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#callurv

From language play to linguistic form and back again

Lessons from an experimental study
for the design of task-based language practice
supported by games

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 @fcornillie



Raskalor

Keeg Gibn

Dunmore

Fafhrkek

whiteout

Keeg Gibn
(Dwarf)

Fafhrkek

Cranit

Damador
<Night Crew>

Dunmore

You dance with Keeg Gibn.
 You dance with Keeg Gibn.
 You dance with Keeg Gibn.
 [1: General] Beryl: get down tonight?
 Dunmore says: join in folks
 [1: General] FourInchTool: Considering we're dwarves, little is right.
 Damador bursts into dance.
 Dunmore bursts into dance.

TigerLibra gains Devotion Aura.
 BeoWolven gains Devotion Aura.
 Devotion Aura fades from BeoWolven.
 Devotion Aura fades from BaleogFierce.
 Devotion Aura fades from TigerLibra.
 Devotion Aura fades from Erebumi.
 Devotion Aura fades from Brunhilde.
 Devotion Aura fades from BaleogFierce.

Damador
 Dwarf Paladin
 Level 8

Games and L2 learning



Games and L2 learning

- meaningful attention to and appropriation of complex texts (Thorne, Fischer, & Lu, 2012; Piirainen-Marsh & Tainio, 2009)
- construction of scientific discourse (Steinkuehler & Duncan, 2009)
- high-stakes communicative activity with other players, often in plurilingual settings (Thorne, 2008; Zheng, Newgarden, & Young, 2012)
- gaming correlates with measures of L2 proficiency (Kuppens, 2010; Sylvén & Sundqvist, 2012)

Games and L2 learning: task-based!



non-linguistic goals
meaningful use of language
scenarios and mechanics
interactivity
feedback

Baltra, 1990; Cornillie, Thorne, & Desmet, 2012; García-Carbonell, Rising, Montero, & Watts, 2001; Mawer & Stanley, 2011; Purushotma et al., 2009; ...

Games and L2 teaching ?

Translate this text to Spanish

My name is tariq.

Mi nombre es Tariq ⌵ Áá

⬇ shift á é í ó ú
ü ñ ç i

You can use the keyboard for most things. Try hitting Enter instead of clicking check.

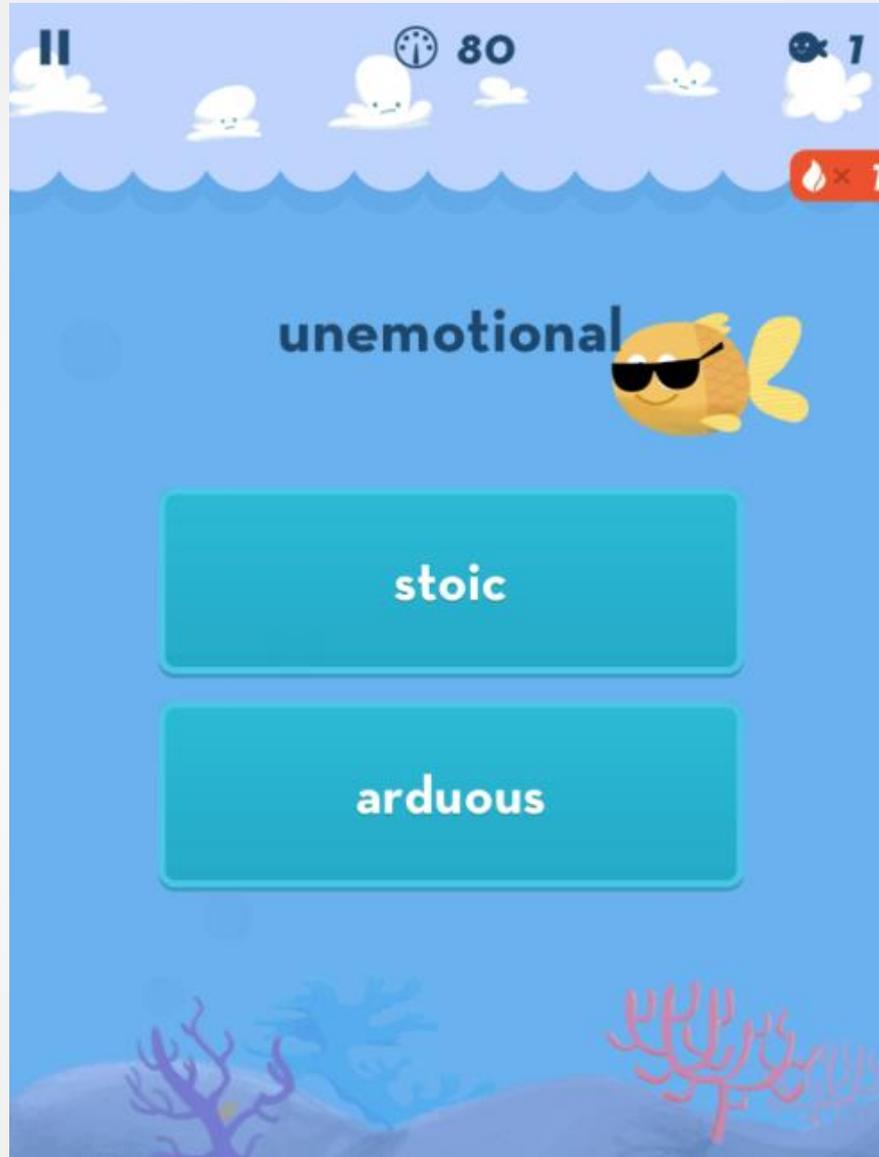


You are correct.

Check

Continue

Feedback



Mindsnacks



Verb Mayhem

The evidence is IN: drills are OUT

<http://barrynabdahl.files.wordpress.com/2010/02/drill-kill.jpg>



Wong, W., & VanPatten, B. (2003). The Evidence is IN: Drills are OUT. *Foreign Language Annals*, 36(3), 403-423.

mechanical
drills

I dig, I dug, I have dug



meaningful
drills

Yesterday, my dog ... up
a bunch of bones.

communicative
drills

Tell me what your dog found
in the garden yesterday, and
use the verb 'to dig'.

...

**TOWARDS MEANINGFUL
CONTROLLED PRACTICE**



5



1

57:14



0

THIS RECIPE USES LESS
INGREDIENTS.

incorrect
(F)

correct
(J)



46:50



TOMORROW WILL BE WARM WITH
LESS SHOWERS.

incorrect
(F)

correct
(J)



3



1

36:48



0

I HAVE HAD LESS JOBS THAN
YOU.

incorrect
(F)

correct
(J)



2



1

26:52

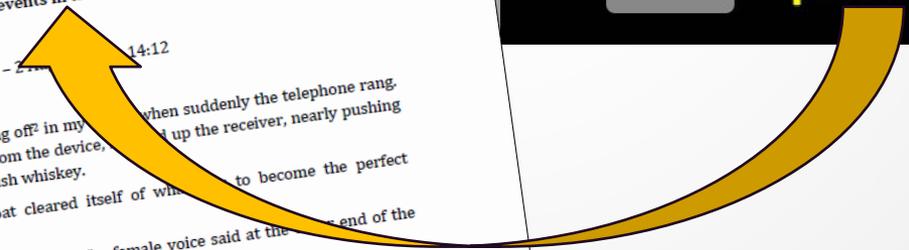
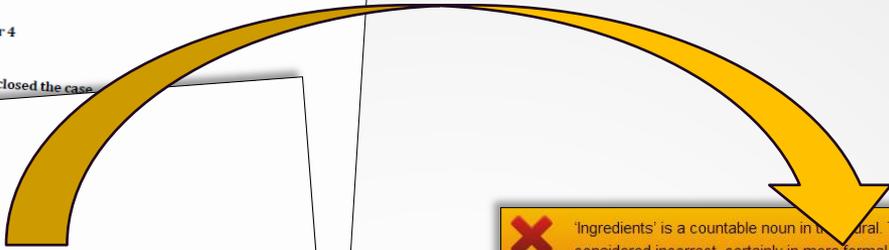
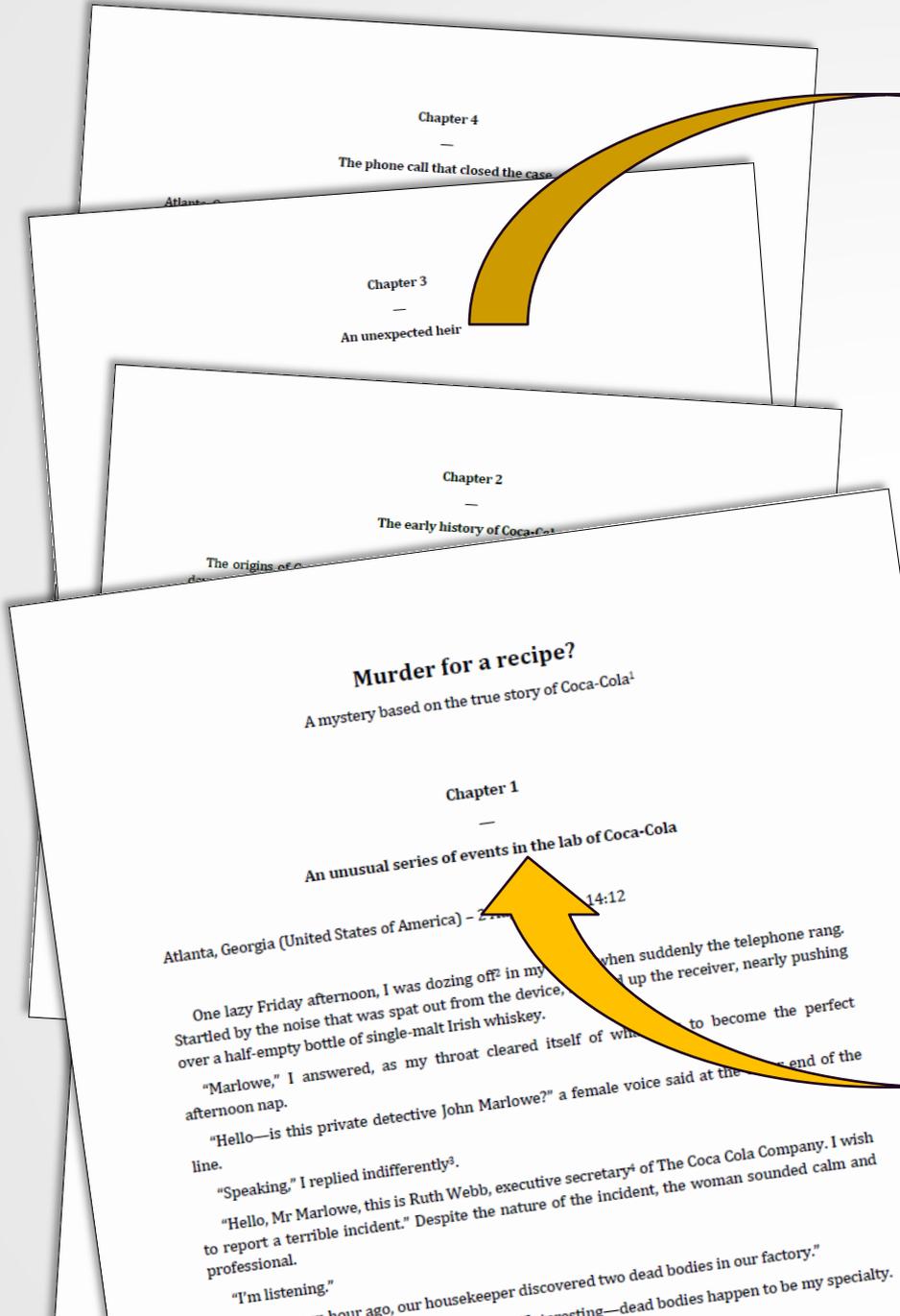


0

BRASIL MISSED LESS PENALTIES
THAN ARGENTINA.

incorrect
(F)

correct
(J)



X 'Ingredients' is a countable noun in the plural. The use of 'less' with countable plural nouns is generally considered incorrect, certainly in more formal English. The general rule is that you need to use 'fewer'. When you stick to the rule, you can't go wrong.

COPIES OF COCA-COLA USE LESS INGREDIENTS.



incorrect (F)

correct (J)

press SPACE

Chapter 4
—
The phone call that closed the case

Chapter 3
—
An unexpected heir

Chapter 2
—
The early history of Coca-Cola

The origins of Coca-Cola

Murder for a recipe?

A mystery based on the true story of Coca-Cola!

Chapter 1
—
An unusual series of events in the lab of Coca-Cola

Atlanta, Georgia (United States of America) - 27th April 1914:12

One lazy Friday afternoon, I was dozing off² in my office when suddenly the telephone rang. Startled by the noise that was spat out from the device, I picked up the receiver, nearly pushing over a half-empty bottle of single-malt Irish whiskey.

"Marlowe," I answered, as my throat cleared itself of whiskey, "I've come to become the perfect afternoon nap.

"Hello—is this private detective John Marlowe?" a female voice said at the other end of the line.

"Speaking," I replied indifferently³.

"Hello, Mr Marlowe, this is Ruth Webb, executive secretary⁴ of The Coca Cola Company. I wish to report a terrible incident." Despite the nature of the incident, the woman sounded calm and professional.

"I'm listening."

Just over an hour ago, our housekeeper discovered two dead bodies in our factory."

...: "Interesting—dead bodies happen to be my speciality.

9:33 \$ 250 YOUR BEST: 10

I THOUGHT WE PUT LESS COCA LEAVES IN THE KETTLE.

incorrect (F) hurry! correct (J)

Research question

What is the potential of these practice activities, embedded in meaningful reading, for performance on transfer tasks?



Participants & research design

- intermediate English L2 learners (~B1 CEFR)
- Dutch L1
- 16-18 years old
- secondary education in Flanders
- $N = 186$

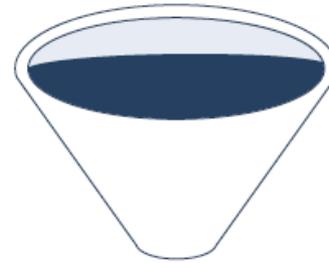
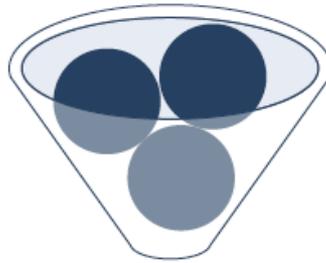
- experimental design
 - reading + practice with 'knowledge of results' feedback (KR)
 - reading + practice with metalinguistic feedback (ML)
 - control group (tests only)
- practice behaviour logged
- pre-, post-, delayed post-tests (+1M)

Target structures

- quantifiers (QNT)
 - *Copies of Coca-Cola use fewer ingredients / less sugar / ?*less ingredients.*
 - *Kopieën van het Coca-Cola recept gebruiken minder ingrediënten/suiker.*
- verbs with two objects (V2O)
 - **Pemberton revealed me the secret formula.*
 - *Pemberton onthulde mij het geheime recept.*

Rule instruction for QNT

Words that express quantity



+++++

many

much

+

few

little

<->

fewer (less)

less

<->

fewest (least)

least

The third protagonist is Frank Robinson, engineer and salesman of printing devices. On one of his sales tours, Robinson arrived at Pemberton's laboratory. After [opening Robinson a bottle of Coca-Cola](#), Pemberton told him that, earlier that day, his expensive brewing machine had broken down. Robinson, who immediately loved the soda drink, offered his services as an engineer, and [fixed the brewing machine for Pemberton](#).

For Pemberton, Robinson was a gift from heaven. He needed someone to help him manufacture Coca-Cola, and he received virtually no help from his son. So, Pemberton invited Robinson into the company as a business partner. Robinson agreed. In turn, Pemberton [revealed¹⁰ the secret formula of Coca-Cola to Robinson](#), and [taught him the secrets of the trade of brewing](#).

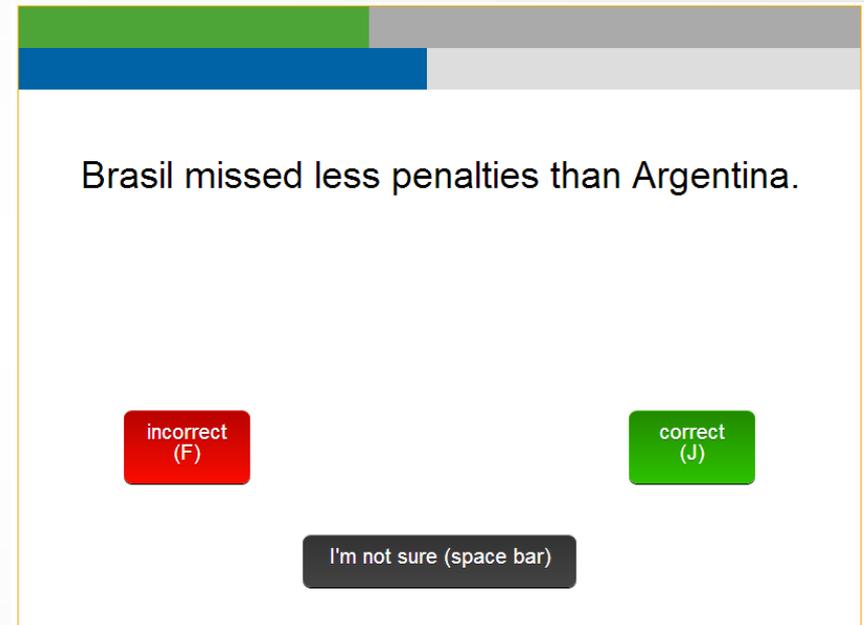
At that time, [Dr. Pemberton](#) was tired from working so hard on the formula of Coca-Cola. So, he turned the manufacture of the drink over to his business partner, and took some time off from work. While Pemberton was on a break, Robinson [brewed him many batches of the soda drink](#), and became so involved in the product that he [invented the name 'Coca-Cola' and a logo for Pemberton](#). Robinson also did much advertising, which contributed greatly to the early successes of the drink.

Now that Pemberton had more time on his hands, he noticed that things were not going too well for his son. Charley was womanizing¹¹, and was drinking more heavily than ever. Knowing the dangers of addiction, Pemberton decided to help his son. His strategy was to give his son's life a purpose by involving him more in the company. He learned Charley to make Coca-Cola, which freed Robinson for more concentrated promotion of the product, with much success.

In the summer of 1887, Pemberton fell deadly ill. Realizing that Coca-Cola was all he had, he [promised Charley the rights to the name 'Coca-Cola'](#). This move was extremely unfair to Robinson, who had invented the name, and had made it into a real brand. To make matters worse for Robinson, Pemberton [transferred two thirds of the rights to the Coca-Cola formula to two investors](#), in an attempt to safeguard¹² the future of the product. He kept the other third for

Timed grammaticality judgment task (TGJT)

- aim = measure implicit/automatized grammar knowledge
- format cfr. Gutiérrez, 2013; Loewen, 2009
- time limit: 3 - 7 sec
- 54 items
 - 24 QNT
 - 24 V2O
 - 6 distractor items
- Cronbach's α
 - pre = .44
 - post = .89
 - delayed post = .88



Brasil missed less penalties than Argentina.

incorrect (F)

correct (J)

I'm not sure (space bar)

The screenshot shows a computer interface for a Timed Grammaticality Judgment Task. At the top, there are two horizontal bars: a green one on the left and a grey one on the right. Below these is a blue bar, also with a grey section on the right. The main area is white and contains the sentence "Brasil missed less penalties than Argentina." Below the sentence are three buttons: a red button labeled "incorrect (F)", a green button labeled "correct (J)", and a dark grey button labeled "I'm not sure (space bar)".

Written discourse completion task (WDCT)

- aim = measure productive grammar knowledge in formal contexts of use
- 7 items
 - 4 QNT
 - 3 V20
- Cronbach's α
 - pre = .52
 - post = .69
 - delayed post = .71

You work as a pharmacist for Johnson & Johnson, and have just improved the recipe of a painkiller. You are in your boss's office, and want to convince him to produce your improved version of the painkiller. You think that you can convince him by saying that the quantity of ingredients needed to make the painkiller is much smaller now. You say:

My new recipe is better than the old one, because it uses



You must use the underlined words.

Oral elicited imitation task (OEIT)

- aim = measure grammar knowledge in “unplanned language use” (Ellis, 2006, p. 351)
- format cfr. Erlam, 2009, with stronger meaning focus (roleplay)
- $N = 69$ (selected on treatment type and time spent on practice)
- 9 items
 - 5 QNT
 - 4 V20
- Cronbach's $\alpha = .81$

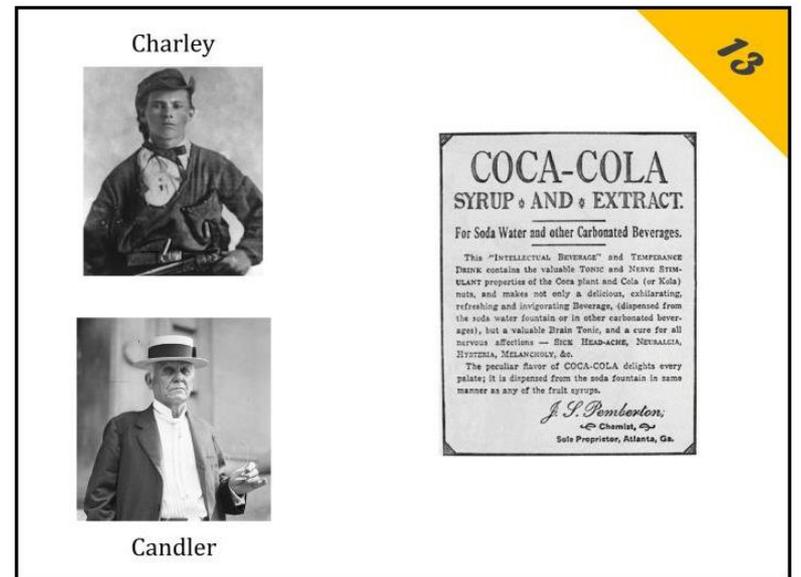


Figure 6: visual support for the oral stimulus
**Charley revealed Candler the secret recipe of Coca-Cola.*

TGJT

Brasil missed less penalties than Argentina.

incorrect (F) correct (J)

I'm not sure (space bar)

WDCT

You work as a pharmacist for Johnson & Johnson, and have just improved the recipe of a painkiller. You are in your boss's office, and want to convince him to produce your improved version of the painkiller. You think that you can convince him by saying that the quantity of ingredients needed to make the painkiller is much smaller now. You say:

My new recipe is better than the old one, because it uses

! You must use the underlined words.

OEIT

Charley

Candler

13

COCA-COLA SYRUP + AND + EXTRACT

For Soda Water and other Carbonated Beverages.

The product name of COCA-COLA Syrup was changed to COCA-COLA Syrup + AND + EXTRACT in 1901.

MODE

written

written

oral

SKILL

comprehension

production

production

L2 KNOWLEDGE

implicit

explicit

implicit

Results (TGJT)

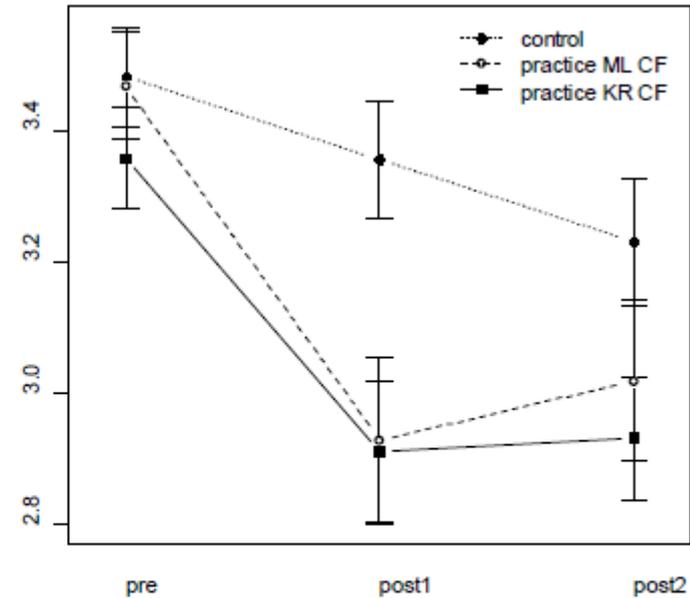
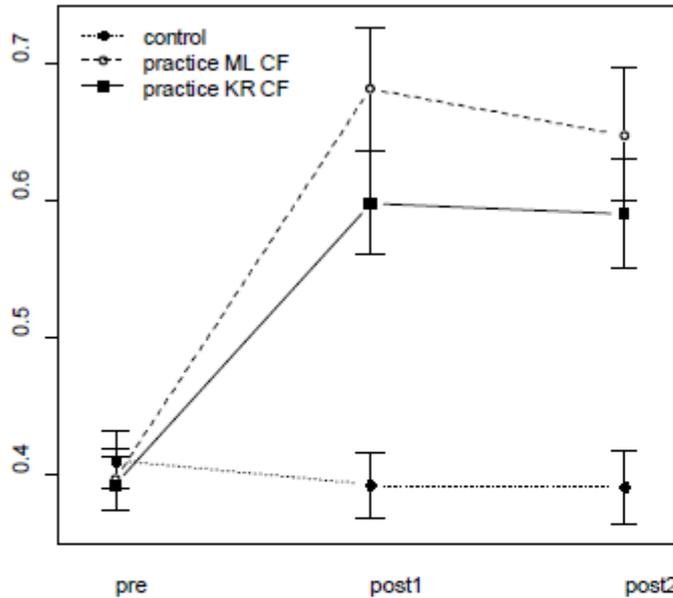


Figure VI-7: plots of mean accuracy (left) and mean response time (right) on the TGJT, by test time and experimental condition

Results (WDCT)

You work as a pharmacist for Johnson & Johnson, and have just improved the recipe of a painkiller. You are in your boss's office, and want to convince him to produce your improved version of the painkiller. You think that you can convince him by saying that the quantity of ingredients needed to make the painkiller is much smaller now. You say:

My new recipe is better than the old one, because it uses ...

 You must use the underlined words

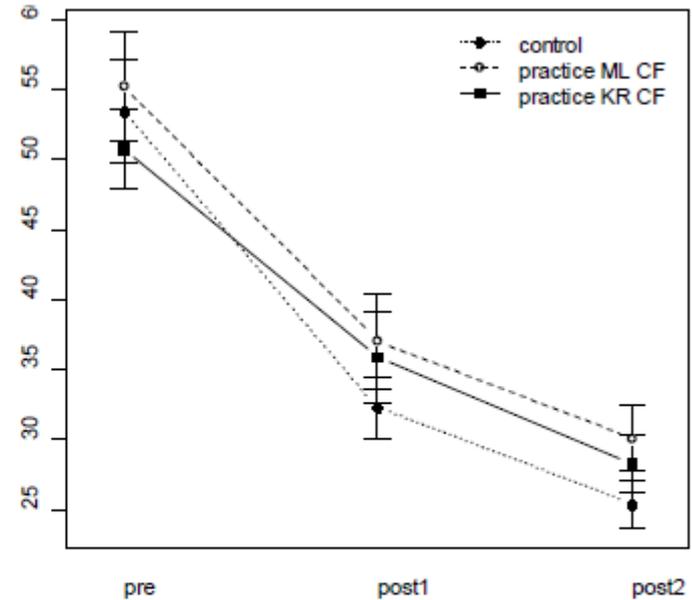
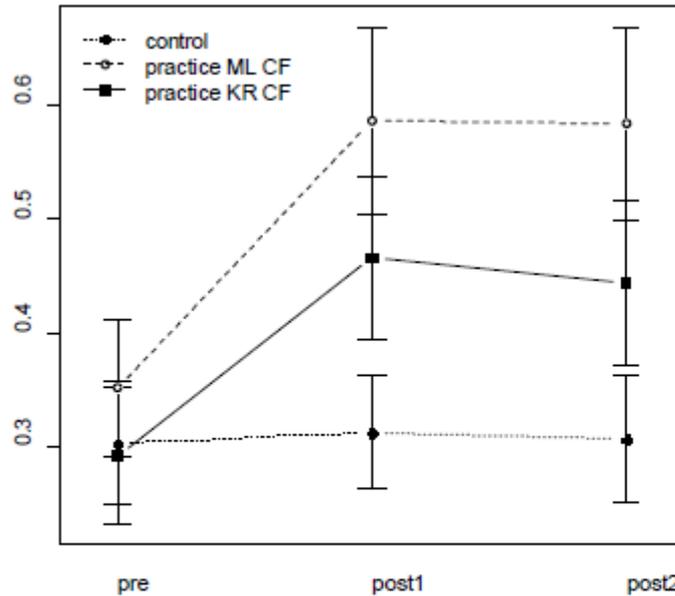
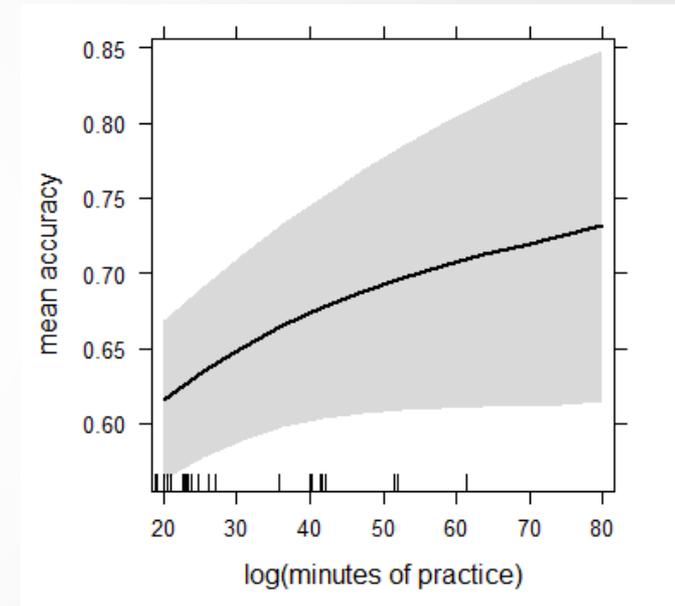
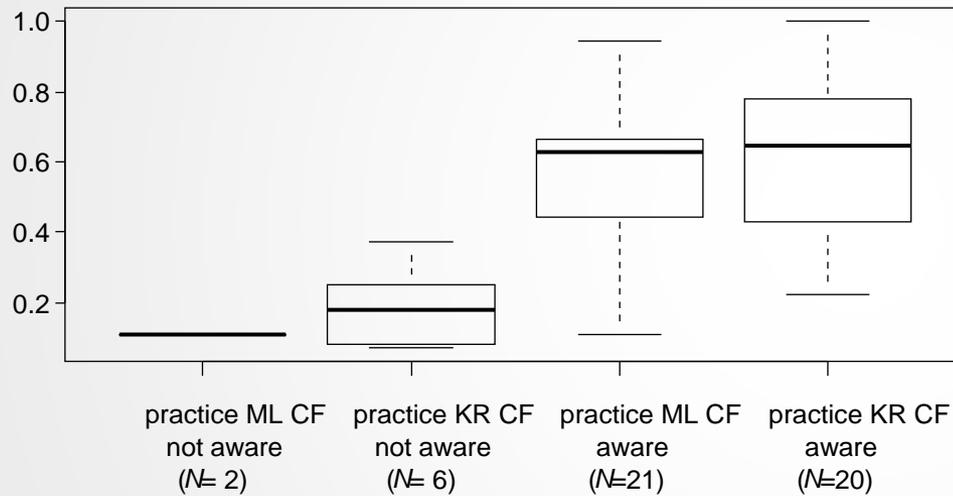
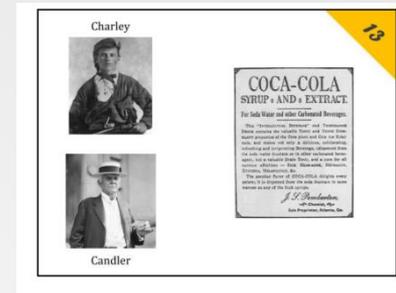


Figure VI-8: plots of mean accuracy (left) and mean response time (right) on the WDCT, by test time and experimental condition

Results (OEIT)



TGJT

Brasil missed less penalties than Argentina.

incorrect (F) correct (J)

I'm not sure (space bar)

WDCT

You work as a pharmacist for Johnson & Johnson, and have just improved the recipe of a painkiller. You are in your boss's office, and want to convince him to produce your improved version of the painkiller. You think that you can convince him by saying that the quantity of ingredients needed to make the painkiller is much smaller now. You say:

My new recipe is better than the old one, because it uses

! You must use the underlined words.

OEIT

Charley

Candler

13

TRANSFER OF PRACTICE ?

++

++

+

ADDED VALUE OF ML CF ?

+

++

/

LESSONS LEARNED FOR TASK-BASED PRACTICE

Qualitative observations

- mechanics of gaming (time pressure, competition) may have interfered with meaningful language processing
- learners had little control
- identification with the protagonist?

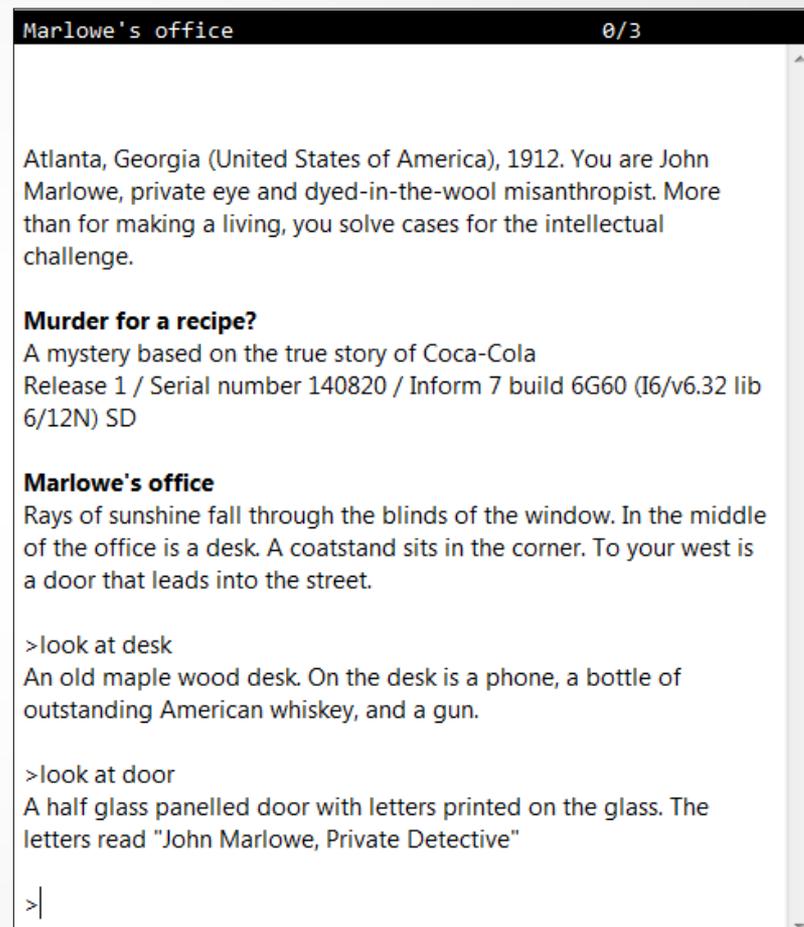
- learners came up with alternative endings to the mystery story
- elicited roleplay, even if not a good measure of implicit knowledge, was a really useful practice activity

Objectives for task (re-)design

1. increase agentive engagement with the text
2. make controlled practice more meaningful
(communicative?)

Towards playful L2 tasks?

- develop an interactive version of the text
- design communicative tasks that exploit potential information gaps between different learners
- automatize the OEIT for individual practice
- let learners contribute to the text



Marlowe's office 0/3

Atlanta, Georgia (United States of America), 1912. You are John Marlowe, private eye and dyed-in-the-wool misanthropist. More than for making a living, you solve cases for the intellectual challenge.

Murder for a recipe?
A mystery based on the true story of Coca-Cola
Release 1 / Serial number 140820 / Inform 7 build 6G60 (I6/v6.32 lib 6/12N) SD

Marlowe's office
Rays of sunshine fall through the blinds of the window. In the middle of the office is a desk. A coatstand sits in the corner. To your west is a door that leads into the street.

>look at desk
An old maple wood desk. On the desk is a phone, a bottle of outstanding American whiskey, and a gun.

>look at door
A half glass panelled door with letters printed on the glass. The letters read "John Marlowe, Private Detective"

>|



@fcornillie



do interact!

fonts used: Montserrat, PeaxWebdesignarrow

Thank You !

