# **<CG3 PRACTICAL EXERCISE 2**

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For this exercise, we will use VISL's CG Lab:  [https://visl.sdu.dk/cglab.htm](https://beta.visl.sdu.dk/cglab.htm).

Given the following sentences in red with common mistakes in English made by Spanish speakers, and other correct sentences in black:

***Are*** *you* ***agree*** *with me?*

*I* ***am*** *completely* ***agree*** *with you.*

*They aren't agree with your theory.*

*It* ***is*** *the first time you* ***agree*** *with me.*

*Your father* ***is****n't going to* ***agree*** *to what they are saying.*

*I* ***am*** *sure you will* ***agree*** *once I have explained the full context.*

*I am* ***taking*** *a coffee.*

*I* ***took*** *a couple of beers yesterday.*

*Let's go out and* ***take*** *a drink.*

*I* ***took*** *the decision not to* ***drink*** *anymore.*

*Do you* ***take*** *sugar in your* ***coffee****?*

*She* ***took*** *a sip of* ***whisky****.*

*We were* ***taken*** *to have a* ***drink****.*

*She was finally free to****take****an official****coffee****break.*

*Will you help me* ***do*** *a* cake*?*

*I have* ***done*** *a lot of* ***mistakes*** *in my essay.*

*Now* ***do*** *you want any* ***cake*** *with that second cup of tea?*

*It* ***does*** *not include* ***mistakes*** *other than those occasioned by fraud.*

*She* ***did*** *not realise her* ***mistake****.*

*I like* ***making*** *extreme* ***sports****.*

*We were going to* ***make*** *up a* ***sport*** *to see what he said.*

*Competitors could* ***make*** *use of all the excellent* ***sports*** *facilities throughout the Academy.*

*I am here* ***since*** *an hour* ***ago****.*

*Euro Disney has been losing money* ***since*** *it opened eighteen months* ***ago****.*

*Can you* ***explain me*** *again, please?*

*Will you* ***listen mum****, please?*

*She didn't* ***say me*** *anything.*

*Helen* ***has*** *18* ***years old****.*

*How many* ***years*** *do you* ***have****?*

*Its success* ***has*** *taken* ***years*** *of dedication to achieve.*

*How many* ***years*** *of experience do you* ***have****?*

*I* ***didn't went*** *out yesterday.*

*She* ***doesn't goes*** *to church.*

*What* ***did*** *you* ***ate*** *for dinner?*

1. **Develop a grammar to MAP the mistakes in parsed text**. Of course, the grammar should not mark the mistakes in the correct sentences.

* Add here both the **grammar** and the **output text**.
* # **Comment** the grammar rules, describing them, giving examples if needed...

Below you can find the correct use for each sentence (just in case :-). **Erase this part in the final version you upload to eGela**.

| **Are** you **agree** with me? | Do you **agree** with me? |
| --- | --- |
| I am **taking** a coffee. | I am **having** a coffee. |
| I **took** a couple of beers yesterday. | I **had** a couple of beers yesterday. |
| Let's go out and **take** a drink. | Let's go out and **have** a drink. |
| Will you help me **do** a cake? | Will you help me **make** a cake? |
| I have **done** a lot of mistakes in my essay. | I have **made** a lot of mistakes in my essay. |
| I like **making** extreme sport. | I like **doing/playing** extreme sports. |
| I am here **since** an hour **ago**. | I have been here **for an hour**. (CLUE: do not use *since* + *ago* together) |
| Can you **explain me** again, please? | Can you **explain to me** again, please? > explain to me. |
| Will you **listen mum**, please? | Will you **listen to** me, please? |
| She didn't **say me** anything. | She didn't **say** anything **to** me / She didn't **tell** me anything. |
| Helen **has** 18 **years old**. | Helen **is** 18 (years old). |
| How many **years** do you **have**? | How old **are** you? |
| I **didn't went** out yesterday. | I **didn't go** out yesterday. |
| She **doesn't goes** to church. | She **doesn't go** to church. |
| What **did** you **ate** for dinner? | What **did** you **eat** for dinner? |

**SOLUTION**

All grammars have the same delimiters and corrections code:

SOLUTION

1 DELIMITERS = "<$.>" "<$!>" "<$?>" "<$\;>" "<$:>" "<$-->" "<$>" "<$start>" "<$START>" ;

2 MAPPING-PREFIX = @ ;

3

4 SETS

5

6 CORRECTIONS

7 LIST DO\_COLLOCATIONS = "mistake" "cake";

8 LIST MAKE\_COLLOCATIONS = "sport";

9 LIST VERBS\_TO = "explain" "listen" "say";

10 MAPPINGS

11

And each mapping has his specific constraints. For example the mapping for agreements:

12 CONSTRAINTS

13

14 #MAP OF AGREEMENT

15 MAP(@MISTAKE-agree) TARGET ("be") IF (1 (PERS)) (2 ("agree")); #to check "are you agree with me"

16 MAP(@MISTAKE-agree) TARGET ("be") IF (-1 (PERS)) (2 ("agree")); #to check "i am completely agree with you" and "they aren't agree with yout theory"

I use the tag “@MISTAKE-agree” to convey that a phase is wrong. For example, line 15 checks questions and the code in line 6 checks affirmative phrases if the verb *to be* appears near the verb *to agree* with a one-word distance.

For mapping of complements of the verb *to take*, we find the tag <drink> that appears in liquid nouns like beer or coffee. This tag allows us to detect all drink following and article. The tag <amount> allows us to the detect all structure like “a couple of” or “a lot of” and discriminate structure like “a sip of whiskey”:

18 #MAP OF TAKE

19 MAP(@MISTAKE-TAKE) TARGET ("take") IF (1 (ART))(2 (<drink>));#For drinks with articles.

20 MAP(@MISTAKE-TAKE) TARGET ("take") IF (1 (ART)) (2 (<amount>)) (3 ("of")) (4 (<drink>));#For drinks with articles. # only with <amount> followed by "of" to catch "I took a couple of beers" but not "I took a sip of whiskey".

For mapping of collocations as *sport* with *make* or *do* with *mistake* and *cake*, I have instanced two sets called DO\_COLLOCATION and MAKE\_COLLOCATION to group all words that accompany the verb *to do* and the verb *to make.* With these sets, I just check if there is an article or an adjective in front of collocation of *do*, and if there is the sequence “a lot of” in front of collocation of *do* too. And finally, I check the same structure for collocation of *make*.

21

22 #MAP OF COLLOCATIONS

23 MAP(@MISTAKE-COLLOCATION) TARGET ("do") IF (1 (ART) OR (ADJ) ) (2 DO\_COLLOCATIONS);

24 MAP(@MISTAKE-COLLOCATION) TARGET ("do") IF (1 (ART)) (2 ("lot")) (3 (of)) (4 DO\_COLLOCATIONS);

25 MAP(@MISTAKE-COLLOCATION) TARGET ("make") IF (1 (ART) OR (ADJ)) (2 MAKE\_COLLOCATIONS);

26

For mapping of *since* structures, I only check if there is the word *ago* following and there is no verb between *since* and *ago.*

27 #MAP OF SINCE

28 MAP(@MISTAKE-SINCE) TARGET("since") if(\*1 ("ago") BARRIER (V));

For preposition mapping I have instanced a set of verbs that are followed by *to* and I put the mistake tag if these verbs are not followed by *to*.

29 #PREPOSITION MAPPING

30 MAP(@MISTAKE\_TO) TARGET VERBS\_TO IF (NOT 1 ("to"));

For this *old* problem, I check if there is near of *year* the verb to have and *year is* not followed by a preposition to avoid to tag wrongly sentences like “years of dedication”

31 #IS/HAVE MAPPING

32 MAP(@MISTAKE\_AGE) TARGET ("year") if (-1\* ("have")) (NOT 1 (PRP));

33 MAP(@MISTAKE\_AGE) TARGET ("year") if (1\* ("have")) (NOT 1 (PRP));

Finally, for auxiliary verbs mapping, I tag with MISTAKE\_AUX tag when the verb *to do* in negative form is not followed by an infinitive verb, and I check too if the verb *to do* is followed by a personal pronoun which is not followed by a verb in infinitive form, when the verb *to do* is following a interrogative word as *what* or *why*.

34 #AUX\_VERBS MAPPING

35 MAP(@MISTAKE\_AUX) TARGET ("do") if (1 ("not")) (NOT 2 (V INF));

36 MAP(@MISTAKE\_AUX) TARGET ("do") if (-1 (<interr>)) (1 (PERS)) (NOT 2 (V INF));