewing activities.

\*\* After viewing two episodes

# Target constructions (adapted from Goldberg (2003))

- Passive construction [10]
- Catenative constructions (e.g. I want/need you to...) [14]
- Irregular plural constructions (e.g. mice, cacti, shrimp) [5]
- Causative construction let (let+person+verb) [12]
- Idiom constructions (filled) (e.g. say no more [6], no big deal [3])

## Target constructions (adapted from Goldberg (2003))

- Idiom constructions (partially filled) (e.g. do for a living, break (sb's) promise) [3]
- Idiom (minimally filled) (e.g. The more..., the less...) [4]
- Subject-Auxiliary Emphasis ( I did wash the dishes!) [13]
- Phrasal Constructions ( e.g. figure out [11], let sb down [3])

# Other Target Constructions

- Tag questions [11]
- Not...either [6]
- Let's + verb [33]
- Future in the past [15]
- Reported speech [21]
- Used to [11]
- I just want to [6]
- Why don't you [9]
- I would rather [2]
- To be supposed to [16]
- To be allowed to [3]
- I wish I had [2]

# What do we know so far?

Explicit instruction: 'I do, we do, you do' → lecturing

Implicit instruction: instructional tasks that do not provide specific guidance on what is to be learned from the task

Grammar learning benefits more from **explicit instruction** than from implicit instruction.

For grammar **implicit instruction** to be effective in a rather short time span, you need **tons of input** in a **meaningful context**.



# What do we know so far?

**Implicit/incidental/non-intentional learning** is the **learning** of complex information in an incidental manner, without awareness of what has been learned.

It is accidental / indirect / additional / unplanned **learning** within an informal or formal **learning** situation.

Explicit learning: deliberate learning

## 4 learning stages

input > input processing > intake > output

# 2 different conditions

Group A: with captions (FL)

Group B: without subtitles

What do you think was the result?

# Preliminary results without “cleaning” the data

Missing data, no validity/reliability item analysis, no item classification in terms of tokens, and then the curious incident of incongruent results...

pre-test/23(total	Post-test/23	pre-test/29	Post-test/29
5	21	21	22
12	6	3	9

# Results - Single words + verb tenses /23

	Pre-test /23	Post-test/23
Group A	8.75	12.23
Group B	10.18	13.21
All	9.45	12.71

No significant differences between Group A and B either on the Pre- (.140) or the Post-Test (.397).

Significant differences pre-/post- in All  $p < .000$

Group A → significant differences  $p < .000$

Group B → significant differences  $p < .000$

**There has been significant learning regardless of the condition (with or without subtitles).**

# Results – transformations /29

	Pre-test /29	Post-test/29
Group A	14.44	17.71
Group B	14.58	17.71
All	14.51	17.71

No significant differences between Group A and B either on the Pre- (.895) or the Post-Test (.992).

Significant differences pre-/post- in All  $p < .000$

Group A → significant differences  $p < .000$

Group B → significant differences  $p < .000$

**There has been significant learning regardless of the condition (with or without subtitles).**

# Preliminary discussion

The exposure to captions hasn't had any effect as both groups have learned the same, and significantly.

But it remains to be known what kind of structures have been learned and what haven't (easy - short vs difficult - transformations).

Input flooding? → some structures appearing much more than others. Are those the ones learned?

Again, the means in the post-tests (13 out of 23 – 17 out of 29) are way below the maximum grade. Therefore, there was much more room for learning.

# Aptitude and grammar learning

	LLAMA B	LLAMA D	LLAMA E	LLAMA F	LLAMA Total
Gains short w./ 23	x	x	x	x	x
Gains transf./ 29	x	x	x	-.451**	x

Similar results when comparing groups too.

# Proficiency and grammar learning: all

	OPT Listening	OPT Grammar	OPT Total
Post-test / 23	.378**	.702**	.674**
Post-test / 29	.404**	.746**	.816**

# Proficiency and grammar learning: Comparing groups

Group A	OPT Listening	OPT Grammar	OPT Total
Post-test / 23	.577**	.547**	.523**
Post-test / 29	.683**	.838**	.833**

Group B	OPT Listening	OPT Grammar	OPT Total
Post-test / 23	.217	.894**	.824**
Post-test / 29	.179	.665**	.802**

Listening ability was not playing a role in group B (without captions). It was their grammar and their overall proficiency. Group A's overall proficiency, including listening, was playing a role → more similar to reading experience. In both cases, it's one's proficiency that determines learning, not the subtitles.



# Bold and oversimplified conclusion

If you want to learn grammar, listening/watching TV series with(out) captions or subtitles is not determinant. What makes you learn more or less from this activity is your proficiency.

Both conditions (group A and B) learned the same amount of input, but both of them had lots to learn left.

The importance of explicit instruction →

so let's now review the test items explicitly so we are all on the same page! 😊