# **CG3 PRACTICAL EXERCISE 2**

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...

**GRAMMAR**

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

2 MAPPING-PREFIX = @ ;

3

4 SETS

5

6 CORRECTIONS

7

8 MAPPINGS

9

10 CONSTRAINTS

11 # Add a mistake tag if the verb "be" appears before "agree", and there is not a verb or noun between them.

12 ADD (@AGREE\_MISTAKE) TARGET ("<agree>") IF (\*-1 ("be") BARRIER (V) OR (N));

13

14 # Add a mistake tag if a drink appears after "take", and there is not a verb or noun between them.

15 ADD (@TAKE\_MISTAKE) TARGET ("take") IF (\*1 (<drink>) BARRIER (V) OR (N));

16

17 # Add a mistake tag if an amount noun appears after "take".

18 ADD (@TAKE\_MISTAKE) TARGET ("take") IF (\*1 (<amount>));

19

20 # Add a mistake tag if a noun appears after "do", and there is no verb between them.

21 ADD (@DO\_MISTAKE) TARGET ("do") IF (\*1 (N) BARRIER (V));

22

23 # Add a mistake tag if "sport" appears after "make", and there is no article in between.

24 ADD (@MAKE\_MISTAKE) TARGET ("make") IF (\*1 ("sport") BARRIER (ART));

25

26 # Add a mistake tag if "ago" appears after "since", and there is not verb in between.

27 ADD (@SINCE\_MISTAKE) TARGET ("since") IF (\*1 ("ago") BARRIER (V));

28

29 # Add a mistake tag if a personal pronoun or noun appears after the following verbs.

30 LIST ELS = "explain" "listen" "say";

31 ADD (@TO\_MISTAKE) TARGET ELS IF (1 (PERS) OR (N));

32

33 # Add a mistake tag if "years old" appears after "has".

34 ADD (@YEARS\_MISTAKE) TARGET ("<has>") IF (\*1 ("<years>") LINK 1 ("old"));

35

36 # Add a mistake tag if a verb appears after "years", and there is no "of" in between.

37 ADD (@YEARS\_MISTAKE) TARGET ("<years>") IF (\*1 (V) BARRIER ("of"));

38

39 # Add a mistake tag if a past tense verb appears after "did".

40 ADD (@DO\_MISTAKE) TARGET ("do") + (IMPF) IF (\*1 (V) + (IMPF));

41

42 # Add a mistake tag if a third person singular verb appears after "does".

43 ADD (@DO\_MISTAKE) TARGET ("do") + (3S) IF (\*1 (V) + (3S));

**OUTPUT**

"<are>"

"be" <\*> <nosubj> V PR -1/3S

"<you>"

"you" PERS 2S/P NOM

"<agree>"

"agree" <vq> <v-cog> V PR -3S @AGREE\_MISTAKE ADD:12

"<with>"

"with" PRP

"<me>"

"I" PERS 1S ACC

"<$?>"

"?" PU <<< @PU

"<i>"

"I" <\*> PERS 1S NOM

"<am>"

"be" V PR 1S

"<completely>"

"completely" <ly> <ADJ:complete+ly> ADV

"<agree>"

"agree" <vq> <v-cog> V INF @AGREE\_MISTAKE ADD:12

"<with>"

"with" PRP

"<you>"

"you" PERS 2S/P ACC

"<$.>"

"." PU <<< @PU

"<they>"

"they" <\*> PERS 3P NOM

"<are\_>"

"be" <sam-> V PR -1/3S

"<\_n't>"

"not" <-sam> ADV

"<agree>"

"agree" <vq> <v-cog> V INF @AGREE\_MISTAKE ADD:12

"<with>"

"with" PRP

"<your>"

"you" <poss> <det> PERS 2S/P GEN

"<theory>"

"theory" <sem-c> <ac-cat> <def> N S NOM

"<$.>"

"." PU <<< @PU

"<it>"

"it" <\*> PERS NEU 3S NOM

"<is>"

"be" V PR 3S

"<the>"

"the" <def> ART S/P

"<first>"

"first" <num-ord> NUM

"<time>"

"time" <ac-cat> <temp> <per> <num+> <def> N S NOM

"<you>"

"you" PERS 2S/P NOM

"<agree>"

"agree" <vq> <v-cog> V PR -3S

"<with>"

"with" PRP

"<me>"

"I" PERS 1S ACC

"<$.>"

"." PU <<< @PU

"<your>"

"you" <\*> <poss> <det> PERS 2S/P GEN

"<father>"

"father" <Hfam> <def> <nhead> N S NOM

"<is\_>"

"be" <sam-> V PR 3S

"<\_n't>"

"not" <-sam> ADV

"<going>"

"go" <va+DIR> V PCP1

"<to>"

"to" INFM

"<agree>"

"agree" <vq> <v-cog> V INF

"<to>"

"to" PRP

"<what>"

"what" <rel> INDP S/P

"<they>"

"they" PERS 3P NOM

"<are>"

"be" V PR -1/3S

"<saying>"

"say" <vq> <v-cog> <speak> V PCP1

"<$.>"

"." PU <<< @PU

"<i>"

"I" <\*> PERS 1S NOM

"<am>"

"be" V PR 1S

"<sure>"

"sure" <jpsych> ADJ POS

"<you>"

"you" PERS 2S/P NOM

"<will>"

"will" V PR

"<agree>"

"agree" <vq> <v-cog> V INF

"<once>"

"once" KS

"<i>"

"I" <\*> PERS 1S NOM

"<have>"

"have" V PR -3S

"<explained>"

"explain" <vq> <v-cog> V PCP2 AKT

"<the>"

"the" <def> ART S/P

"<full>"

"full" ADJ POS

"<context>"

"context" <sem-r> <sit> <def> N S NOM

"<$.>"

"." PU <<< @PU

"<i>"

"I" <\*> PERS 1S NOM

"<am>"

"be" V PR 1S

"<taking>"

"take" <v.contact> <v.contact> V PCP1 @TAKE\_MISTAKE ADD:15

"<a>"

"a" <indef> ART S

"<coffee>"

"coffee" <col> <drink> <idf> N S NOM

"<$.>"

"." PU <<< @PU

"<i>"

"I" <\*> PERS 1S NOM

"<took>"

"take" <v.contact> <v.contact> V IMPF @TAKE\_MISTAKE ADD:18

"<a>"

"a" <indef> ART S

"<couple>"

"couple" <HH> <amount> <idf> <nhead> N S NOM

"<of>"

"of" PRP

"<beers>"

"beer" <drink> <idf> N P NOM

"<yesterday>"

"yesterday" <atemp> ADV

"<$.>"

"." PU <<< @PU

"<let\_>"

"let" <sam-> <\*> V IMP

"<\_s>"

"we" <-sam> PERS 1P ACC

"<go>"

"go" <move> V INF

"<out>"

"out" <adir> ADV

"<and>"

"and" KC

"<take>"

"take" <v.contact> <v.contact> V INF @TAKE\_MISTAKE ADD:15

"<a>"

"a" <indef> ART S

"<drink>"

"drink" <drink> <idf> N S NOM

"<$.>"

"." PU <<< @PU

"<i>"

"I" <\*> PERS 1S NOM

"<took>"

"take" <v.contact> <v.contact> V IMPF

"<the>"

"the" <def> ART S/P

"<decision>"

"decision" <act-c> <def> N S NOM

"<not>"

"not" ADV

"<to>"

"to" INFM

"<drink>"

"drink" <vtk+ADJ> V INF

"<anymore>"

"anymore" ADV

"<$.>"

"." PU <<< @PU

"<do>"

"do" <\*> <v.contact> V PR -3S

"<you>"

"you" PERS 2S/P NOM

"<take>"

"take" <v.contact> <v.contact> V INF

"<sugar>"

"sugar" <food> <cm-chem> <second> <idf> N S NOM

"<in>"

"in" PRP

"<your>"

"you" <poss> <det> PERS 2S/P GEN

"<coffee>"

"coffee" <col> <drink> <def> N S NOM

"<$?>"

"?" PU <<< @PU

"<she>"

"she" <\*> <fem> PERS FEM 3S NOM

"<took>"

"take" <v.contact> <v.contact> V IMPF

"<a>"

"a" <indef> ART S

"<sip>"

"sip" <act-d> <idf> <nhead> N S NOM

"<of>"

"of" PRP

"<whisky>"

"whisky" <drink> <idf> N S NOM

"<$.>"

"." PU <<< @PU

"<we>"

"we" <\*> PERS 1P NOM

"<were>"

"be" V IMPF -1/3S

"<taken>"

"take" <v.contact> <v.contact> V PCP2 PAS

"<to>"

"to" INFM

"<have>"

"have" V INF

"<a>"

"a" <indef> ART S

"<drink>"

"drink" <drink> <idf> N S NOM

"<$.>"

"." PU <<< @PU

"<she>"

"she" <\*> <fem> PERS FEM 3S NOM

"<was>"

"be" V IMPF 1/3S

"<finally>"

"finally" <ly> <ADJ:final+ly> ADV

"<free>"

"free" ADJ POS

"<to>"

"to" INFM

"<take>"

"take" <v.contact> <v.contact> V INF @TAKE\_MISTAKE ADD:15

"<an>"

"a" <indef> ART S

"<official>"

"official" <jpert> ADJ POS

"<coffee>"

"coffee" <col> <drink> <comp1> <idf> N S NOM

"<break>"

"break" <food> <comp2> <idf> N S NOM

"<$.>"

"." PU <<< @PU

"<will>"

"will" <\*> V PR

"<you>"

"you" PERS 2S/P NOM

"<help>"

"help" V INF

"<me>"

"I" PERS 1S ACC

"<do>"

"do" <v.contact> <DL:bio> V INF @DO\_MISTAKE ADD:21

"<a>"

"a" <indef> ART S

"<cake>"

"cake" <food-c> <DL:bio> <idf> N S NOM

"<$?>"

"?" PU <<< @PU

"<i>"

"I" <\*> PERS 1S NOM

"<have>"

"have" <DL:bio> V PR -3S

"<done>"

"do" <v.contact> <DL:bio> V PCP2 AKT @DO\_MISTAKE ADD:21

"<a=lot=of>"

"a=lot=of" <quant> DET S/P

"<mistakes>"

"mistake" <act-d> <sem-c> <DL:bio> <idf> N P NOM

"<in>"

"in" PRP

"<my>"

"I" <poss> <det> PERS 1S GEN

"<essay>"

"essay" <sem-r> <act> <DL:bio> <def> N S NOM

"<$.>"

"." PU <<< @PU

"<now>"

"now" <\*> <atemp> ADV

"<do>"

"do" <v.contact> <DL:bio> V PR -3S

"<you>"

"you" PERS 2S/P NOM

"<want>"

"want" <v.contact> <vtk+ADJ> <vtk+PCP2> V INF

"<any>"

"any" <quant> DET S/P

"<cake>"

"cake" <food-c> <DL:bio> <idf> <nhead> N S NOM

"<with>"

"with" PRP

"<that>"

"that" <dem> DET S

"<second>"

"second" <num-ord> NUM

"<cup>"

"cup" <con> <occ> <DL:bio> <def> <nhead> N S NOM

"<of>"

"of" PRP

"<tea>"

"tea" <drink> <Bbush> <DL:bio> <idf> N S NOM

"<$?>"

"?" PU <<< @PU

"<it>"

"it" <\*> PERS NEU 3S NOM

"<does>"

"do" <v.contact> V PR 3S

"<not>"

"not" ADV

"<include>"

"include" <DL:bio> V INF

"<mistakes>"

"mistake" <act-d> <sem-c> <DL:bio> <idf> <nhead> N P NOM

"<other=than>"

"other=than" PRP

"<those>"

"that" <dem> INDP P

"<occasioned>"

"occasion" <DL:bio> V PCP2 PAS

"<by>"

"by" PRP

"<fraud>"

"fraud" <act> <H> <DL:bio> <idf> N S NOM

"<$.>"

"." PU <<< @PU

"<she>"

"she" <\*> <fem> PERS FEM 3S NOM

"<did>"

"do" <v.contact> V IMPF

"<not>"

"not" ADV

"<realise>"

"realise" <v-cog> V INF

"<her>"

"she" <fem> <poss> <det> PERS FEM 3S GEN

"<mistake>"

"mistake" <act-d> <sem-c> <def> N S NOM

"<$.>"

"." PU <<< @PU

"<i>"

"I" <\*> PERS 1S NOM

"<like>"

"like" <vtk+ADJ> <DL:sport> V PR -3S

"<making>"

"make" <v.contact> <vtk+N> <vtk+ADJ> <v.contact> <DL:sport> V PCP1 @MAKE\_MISTAKE ADD:24

"<extreme>"

"extreme" <Labs> <DL:sport> <idf> <nhead> N S NOM

"<sports>"

"sport" <sport> <domain> <M:H> <DL:sport> <idf> N P NOM

"<$.>"

"." PU <<< @PU

"<we>"

"we" <\*> PERS 1P NOM

"<were>"

"be" <DL:sport> V IMPF -1/3S

"<going>"

"go" <va+DIR> <DL:sport> V PCP1

"<to>"

"to" INFM

"<make>"

"make" <DL:sport> V INF

"<up>"

"up" ADV

"<a>"

"a" <indef> ART S

"<sport>"

"sport" <sport> <domain> <M:H> <DL:sport> <idf> N S NOM

"<to>"

"to" INFM

"<see>"

"see" <vq> <v.contact> <vtk+ADJ> <DL:sport> V INF

"<what>"

"what" <interr> INDP S/P

"<he>"

"he" <masc> PERS MASC 3S NOM

"<said>"

"say" <vq> <v-cog> <speak> <DL:sport> V IMPF

"<$.>"

"." PU <<< @PU

"<competitors>"

"competitor" <\*> <H> <DL:sport> <idf> <nhead> N P NOM

"<could>"

"can" <DL:sport> V IMPF

"<make>"

"make" <v.contact> <vtk+N> <vtk+ADJ> <v.contact> <DL:sport> V INF

"<use>"

"use" <act> <P:f> <second> <DL:sport> <idf> <nhead> N S NOM

"<of>"

"of" PRP

"<all>"

"all" <quant> <nhead> DET S/P

"<the>"

"the" <def> ART S/P

"<excellent>"

"excellent" <Q:good> <DL:sport> ADJ POS

"<sports>"

"sport" <sport> <domain> <M:H> <DL:sport> <comp1> <first> <def> N P NOM

"<facilities>"

"facility" <Lh> <f-psych> <second> <comp2> <DL:sport> <def> N P NOM

"<throughout>"

"throughout" PRP

"<the>"

"the" <def> ART S/P

"<academy>"

"academy" <\*> <inst> <DL:sport> <def> N S NOM

"<$.>"

"." PU <<< @PU

"<i>"

"I" <\*> PERS 1S NOM

"<am>"

"be" V PR 1S

"<here>"

"here" <aloc> ADV

"<since>"

"since" PRP @SINCE\_MISTAKE ADD:27

"<an>"

"a" <indef> ART S

"<hour>"

"hour" <dur> <per> <idf> N S NOM

"<ago>"

"ago" ADV

"<$.>"

"." PU <<< @PU

"<euro=Disney>"

"Euro=Disney" <\*> <Proper> <heur> <nhead> N S NOM

"<has>"

"have" V PR 3S

"<been>"

"be" V PCP2 AKT

"<losing>"

"lose" <v.contact> V PCP1

"<money>"

"money" <mon> <second> <idf> N S NOM

"<since>"

"since" KS

"<it>"

"it" PERS NEU 3S NOM

"<opened>"

"open" <v.contact> <v.contact> V IMPF

"<eighteen>"

"eighteen" <fr:100> <b:250> <card> NUM P

"<months>"

"month" <ac-cat> <per> <dur> <def> N P NOM

"<ago>"

"ago" ADV

"<$.>"

"." PU <<< @PU

"<can>"

"can" <\*> V PR

"<you>"

"you" PERS 2S/P NOM

"<explain>"

"explain" <vq> <v-cog> V INF @TO\_MISTAKE ADD:31

"<me>"

"I" PERS 1S ACC

"<again>"

"again" <atemp> ADV

"<$,>"

"," PU @PU

"<please>"

"please" ADV

"<$?>"

"?" PU <<< @PU

"<will>"

"will" <\*> V PR

"<you>"

"you" PERS 2S/P NOM

"<listen>"

"listen" V INF @TO\_MISTAKE ADD:31

"<mum>"

"mum" <Htit> <f> <fem> <Hfam> <Bflo> <idf> N S NOM

"<$,>"

"," PU @PU

"<please>"

"please" ADV

"<$?>"

"?" PU <<< @PU

"<she>"

"she" <\*> <fem> PERS FEM 3S NOM

"<did\_>"

"do" <sam-> <v.contact> <DL:bio> V IMPF

"<\_n't>"

"not" <-sam> ADV

"<say>"

"say" <vq> <v-cog> <speak> V INF @TO\_MISTAKE ADD:31

"<me>"

"I" PERS 1S ACC

"<anything>"

"anything" INDP S NOM

"<$.>"

"." PU <<< @PU

"<helen>"

"Helen" <\*> <Proper> <hum> <fem> <Hmyth> <nhead> N S NOM

"<has>"

"have" V PR 3S @YEARS\_MISTAKE ADD:34

"<$18>"

"18" <card> NUM P

"<years>"

"year" <per> <dur> <def> N P NOM

"<old>"

"old" <jbio> ADJ POS

"<$.>"

"." PU <<< @PU

"<how>"

"how" <\*> <interr> <aquant> ADV

"<many>"

"many" <quant> DET ABS P

"<years>"

"year" <per> <dur> <idf> <nhead> N P NOM @YEARS\_MISTAKE ADD:37

"<do>"

"do" <v.contact> V PR -3S

"<you>"

"you" PERS 2S/P NOM

"<have>"

"have" V INF

"<$?>"

"?" PU <<< @PU

"<its>"

"it" <\*> <poss> <det> PERS NEU 3S GEN

"<success>"

"success" <event> <def> <nhead> N S NOM

"<has>"

"have" V PR 3S

"<taken>"

"take" <v.contact> <v.contact> V PCP2 AKT

"<years>"

"year" <per> <dur> <idf> <nhead> N P NOM

"<of>"

"of" PRP

"<dedication>"

"dedication" <act> <f-psych> <sem-r> <event> <idf> N S NOM

"<to>"

"to" INFM

"<achieve>"

"achieve" V INF

"<$.>"

"." PU <<< @PU

"<how>"

"how" <\*> <interr> <aquant> ADV

"how" <\*> <dem> <aquant> ADV

"<many>"

"many" <quant> DET ABS P

"<years>"

"year" <per> <dur> <idf> <nhead> N P NOM

"<of>"

"of" PRP

"<experience>"

"experience" <f-psych> <percep-f> <idf> <nhead> N S NOM

"<do>"

"do" <v.contact> V PR -3S

"<you>"

"you" PERS 2S/P NOM

"<have>"

"have" V INF

"<$?>"

"?" PU <<< @PU

"<i>"

"I" <\*> PERS 1S NOM

"<did\_>"

"do" <sam-> <v.contact> V IMPF @DO\_MISTAKE ADD:40

"<\_n't>"

"not" <-sam> ADV

"<went>"

"go" <move> V IMPF

"<out>"

"out" <adir> ADV

"<yesterday>"

"yesterday" <atemp> ADV

"<$.>"

"." PU <<< @PU

"<she>"

"she" <\*> <fem> PERS FEM 3S NOM

"<does\_>"

"do" <sam-> <v.contact> V PR 3S @DO\_MISTAKE ADD:43

"<\_n't>"

"not" <-sam> ADV

"<goes>"

"go" <move> V PR 3S

"<to>"

"to" PRP

"<church>"

"church" <build> <HHorg> <idf> N S NOM

"<$.>"

"." PU <<< @PU

"<what>"

"what" <\*> <interr> INDP S/P

"<did>"

"do" <v.contact> V IMPF @DO\_MISTAKE ADD:40

"<you>"

"you" PERS 2S/P NOM

"<ate>"

"eat" V IMPF

"<for>"

"for" PRP

"<dinner>"

"dinner" <food> <occ> <idf> N S NOM

"<$?>"

"?" PU @PU <<<