

APPLYING INTERCULTURAL LINGUISTIC
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HOW SYSTEMATIC AND RANDOM ARE ERRORS AND MISTAKES IN TEXTS WRITTEN BY LANGUAGE LEARNERS OF FRENCH?

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In his epoch-making article entitled “The significance of learners’ errors”, Corder (1967) argues that the analysis of errors is central to investigating the learners’ acquisition process. One of his key points addresses the idea that competence-dependent errors should be differentiated from performance-related mistakes. Errors, he says, are evidence of the learner’s use of an underlying system during the learning process. As well as revealing the learner’s interlanguage competence, errors are systematic. By contrast, mistakes are mainly the result of accidental slips of the tongue, physical or psychological conditions, such as tiredness or specific emotional states. They are incorrect forms whose systematicity cannot be explicitly described. To give some nuances to Corder’s distinction, other researchers, such as Ellis (1997), have pointed out that the differentiation between both errors and mistakes could also be made by asking learners to self-edit their own performance. If learners are capable of correcting themselves, their incorrect forms are regarded as mistakes. Conversely, if they are unable to self-edit their own performance, their incorrect forms are considered as errors. Following a brief discussion on the different methods in use to distinguish between both errors and mistakes, this short paper explores the extent to which systematicity in L2 learners’ incorrect written performance may help identify learners’ lack of knowledge. More specifically, it analyses an interlanguage corpus of texts written by learners of French and compares the systematicity of their incorrect forms with their ability to correct themselves.

Keywords: error, mistake, systematicity, randomness, zone of proximal development.

1. Literature review

While Corder (1981) advances that one should distinguish “between those errors which are the product of [...] chance circumstances [i.e. mistakes] and those which reveal [the learner’s] underlying knowledge [i.e. errors]” (p. 10), Ellis (2009) argues that the distinction between both is “nothing like

as clear-cut as Corder made out. The gravity of an error is to a very considerable extent a matter of personal opinion” (p. 6). In contrast with Corder’s (1967) method of distinction, which broadly stipulates that errors are systematic and mistakes are random, Taylor (1986), for instance, considers semantic and structural intentionality to differentiate between competence-dependent errors and performance-related mistakes; if the writer’s intention is vague, then the incorrect forms may be labelled as insignificant, in other words mistakes (p. 154). Thereafter, Ellis (1997) puts forward the idea that the error-mistake distinction could be doable by asking learners to edit their own incorrect forms; if they can correct themselves, the incorrect form is a mistake, otherwise it is an error. James (1998) further points out that a mistake “can [...] be corrected by their agent if their deviance is pointed out to him or her”, an error on the other hand, “cannot be self-corrected until further relevant input [...] has been provided and converted into intake by the learner” (p. 83). Elaborating on James’s (1998) discussion, Thouësny (2011, 2012) adopts a sociocultural approach and suggests a dynamic assessment-based error-mistake distinction grounded in Vygotsky’s (1978) zone of proximal development (ZPD). Making a parallel between the amount of assistance needed to differentiate errors from mistakes and what a learner can do with or without assistance in a sociocultural context, she suggests that “the distinction between errors and mistakes [could be] linked to the representation of the learners’ ZPD. In other words, positioning each incorrect form in the learners’ ZPD will help establish whether the incorrect form to be analysed is in fact an error or a mistake” (Thouësny, 2011, p. 64). An incorrect form requiring only to be pointed out to be self-edited would be highly placed in the learner’s ZPD, the learner being very close to independent performance. Reversely, an incorrect form necessitating more explanations to be corrected would be lowly placed in the learner’s ZPD, the learner being further away from independent performance (Aljaafreh & Lantolf, 1994, p. 471). Consequently, an incorrect form highly placed in a ZPD would correspond to a mistake, while a lowly placed incorrect form would designate a lack of knowledge and be characterised as an error.

Although the error-mistake distinction may be approximated from different angles, the systematicity versus non-systematicity method is generally the one considered in the literature. For instance, Ho (2008), in exploring the difficulties that student teachers may have in analysing grammatical features, differentiates between errors and mistakes by defining the latter as “erratic inaccuracies as opposed to systematic errors from which one may reconstruct learners’ developing knowledge of the language” (p. 86). Yet, systematicity in L2 learners’ incorrect written performance is not easily identifiable; systematicity versus non-systematicity has been described as a method that would “probably [be] unworkable in practice” (Ellis, 1985, p. 68). In this short paper, errors written by learners of French are differentiated from mistakes by considering both their systematicity and their position in the learners’ ZPD. The extent to which systematicity is applicable in practice to distinguish between errors and mistakes is subsequently discussed.

2. Methodology

2.1 Settings and data collection

The data used in this study is drawn from a corpus that was constituted by this researcher for her doctorate (Thouëсны, 2011). Participants were learners of French studying at university level during the 2008/2009 academic calendar. At the time, students submitted texts for which they needed corrective feedback. The submission was on a voluntary basis. To comply with the 2011 research, students, after submission and upon receiving feedback, had to correct themselves three times with and without assistance and re-submit their texts along with the corrections to each incorrect form that was initially highlighted. Based on Aljaafreh and Lantolf's (1994) regulatory scale of assistance, the amount of corrective feedback provided to learners was arranged from implicit to explicit. More specifically, the incorrect form was first highlighted without providing any further information (level 1), the error type was given (level 2), the incorrect form was then described with meta-linguistic feedback (level 3), and finally the correct answer was given to the learner (level 4). Each incorrect form was stored into a database along with metadata such as the student's identification, its error type, whether the student provided a correct replacement and whether the student accessed the feedback and for how long. Figure 1 below illustrates some of the information attached to the incorrect form *était** (*was*), a verb that did not agree with its subject.

Figure 1. Extract of the annotated corpus

```

<chunk>
  <token_id>7942</token_id>
  <token>était</token>
  <error_tagged_as>mo_ag_sv_</error_tagged_as>
  <incorrectForm>
    <incorrectForm_id>2820 </incorrectForm_id>
    <incorrect_seq>était</incorrect_seq>
    <stu_corr_level_1>_blank</stu_corr_level_1>
    <stu_corr_level_2>étais</stu_corr_level_2>
    <stu_corr_level_3>étaient</stu_corr_level_3>
    <val_errorType_1>0</val_errorType_1>
    <val_errorType_2>0</val_errorType_2>
    <val_errorType_3>1</val_errorType_3>
    <fb_level_2>subject verb agreement</fb_level_2>
    <fb_level_3>Verbs agree with their subjects in person and number.</fb_level_3>
    <fb_level_4>étaient</fb_level_4>
    <feedback_read_count_level_2>1</feedback_read_count_level_2>
    <feedback_read_average_time_level_2>3.86</feedback_read_average_time_level_2>
    <feedback_read_count_level_3>1</feedback_read_count_level_3>
    <feedback_read_average_time_level_3>5.17</feedback_read_average_time_level_3>
    <submissionDate>2009-05-01</submissionDate>
  </incorrectForm>
  <pos_5>VER:conj</pos_5>
  <position>68</position>
</chunk>

```

With the example above, it is known that the student did not provide any replacement to the incorrect sequence (*<incorrect_seq>*) at level 1 (*<stu_corr_level_1>*). This student, however, wrote replacements at levels 2 and 3 (*<stu_corr_level_2>*, *<stu_corr_level_3>*). While the former is incorrect, the latter is correct. The feedback at level 2 (*<fb_level_2>*) was accessed by the student for 3.86 seconds (*<feedback_read_average_time_level_2>*), while the one at level 3 was accessed for 5.17 seconds. The student's replacements were thus marked as resolved at level 3 (*<val_errorType_3>*) and unresolved at levels 1 and 2 as the replacements offered were not deemed satisfactory (*<val_errorType_1>*, *<val_errorType_2>*). In this particular example, it may be advanced that the learner is far from independent performance as she required metalinguistic feedback (level 3 on the regulatory scale of assistance) to be able to correct herself. It may be concluded that this incorrect form cannot be considered as a mistake as the student's replacements and behaviour with respect to assistance demonstrate a certain lack of knowledge. This incorrect form would be relatively lowly placed in the student's ZPD, and therefore be considered as an error.

2.2 Data analysis

The subset used in this study includes 19,870 tokens written by 14 students, in which 2,578 incorrect sequences were counted. Systematicity was determined at both word and error type levels. Firstly, the systematicity of incorrect sequences was calculated by counting all instances of identical incorrect words. Table 1 illustrates the frequency of incorrect forms at word level. Student #2, for instance, wrote 1,033 incorrect sequences between the 22nd of October 2008 and the 1st of May 2009; 656 of her incorrect sequences occurred only once in the whole corpus, 116 happened twice, 61 took place 3 times, and 200 repeated themselves 4 or more times. An incorrect form occurring only once may be viewed as random, thus as a mistake. According to the systematicity approach, the 656 unique incorrect sequences that were written by student #2 during the two semesters of the academic year would be considered as performance-related mistakes, the rest of her incorrect sequences taking place more than once would be regarded, to a certain extent, as a lack of competence.

Table 1. Frequency of incorrect forms at word level

Students id	Incorrect forms amount	Incorrect forms' frequency at word level				Time range	
		1	2	3	4+	from	to
#2	1033	656	116	61	200	22/10/2008	01/05/2009
#5	43	32	8	3	0	03/12/2008	03/12/2008
#6	158	92	20	21	25	10/12/2008	19/12/2008
#7	145	114	18	0	13	10/12/2008	19/12/2008
#8	127	86	19	9	13	10/12/2008	11/12/2008
#9	101	80	10	6	5	10/12/2008	16/12/2008
#10	156	112	20	16	8	16/12/2008	29/04/2009
#11	78	57	10	3	8	15/12/2008	16/12/2008
#12	37	32	2	3	0	15/12/2008	15/12/2008
#14	59	40	12	3	4	15/12/2008	15/12/2008
#15	49	43	6	0	0	15/12/2008	15/12/2008
#16	96	71	8	0	17	15/12/2008	15/12/2008
#17	457	281	74	34	68	17/12/2008	30/04/2009
#19	39	33	6	0	0	17/12/2008	17/12/2008

Secondly, the systematicity of the incorrect sequences was determined by grouping error types together. The error types were defined in this researcher's previous study (Thoušný, 2011, p. 88). Basically, the error classification was organised in four major categories (see Table 2 below): (1) the incorrect selection category in terms of lexemes or grammatical aspects (from *nonstandard word or expression* to *incorrect word class*), (2) the syntactic error category (from *word addition* to *syntax not understandable*), (3) the morphosyntactic error category (from *determinant noun agreement* to *incorrect word formation*), (4) the misspelling error category (from *hyphen* to *incorrect or missing accent*), and the typographic error category (from *capitalisation* to *missing or inappropriate space*).

Furthermore, each incorrect form was positioned in the learners' ZPD. If learners were able to correct themselves at level 1 of the regulatory scale, the incorrect forms were considered high in their ZPD. In such a case, their incorrect forms were more likely linked to performance rather than competence issues. Conversely, if learners required more assistance than highlighting the incorrect form, the incorrect sequence was placed in a lower position in the ZPD resulting of a competence as opposed to performance issue.

3. Results and discussion

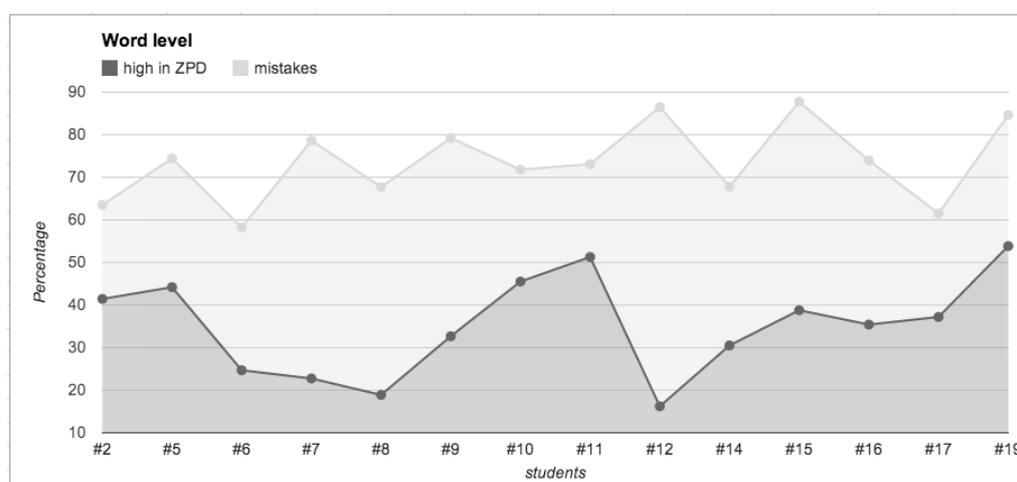
3.1 Systematicity at word level

Looking at systematicity at word level is not without drawbacks. Firstly, the observation of the corpus shows that although identical incorrect tokens are often accompanied with the exact same error type, it

is not always the case. Some of them are marked for different causes. For example, the word *de*, written four times incorrectly in one student's text, corresponds in fact to 2 incorrect article type errors (the definite article *le* was expected in both cases), 1 incorrect word formation error (*d'* was the correct answer as the following word started with a vowel), and 1 word addition error (there was no need for the word *de* to be included in the noun phrase). In a further example, the token *votre* written by another student in two different texts over a period of 2 months was highlighted as incorrect for the following two reasons: one of them was used in an inappropriate register and the other one was linked to a determinant noun agreement issue.

Secondly, it is difficult to establish systematicity with precision as most of the incorrect forms occur only once: 67.07 percent of all incorrect sequences in the corpus were unique. Given the fact that the systematicity of these unique sequences could not be explicitly described, they should, according to Corder's (1967) approach, be considered as mistakes. Figure 2, however, demonstrates that students needed more assistance than just pointing out the incorrect forms to be able to edit the majority of them. The darkest zone in Figure 2 represents the percentage of what learners could correct when provided with only the highlighted incorrect forms (level 1 of the regulatory scale). While student #12, for instance, was able to self-edit 16.22 percent of all her incorrect forms without further assistance than level 1, suggesting that these incorrect forms are all highly positioned in the learner's ZPD and thus performance-related mistakes, the systematicity approach considers that this student made 86.49 percent of performance-related mistakes (lightest zone in Figure 2). In such a case, the learner would not need additional assistance to correct herself. However, the observation of the corpus reveals that student #12, in fact, needed metalinguistic feedback (level 3) and even the correct answer (level 4) for most of her incorrect forms, uncovering a real deficit in language competence.

Figure 2. Comparison between incorrect forms highly placed in the ZPD and incorrect forms considered as mistakes based on their randomness level



Considering the aforementioned discussion, one could advance that if the incorrect sequence is random, taking place only once, it might be the case that it is not always a mistake as no further points of reference are made available to discriminate them from errors. Conversely, systematicity is not determinant either as students can systematically write the exact same incorrect forms several times and be able to correct them with as little assistance as just pointing them out. For instance, one student consistently wrote over a period of 3 months the incorrect sequence “à université” (at university), always forgetting the article. Each time, she was able to correct herself at level 1 of the regulatory scale, indicating that she was very close to independent performance. While competence-dependent errors have been shown to also be random, performance-related mistakes may as well be systematic.

3.2 Systematicity at error type level

Looking at systematicity at error type level might be problematic as incorrect forms grouped together may not always be connected. For instance, past participle agreement errors may relate to an agreement between a past participle and a subject or an object depending on the auxiliary.

Table 2. Comparison between frequency of incorrect forms at error type level and frequency of incorrect forms lowly positioned in the ZPD

Students	#2		#5		#6		#7		#8		#9		#10		#11		#12		#14		#15		#16		#17		#19	
	freq.	low																										
nonstandard word or expression	12	8	2	-	3	3	2	1	1	1	1	0	-	-	-	-	1	1	-	-	4	4	1	1	3	3	-	-
inappropriate choice	94	86	4	2	22	20	15	-	14	13	8	6	5	4	16	8	4	3	7	6	6	5	18	12	28	22	1	1
inappropriate register	1	1	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
not understandable	7	6	-	-	4	4	1	-	3	3	-	-	-	-	-	-	-	-	1	1	-	-	2	2	7	6	-	-
inappropriate connection word	14	5	-	-	-	4	-	3	3	3	3	-	-	2	0	2	1	3	1	1	1	1	1	1	7	6	2	2
reflexive verb	6	4	2	2	2	2	1	-	4	4	2	2	6	3	-	-	-	-	1	1	1	1	1	0	5	2	2	2
incorrect article type	48	21	4	2	8	8	14	-	4	4	2	1	8	6	1	0	1	1	2	1	1	0	6	3	24	10	2	2
incorrect preposition	59	44	2	1	14	12	13	-	10	8	11	6	6	5	12	4	9	9	5	4	2	1	11	0	39	27	-	-
incorrect mood	15	12	1	1	1	0	3	-	-	-	-	-	4	3	-	-	2	1	1	1	4	2	-	-	7	5	1	0
incorrect tense	23	17	-	-	2	2	3	-	1	1	-	-	3	3	1	0	1	1	-	-	-	-	5	5	9	8	-	-
incorrect voice	4	3	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
incorrect word class	7	7	-	-	5	5	3	-	2	2	-	-	-	1	1	-	-	-	-	-	-	-	1	0	3	3	-	-
word addition	25	20	-	-	8	8	5	-	2	2	2	1	5	5	3	3	-	-	2	2	2	2	2	2	16	16	1	0
word omission	98	84	-	-	10	8	17	-	6	5	4	3	10	9	3	1	1	1	2	1	1	1	4	4	26	25	8	5
word order or incorrect syntax	14	12	-	-	4	4	3	-	-	2	2	4	4	-	-	-	-	-	-	1	0	2	1	7	7	-	-	
syntax not understandable	51	47	3	2	10	10	11	-	5	5	2	2	5	5	3	1	5	5	2	1	3	2	11	9	30	30	-	-
determinant noun agreement	34	12	-	-	3	2	2	-	-	-	8	5	1	1	1	1	1	1	2	1	-	-	3	0	7	7	2	0
gender agreement	22	3	2	-	1	1	2	-	2	2	1	0	6	0	-	-	1	1	2	1	1	0	1	0	8	3	-	-
noun adjective agreement	52	26	4	1	7	7	6	-	3	2	6	3	16	10	5	1	-	-	3	2	2	1	1	0	19	15	2	1
pronoun antecedent agreement	13	6	1	1	1	1	4	-	-	-	-	-	1	1	4	2	-	-	-	-	2	2	3	2	8	6	-	-
past participle agreement	12	6	-	-	6	6	8	-	7	7	-	-	4	2	1	0	-	-	-	-	1	0	1	1	7	6	-	-
subject verb agreement	9	6	1	1	-	-	2	-	2	2	2	0	5	1	-	-	-	-	1	1	-	-	-	-	2	2	-	-
incorrect plural form	2	1	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
incorrect conjugation form	56	26	1	-	7	4	2	-	1	0	7	6	5	3	2	2	2	1	1	1	-	-	2	2	18	8	1	0
incorrect word formation	20	11	-	-	1	1	-	-	1	1	2	0	4	3	1	0	1	0	1	1	-	-	1	1	1	0	1	0
hyphen	14	6	2	2	-	-	1	-	1	1	2	2	2	0	1	0	-	-	-	-	-	-	-	-	1	1	-	-
misspelling	90	51	5	4	5	2	4	-	12	9	11	5	13	6	-	-	-	-	5	4	2	2	1	1	35	16	6	1
incorrect or missing accent	97	36	5	1	25	3	4	-	23	14	9	7	9	2	3	3	-	-	4	0	5	1	-	-	75	14	2	0
capitalisation	50	9	-	-	-	-	-	-	8	5	1	0	1	1	2	2	4	4	-	-	-	-	-	-	27	11	-	-
abbreviation	8	7	-	-	-	-	-	-	1	1	2	1	-	-	6	3	-	-	3	3	-	-	8	8	2	2	-	-
missing punctuation	57	13	-	-	7	4	13	-	5	4	9	9	24	2	-	-	2	1	5	2	5	1	9	6	16	11	7	3
inappropriate punctuation	12	4	-	-	1	1	1	-	1	1	2	2	6	3	-	-	-	-	-	-	2	2	-	-	6	6	1	1
missing or inappropriate space	7	5	4	4	1	1	1	-	4	2	2	2	-	-	10	6	-	-	6	6	2	1	1	1	14	9	-	-

Table 2 shows that student #2 wrote 12 incorrect past participles in total. Determining whether these

incorrect forms are systematic is not straightforward as they reflect different tokens (*aide**, *enseigne**, *remise**, *presse**, *quittee**, *lu**, *connu**, *pressés**, *arrosees**, *connue**, *située**, *trouvé**), were all situated in different contexts and were not all used with the same auxiliary. In addition, the incorrect agreements were not consistent in gender and number. Yet, there were 12 of them incorrect, i.e. 5.91 percent of all her past participles ($N=203$). This student did not systematically write her past participles incorrectly, no patterns could be found between the incorrect and correct sequences. Given the fact that their systematicity could not be explicitly explained, these 12 incorrect past participles should all be considered as mistakes. The concern is that student #2 required assistance at level 3 of the regulatory scale (meta-linguistic feedback) for 6 of them and was able to correct only 3 of them. This implies that (1) the 6 past participles corrected at level 1 of the regulatory scale were performance-related mistakes, (2) the 3 past participles corrected at level 3 of the regulatory scale were lowly positioned in the student's ZPD and considered as competence-dependent errors, and (3) the 3 past participle agreements not corrected by the student before being provided with the correct answer are even more lowly positioned in her ZPD and reflect an even greater lack of knowledge.

4. Conclusion

The above discussion revolves around the idea that the systematicity approach to differentiate errors from mistakes in practice is not as easy as it could appear. The current study shows that the randomness of an incorrect form does not inform whether it is a mistake as most of the unique incorrect sequences in the corpus could only be corrected by learners with further assistance, thus demonstrating a deeper lack of knowledge. Furthermore, the systematicity of an incorrect form is no evidence either of a learner's lack of competence as some performance issues were also systematic, suggesting that learners could be aware of their own fossilisation, but this is another debate.

About the author

Sylvie Thouësny holds a Ph.D. in second language acquisition from the Dublin City University, Ireland. She is primarily a researcher involved in projects which draw on disciplines such as applied linguistics, human computer interaction, natural language processing, intelligent computer-assisted language learning, and dynamic assessment. Her current research focuses on language learner modeling to assist second language teachers in the provision of strategic and effective feedback adapted to each individual. She is also a consultant in computational linguistics and the President of Research-publishing.net, a not-for-profit association committed to making research literature a freely available public resource.

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