

## A TOOL TO EVALUATE GRAMMATICAL SPELLING SKILLS OF NATIVE FRENCH ADULTS: A TYPOLOGY BASED ON THE CAUSES OF ERRORS FRENCH GRAMMATICAL SPELLING

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# A TOOL TO EVALUATE GRAMMATICAL SPELLING SKILLS OF NATIVE FRENCH ADULTS: A TYPOLOGY BASED ON THE CAUSES OF ERRORS

# FRENCH GRAMMATICAL SPELLING

### WHY WOULD ONE MAKE AN AGREEMENT ERROR?

French language has a variety of derivational and inflexional morphemes that makes its morphology very rich (Catach, 1986). French morphology is not written as it is pronounced (Jaffré, Fayol, 2014). Adding up to that difficulty for its scriptors, most of the inflexional morphology in particular is silent (Dubois, 1965).

Ex. the ADJECTIVE «bare»: *nu (masculin) - nue (feminin)* : both pronounced [ny] This orthographic depth mainly explains why we find most of spelling errors in that particular area of written French (Fayol, Jaffré, 2008; Lucci, Millet, 1994).

Among the variety of forms that French inflexional morphology can display, our study case focuses on a particular linguistic skill that is how one transfers plural and gender traits from the word that triggers the agreement to the one that receives it. In other words we will specifically evaluate grammatical spelling skills (Gauvin, 2011).

Ex. La marée haut**e est** mont**ée** (the high tide has risen)

The NOUN «marée» gives singular and feminin traits to the ADJECTIVE «haute» and the PAST PARTICIPLE «montée» and the 3rd person singular trait to the AUXILIARY «est».

Various causes, sometimes several at the same time, may lead to a mistake in the transfer of agreement traits. Some of them are covered by our evaluation tool:

- declarative knowledge (Anderson, 1983) is deficient: metalanguage is not properly learnt and/or grammatical analysis is not precise enough to understand the rule nor trigger its application.

- declarative knowledge is acquired but revision skills are not thorough enough, leading one to leave a mistake while one knows the rule and how to apply it (Largy, 2001; Dédéyan & al., 2006).

- cognitive ressources management lead to a mistake: an automatic procedure is triggered to avoid working memory overload in multitasking instead of applying the rule (Fayol, Got, 1991; Fayol, Largy 1992; Fayol, Pacton, 2005)

#### HYPOTHESES

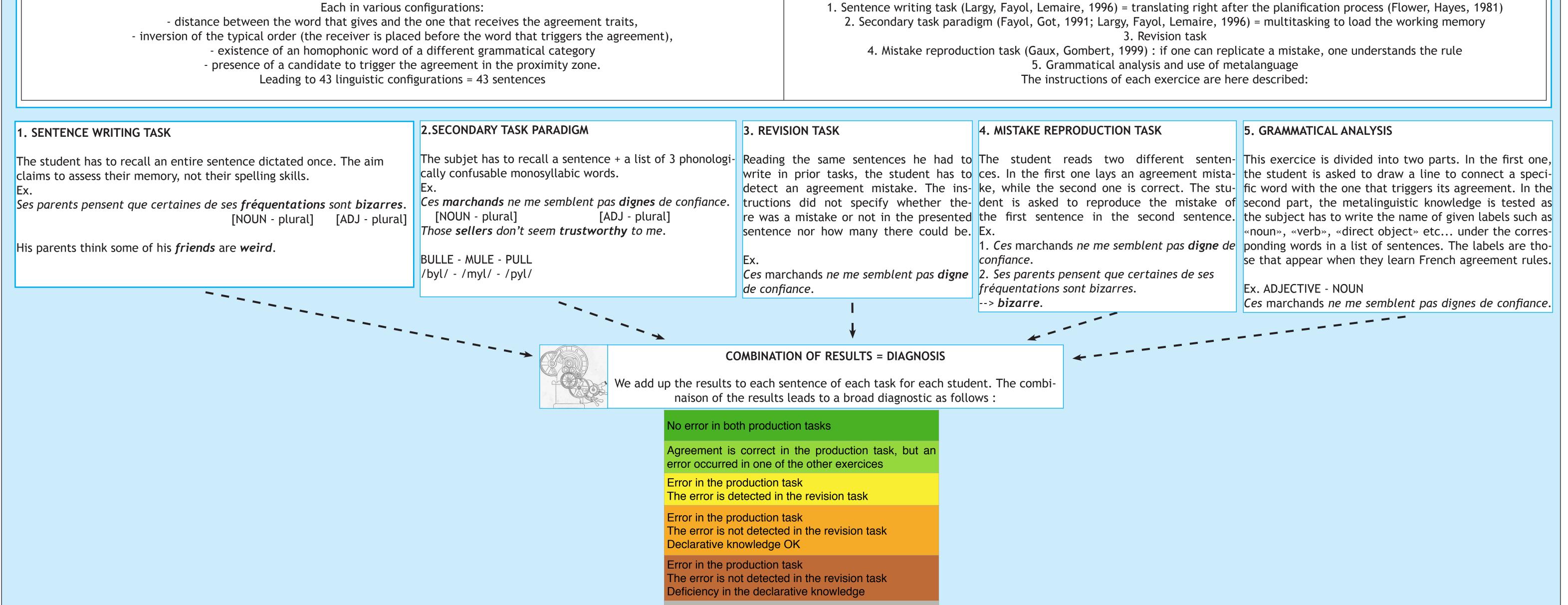
A. It is possible for a student to be able to make correct agreements without knowing the agreement rule (Gaux, Gombert, 1999): procedural > declarative knowledge
B. The opposite is possible as well: a student may know the rule, but still make mistakes when he or she writes (*ibid*.): declarative < procedural knowledge</li>

2. A typology based on the causes of errors might reveal a scale of expertise more obviously than a typology based on grammatical categories.

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COMPOSITION OF THE EVALUATION
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6 agreement receivers are tested: NOUN, ADJECTIVE, VERB, PAST PARTICIPLE - ADVERB and INFINITIVE VERB (inhibited agreement).

The evaluation tool is built on 5 exercices:



#### Working memory overload

#### STUDY CASE

#### Population:

2 classes of 20 students each, all of them were picked out by their teacher because of their various difficulties in French spelling and writing in general. GROUP 1: 1rst year of Bachelor degree in Modern French Litterature (18-21 year old). Students' background = graduated High School. GROUP 2: 1st year of Bachelor degree in Agronomic Engineering (20-22 year old). Students' background = 2 years in Preparatory Class (in Chemistry, Biology or Mathematics)

AGREEMENT RECEIVER	STUDENTS	AGREEMENT RECEIVER	STUDENTS	STUDENTS
NOUN	o I k m m @ I x m @ r I Z r g x k @ w p o	NOUN	Myvmc@@c@aa@wmaak@p@@	1   37   42   4   4   20   4   39   14   26   2   31   4   28   27     10   32   20   14   16   21   5   20   15   32   18   5   13   16   28
ADJECTIVE	k   k   o   n   i	ADJECTIVE	1   0   0   1	21   30   24   15   17   27   16   6   20   12   7   15   15   17   30     25   26   29   16   20   30   20   7   30   10   8   18   16   31   33     27   15   36   20   21   43   22   13   35   24   29   20   43   9   10     5   6   37   22   22   11   23   14   5   4   43   22   3   25   16     7   4   38   25   25   5   25   16   6   3   41   27   14   14   25     15   42   3   26   28   13   26   17   43   5   17   28   17   20   43     16   23   5   32   32   24   27   18   7   9   24   32   18   8   13     6
VERB	v   i   v   i	VERB	n     i     j	41   5   25   23   1   38   43   25   16   17   1   16   25   30   22     40   39   26   24   18   15   6   26   23   18   15   17   26   22   38     20   36   27   28   40   16   14   31   32   22   22   36   29   37   39     22   33   7   5   43   17   17   32   33   23   42   8   32   23   35   23   31   9   34   36   33   12   9   35   13   17     39   25   13   9   14   14   21   37   39   34   16   30   36   35   21     39   25   13   9   14   14   21   37   39   34   36   35   21     2   22   14   15   31   22   29   15
PAST PARTICIPLE ADVERB	0   r   0   r   0   r   0   w	PAST PARTICIPLE ADVERB	a   v   a   v   a   a   a   v   a	37   10   28   13   11   1   32   24   8   6   9   2   11   18   6     38   9   39   18   2   34   34   34   18   15   10   13   19   19   7     43   8   4   19   3   35   10   36   9   30   11   11   28   41   14     11   3   41   43   19   37   11   3   17   19   14   3   12   42   20     12   2   1   27   23   41   12   4   19   20   23   10   30   10   37     42   35   2   29   36   40   13   8   34   27   31   12   31   5   41     19   27   8   34   5   6   19   40   36   11   37   37   32   34     3   17
	GROUP 1		GROUP 2	GROUP 1
	TABLE 1 - Students' evaluation according to the g	rammatical categor	y of the agreement receiver	TAE
	RESULTS AND	DISCUSSION		
n each little	square, the letter refers to a code that specifies the	e cause of the err	or, based on the combination of the results of	In each little square, the number repre

	CTUDENTS					
STUDENTS	STUDENTS					
4     4     20     4     39     14     26     2     31     4     28     27     15     4     17     16     12	4   42   4   37   16   41   15   16   3   27   37   23   10   22   4   3   8   23   14   31					
14     16     21     5     20     15     32     18     5     13     16     28     20     11     16     38     15	16 15 14 23 4 20 20 18 14 16 8 16 7 6 28 9 21 26 15 25					
15     17     27     16     6     20     12     7     15     15     17     30     25     12     32     35     16	17 20 15 28 6 13 25 20 1 4 16 20 2 7 32 26 16 12 22 28					
16     20     30     20     7     30     10     8     18     16     31     33     27     14     33     20     17	20 26 16 29 13 18 32 22 2 11 18 22 3 9 43 37 26 15 26 30					
20 21 43 22 13 35 24 29 20 43 9 10 28 15 42 25 21	3   27   18   2   14   34   2   23   4   25   20   26   35   13   40   4   7   43   29   33					
22 22 11 23 14 5 4 43 22 3 25 16 10 16 29 26 22	25   28   20   6   18   3   28   26   5   29   25   27   6   16   13   20   2   36   30   29					
25 25 5 25 16 6 3 41 27 14 14 25 14 17 31 28 33	32 2 27 9 31 6 35 1 6 36 43 32 9 23 25 29 5 16 32 21					
26 28 13 26 17 43 5 17 28 17 20 43 23 18 9 30 6	34 29 32 11 32 8 22 31 7 41 10 39 20 31 37 30 9 1 39 35					
32     32     24     27     18     7     9     24     32     18     8     13     34     21     14     32     14	35 8 1 20 36 42 26 5 8 43 27 5 21 36 39 35 15 3 13 15					
36     34     33     28     23     22     13     28     33     20     15     29     31     22     22     37     40	2   40   3   26   38   37   29   7   9   21   30   13   43   26   5   41   33   13   17   20					
42 37 39 30 35 37 14 33 35 22 33 26 42 25 23 39 35	8   37   10   27   1   38   6   34   10   38   38   29   17   38   34   16   3   14   27   22					
37     39     2     33     2     12     16     36     43     23     4     15     26     27     15     41     39	40   38   12   34   2   39   7   39   11   39   5   6   1   1   35   43   1   17   37   23					
23     1     38     43     25     16     17     1     16     25     30     22     36     28     38     8     42	21   39   26   7   19   32   43   15   13   14   6   9   38   10   36   6   10   18   38   24					
24     18     15     6     26     23     18     15     17     26     22     38     16     1     20     15     20	37 11 2 1 27 1 5 9 15 1 9 14 8 14 10 38 13 21 18 36					
28     40     16     14     31     32     22     22     36     29     37     39     21     24     21     21     36	38 1 8 5 11 5 38 13 16 5 41 18 13 15 9 1 14 22 24 43					
5     43     17     17     32     33     23     42     8     32     23     35     40     29     25     22     1	39   3   38   24   12   7   39   14   17   7   13   30   14   17   14   7   17   29   43   39					
7     9     18     1     33     25     29     5     7     33     43     36     12     36     3     23     10	1     5     39     38     3     9     40     17     18     9     14     43     15     20     15     10     18     32     23     26					
8     13     10     2     21     38     33     12     9     35     13     17     1     8     4     31     2	5   6   40   39   5   10   24   21   20   10   15   41   16   21   16   14   22   33   4   27     0   7   01   7   10   15   41   16   21   16   14   22   33   4   27					
9 14 14 21 37 39 34 16 30 36 35 21 13 30 41 33 3	6     7     31     10     7     14     31     24     21     13     17     12     18     29     17     15     23     37     16     14					
11     15     22     29     15     42     36     21     1     2     36     23     17     32     7     1     13	7 9 42 13 8 16 33 25 22 15 21 21 22 32 18 17 29 38 20 16					
31 24 23 18 29 21 43 26 14 7 39 40 22 33 18 2 18	9 10 5 14 9 17 36 29 23 17 22 38 23 33 21 18 34 39 42 8					
38 26 25 39 43 31 37 27 21 1 21 42 43 2 1 5 43	10   12   6   15   10   21   1   30   24   20   23   1   24   34   22   21   35   5   31   32					
39   27   26   31   42   26   42   30   23   5   24   24   29   38   2   6   23	11   13   7   16   15   22   8   32   25   22   24   15   25   35   23   22   36   20   33   3					
17 29 28 35 1 28 1 32 24 6 26 32 30 39 24 9 29	12 14 9 17 17 23 9 33 26 23 26 33 26 42 24 23 37 24 36 4					
21     30     29     36     28     10     7     25     29     8     3     8     2     26     13     14     4	13   16   11   18   20   24   10   35   27   24   29   35   27   2   26   24   38   25   1   13					
33 31 31 15 30 24 21 35 34 9 34 2 5 43 30 19 5	14 17 13 19 21 26 14 36 28 26 31 40 28 3 27 31 39 30 41 1					
35 33 32 42 10 1 25 4 4 21 2 4 6 10 43 24 25	15 18 17 21 22 29 17 37 29 30 32 25 29 41 29 32 43 35 2 18					
6     35     42     37     38     2     28     3     38     24     27     9     8     20     19     3     26	18     21     21     22     23     30     18     38     30     31     33     28     30     4     30     33     20     4     21     17					
41 42 4 38 5 13 35 13 40 34 38 18 9 35 34 10 27	19   22   22   30   24   31   21   43   31   32   34   3   31   27   31   34   4   8   25   34     19   22   22   30   24   31   21   43   31   32   34   3   31   27   31   34   4   8   25   34     19   22   22   30   24   31   21   43   31   32   34   3   31   27   31   34   4   8   25   34     20					
2 12 8 40 9 29 8 19 41 10 40 1 18 41 35 11 28	22   23   23   31   25   33   23   4   32   33   35   4   32   28   33   36   24   31   28   2     22   23   23   31   25   33   23   4   32   33   35   4   32   28   33   36   24   31   28   2     20   21   20   25   20   10   20   21   20   21   20   21   20   10   23   10   21   20   10   21   20   10   21   10<					
1 38 7 41 19 3 31 20 19 27 29 3 19 13 36 12 37	23   24   24   32   26   35   30   10   33   34   36   37   33   11   38   40   27   10   40   6     21   25   25   26   35   30   10   33   34   36   37   33   11   38   40   27   10   40   6					
3     10     9     24     22     4     2     34     25     40     1     5     24     3     39     27     38	24   25   25   33   28   36   34   2   34   35   40   2   34   37   42   39   40   19   1					
13     11     1     32     24     8     6     9     2     11     18     6     32     9     26     40     41	26   30   28   36   29   43   3   3   35   40   11   8   36   39   20   2   25   11   35   5     27   31   29   43   30   11   4   6   36   37   2   11   42   8   3   25   19   34   34   7					
18     2     34     34     18     15     10     13     19     19     7     33     34     27     42     9       10     0						
19     3     35     10     36     9     30     11     11     28     41     14     7     31     28     34     30       10     10     27     14     0     17     10     17     10	28   32   30   42   33   12   37   8   37   2   3   17   5   19   12   13   28   2   3   10     20   23   23   40   24   10   41   10   28   6   12   10   20   24   8   27   20   7   7   11					
43 19 37 11 3 17 19 14 3 12 42 20 41 42 5 36 31	29     33     33     40     34     19     41     19     38     6     12     19     39     24     8     27     30     7     7     11       100     24     24     24     24     27     30     7     7     11					
27 23 41 12 4 19 20 23 10 30 10 37 35 37 6 43 32	30   34   34   3   35   40   11   41   39   8   39   24   41   43   1   28   31   9   8   12     31   35   35   4   37   28   19   27   40   19   1   31   12   18   2   5   32   40   5   37					
29     36     40     13     8     34     27     31     12     31     5     41     3     40     8     4     7	31   35   35   34   37   20   19   27   40   19   1   31   12   18   2   3   32   40   3   37     33   36   36   8   39   4   27   28   41   28   19   34   4   30   19   19   6   41   6   38					
34     5     6     19     40     36     11     3/     3/     3/     32     34     4     5     10     7     8       10     7     10     0     14     07     00     00     7     10     7     8	33   36   36   8   39   4   27   28   41   28   19   34   4   30   19   19   6   41   6   38     36   43   43   12   40   15   13   11   43   3   28   7   19   5   41   42   42   42   9   40					
	36   43   43   12   40   15   13   11   43   3   28   7   19   5   41   42   42   42   9   40     43   41   37   41   41   25   42   12   19   12   4   10   40   25   6   8   11   6   10   42					
	43   41   37   41   41   23   42   12   19   12   4   10   40   23   6   6   11   6   10   42     42   19   41   25   43   27   12   40   12   18   7   36   37   40   7   11   12   27   11   9					
<u>30 6 36 8 12 41 40 40 6 41 11 19 38 19 37 18 24</u>						
40 41 12 9 27 11 41 6 26 42 12 31 39 23 40 29 34	41 4 19 35 42 2 16 42 42 42 42 11 12 11 12 41 28 12 41					
GROUP 1 GROUP 2						
TABLE 2 - Students' evaluations according to the type of errors						
RESULTS AND DISCUSSION						

In each little square, the number representents a specific structure of agreement so that the student and the teacher can spot

all 5 exercices. Vertically, the table is sorted according to a linguistic typology (i.e. according to the grammatical category of the agreement receiver: NOUN, ADJECTIVE, VERB, PAST PARTICIPLE, ADVERB AND INFINITV VERB).

This «map» may confer a general impression of scattered skills from one student to the other, which reflects how a teacher may feel towards any class, as all classes are generally very heterogeneous, even among the same curriculum.

In dark green squares, the letters a, b and c correspond to correct agreements in both production tasks for a specific linguistic structure associated with incorrect declarative knowledge. In other words, the student knows how to make the agreement properly but is not able to explain the rule nor make a correct grammatical analysis using the proper metalanguage.

	GROUP 1 (number of occurence)	GROUP 2 (number of occurence)
a & b = production OK but doesn't know or understand the rule	154	189
c = production OK but grammatical analysis is incorrect	98	108

Hypothesis 1.A. «It is possible for a student to be able to make correct agreements without knowing the agreement rule (Gaux, Gombert, 1999)» is validated.

In yellow squares, the letters k and l reveal cases where the production is incorrect but declarative knowledge is learnt properly.

	GROUP 1 (number of occurence)	GROUP 2 (number of occurence)
k & l = production is incorrect but de- clarative knowledge is learnt	387	324

Hypothesis 1.B. «The opposite is possible as well: a student may know how to explain the rule, but still make mistakes when he or she writes (*ibid*.)» is validated.

specifically the linguistic context where the error occured. Vertically, this table is sorted according to the cause of errors that each student makes for each linguistic structure.

#### Scale of expertise

In terms of remediation, if we consider that teaching declarative knowledge needs more ressources than enhancing revision skills for example, a scale of expertise may be established according to the «depth» of defficiencies. That scale is very visible with TABLE 2.

If we compare TABLE 1 on the left with TABLE 2 above, it appears that it is easier to assess the skills of a class if we use a typology based on the causes of the errors rather than the grammatical categories. We might then want to reconsider how sequences are built in remediation; it probably has to differ from how the same skills are aquire at school, one rule after another.

**Hypothesis 2** «A typology based on the causes of errors might reveal a scale of expertise more obviously than a typology based on grammatical categories» is validated but still needs to be discussed as it requires class interventions using a typology based on the causes of errors to assess the efficiency of such a scale of expertise.

# BIBLIOGRAPHY

ANDERSON J. R., 1983, The architecture of cognition, Cambridge: Harvard University Press. CATACH N., 1986, L'orthographe française, Paris, Nathan. DEDEYAN A, Largy P., Negro I, 2006, «Mémoire de travail et détection d'erreurs d'accord verbal : étude chez le novice et l'expert», Langage, 164, p. 57-70. DUBOIS J., 1965, Grammaire structurale du Français : Nom et Pronom. Paris : Larousse. FAYOL M., GOT C., 1991, « Automatisme et contrôle dans la production écrite : les erreurs d'accord sujet verbe chez l'enfant et l'adulte », L'année psychologique, vol. 91, n°2, p. 187-205. FAYOL M., LARGY P., 1992, « Une approche fonctionnelle de l'orthographe grammaticale », *Langue française*, vol. 95, p.80-98. FAYOL M., PACTON S., 2005, « L'accord du participe passé : entre compétition de procédures et récupération en mémoire », Langue française, vol. 151, pp. 59-73. FAYOL M., JAFFRE J.-P., 2014, L'orthographe, Paris, Presses universitaires de France PUF. FLOWER L. HAYES J. R., 1981, «A Cognitive Process Theory of Writing», College Composition and Communication, Vol. 32, No. 4, p. 365-387. GAUVIN I., 2011, Interactions didactiques en classe de français : enseignement / apprentissage de l'accord du verbe en première secondaire, 268 p., thèse en Sciences de l'éducation soutenue à l'Université de Montréal sous la direction de Boivin M.-C. GAUX C., GOMBERT J.-E., 1999, « La conscience syntaxique chez les préadolescents : question de méthodes », L'année psychologique, vol. 99, n°1, p. 45-74. JAFFRE J.-P., 1998, « L'orthographe du français, une exception ? », Le français aujourd'hui, 122, pp. 45-53. LARGY P., 2001, « La révision des accords nominal et verbal chez l'enfant », L'année psychologie, vol. 101, n°2, p.221-245. LUCCI V., MILLET A., 1994, L'orthographe de tous les jours : enquête sur les pratiques orthographiques des français, Paris : Honoré Champion.