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Realization of French Connected Speech: A Comparative Study between Indonesian FLE Students and Native Speakers

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Abstract

This study aims to explain the realization of French external sandhi, namely liaison, enchaînement, and élision in FLE (French as a Foreign Language) students with Indonesian as their first language (L1), and the factors influencing the realization. To determine the extent of mastery of Indonesian students, this study compared the realization of two groups of Indonesian students with different study hours and the realization of native speakers. This study involved 44 FLE students divided into two groups (27 students in Group I and 17 in Group II) and 11 native speakers. The instrument text for oral reading was compiled considering all these three phenomena theoretically and the students' competence level. It contains sequences of words potentially connected by all three. The data collection technique was carried out by recording the text reading once. The use of PRAAT software supported data analysis. The study results indicate the mastery of Indonesian speakers in élision > liaison > enchaînement consonantique > enchaînement vocalique. The realization level of the students is much lower than that of native speakers. Several factors include the absence of similar phenomena in L1, segmentation ability, use of rhythm, differences in the orthographic systems, and interference, namely the presence of silent consonants and grapheme <h>, which are not pronounced in French, differences in the transparency of phoneme-grapheme relationship in the two languages and the quality of input.

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Introduction

Each language has its characteristics. Pronunciation in French is not word by word but per group of words. Palsgrave (1530) in Laks (2014) stated that to produce fluency and harmony of sound so that it sounds more comfortable to the ear, the French pronounce five, six, or more words without a pause as if it were just one word. This is not without reason because French has several unique characteristics that make pronunciation sound fast and flow that occurs at word boundaries *(external sandhi)*, namely *liaison, enchaînement,* and *élision* (Stridfeldt, 2005; Greefhorst & Van den Bosch, 2016; Chiwanga & Iddy, 2017). These three phonological phenomena connect two consecutive words by

re-syllabicating them that makes the boundary between the two sometimes challenging to identify.

The use of these three phonological phenomena is natural and part of real spoken language characteristics among native speakers (Chiwanga & Iddy, 2017; Norris, 1995; Griffee, 1995; Moh-Kim, 1997; Rogerson, 2006 in Nawafleh, 2023). On the other hand, for FLE students, especially those whose first language (L1) does not have similar phenomena, this is a difficulty in itself. The sequences are often pronounced separately, which is analogous to Wauquier & Shoemaker (2013) to a talking dictionary.

Liaison, besides schwa, is one of French's two central phonological phenomena (Durand & Lyche, 2008). In the context of FLE, studies with several variables have been carried out to determine their influence on its realization and the results shown are not always the same. Research conducted by Tennant (2015), Hallin (2016), Andreassen & Lyche (2016), Detey et al. (2016), and Harnois-Delpiano (2016) on FLE students from Canada, Sweden, Norway, Japan, and Korea show that the higher the level of competence or the length of time studying French, the higher the realization of *liaison*. In contrast, Valetopoulos (2016) shows no significant difference in the realization of *liaison* in all categories of the first and fourth-year Cypriot students reading texts.

For language task type, Tennant (2015) and Stridfeldt (2023) showed that the realization of obligatory *liaison* (LO) and facultative *liaison* (LF) of Canadian and Swedish FLE students in conversation was higher than in reading text, while Racine's (2016) research on Spanish learners showed the opposite results. Research from Andreassen & Lyche (2016), which used three types of language tasks, also showed that the realization of *liaison* from groups of B1/B2 and A2 level students had the same pattern: reading text > free conversation > directed conversation.

Harnois-Delpiano (2016), who compared the realization of *liaison* in Korean FLE students with native speakers (children), showed that the ability to use LO increased with the age of children (native speakers) and the length of study for Korean FLE learners, while for the LF category, the results were slightly different. The use of LF in native child speakers depends on the frequency of use, while it is more normative in Korean students.

Despite having different L1, the realization of *liaison* in Swedish speakers shows results close to native speakers, especially for students with B1 standard of CEFR (Hallin, 2016). The level of realization that is quite close to that of native speakers is also shown by Jordanian FLE students (Nawafleh, 2023) using Delattre's *liaison* classification.

Meanwhile, very few studies discuss *enchaînement consonnatique* and *vocalique* (EC and EV). Andreassen & Lyche (2016), Nawafleh (2023) on Norwegian and Jordanian FLE students, Chiwanga & Iddy (2017) on prospective French teachers from Tanzania in reading text showed that *liaison* is acquired faster than EC and that EC is better acquired than EV (Tubdaar, 2023). To the best of our knowledge there is no study that examines *élision* in the context of FLE. Although Nawafleh (2023) argues that *élision* does not cause difficulties for FLE learners, through observation, a different thing was found in Indonesian FLE learners.

The relevant studies emphasize more on *liaison* and no research discussed the three types of linking comprehensively, especially for Indonesian public. The mastery of the three is very important, not only for reason of fluency but also for effective communication due to potential ambiguity raised by its its inappropriate application for example *un savant [t] aveugle* or *un savant aveugle* and *dernier oignon* or *dernier rognon*.

The differences in result among FLE students from diverse L1s implied that L1 greatly affects the realization of the linking. Due to the significant differences in the phonological and orthographical system between Indonesian and French, this study aims to comprehensively examine the realization of these linking phenomena in oral reading by two groups of Indonesian FLE students with different number of study hours

and compare the result with its of native speakers and formulate factors that influence the realization. This research is expected to be useful and give insights for FLE students and teachers about other important phonological aspect in French language.

Methodology

This study involved 44 students of Department of French Education at University of Lampung; 27 third-year students (Group I) and 17 fourth-year students (Group II), and 11 native speakers determined by random sampling technique. During data collection, Group I have studied French for ± 400 hours or equivalent to the B1 level of CEFR, and Group II ± 600 hours or equivalent to the B2 level (Andriani, 2019).

This study only emphasizes oral reading since it involves not only phonological but also orthographical system. It is also based on relevant research where reading has a more significant influence on the realization. For this reason, the instrument used is a text which is in the form of narrative text, not fragments of phrases since the realization of *liaison, enchaînement,* and *élision* is also influenced by the rhythm (rhythmic groups). We compiled it by considering the three phenomena theoretically and also lexical/grammatical mastery levels of the two groups of participants. Before being applied, the instrument was verified linguistically by two native speakers, and its validity through expert judgment. The data source is recording of the reading of the text (one time) carried out by the participants. For FLE students, it was carried out directly in front of the researcher with a few minutes of preparation beforehand, while for native speakers living in France, the reading used the voice note application from *Whatsapp*.

The data collection begins by analyzing the text and marking all word sequences that are potentially linked with *liaison, enchaînement*, and *élision*. Next, we listen attentively to collect the sequences linked by the three and then classify them based on the type of linking. The analysis is also supported by PRAAT software to verify the speech linking especially those which are at relatively fast speaking tempo. The data are then grouped based on context (word sequence) and consonant of *liaison* (CL) using two versions of *liaison* classification: Delattre (1947) classification and Durand & Lyche (2008) (the latter is only for LO category), while for *enchaînement* based on context and consonant of *enchaînement* (CE) used, and structure for *élision*. The conclusions are drawn by linking the research results (tabulation of each realization levels) with other aspects such as the syllable length of the first and second words (W1 and W2) involved, rhythm, the use of CL or CE, and anomalies based on the theory and relevant research results.

Results and Discussion

1. Realization of Liaison

By using Delattre's version of *liaison* classification, the level of realization of Group I and II of Indonesian speakers and native speakers for each category was obtained as follows.

Table 1. *Liaison* realization of Indonesian and native speakers.

	LO			LF			LI		
	R	**P**	**%**	**R**	**P**	**%**	**R**	**P**	**%**
Group I	821	2.268	36,19	103	756	13,62	26	297	8,75
Group II	527	1.428	36,90	62	476	13,02	20	187	10,69
Native speakers	899	924	97,29	135	308	43,83	2	121	1,65

*) LO = obligatory *liaison,* LF = facultative *liaison,* LI = forbidden *liaison,* R = number of realized *liaison*
P = number of potential *liaison*

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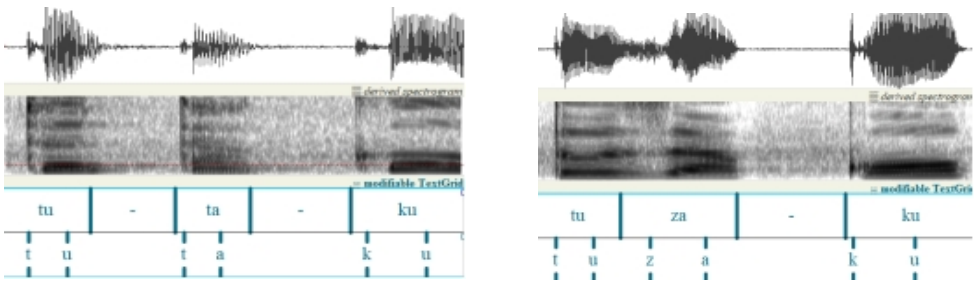
The table above shows that the realization of *liaison* for the LO and LF categories in both groups of Indonesian speakers tends to be the same. In contrast, for the LI, the level of realization of Group II is slightly higher than that of Group I. The level of realization, especially in the LO category in both groups, is much lower than that of native speakers.

In the instrument, 84 sites potentially linked with LO are spread across eight types of contexts (word sequence). The contexts that are most often realized in Groups I and II are the same, namely determinants (numerals and possessive pronouns) + nouns, for example, *trois‿enfants* and *mes‿amis*, subject pronouns + verbs such as *ils‿ont*, and verbs + enclitics such as *faut-‿il*. Many contexts have a low level of realization, and some of them are not realized at all by both groups, namely the monosyllabic adverb *moins/trop* + noun (e.g., *moins ≠ adroit, trop ≠ important*).

On the other hand, the level of realization of native speakers in all contexts of the LO category is relatively high, except for adjective + single nouns such as *premier étage, grands écoles, long hiver, grandes espaces, dernier ouvrage* and monosyllabic adverb + adjective. These word sequences are included in the LF category in Durand & Lyche's (2008) classification version. If using this classification, the level of realization of LO and LF in native speakers is respectively 100% and 60.87%. In contrast, in Indonesian speakers, it is 43.85% and 13.23% (Group I), and 44.44% and 13.56% (Group II). These results corroborate research by Durand & Lyche (2008) that there is a change in the use of *liaison* in native speakers, namely that there are fewer contexts included in LO: subject pronoun + verb (e.g. *nous‿avons, ils‿habitent*), determiner + noun *(son‿emploi, un‿œuf),* verb + enclitic *(achètes-‿en, vas-‿y)* and compound word/frozen expressions *(tout‿à fait, pot-‿au-feu)*.

The LF context that is most often realized by Indonesian speakers and native speakers is the same, namely the *c'est* pattern, for example *c'est‿un film*, verb *être* + *participe passé* as in *mes amis et moi sommes‿allés*. Although the level of LF realization for Groups I and II is the same, there are more LF contexts realized in Group I. The context of *après‿avoi*r, which realized by some Indonesian speakers, is only realized by one native speaker. Two native speakers realize forbidden *liaison* (LI), namely after h aspirated *(h aspiré)* and *des‿haricots* [de.za.ʁi.ko] instead of [de.a.ʁi.ko]. In contrast, in Indonesian speakers, the realization of the LI category is dominated by the context after conjunction *et,* for example, *et‿un poireau*.

The productivity of each CL is different, and its realization depends on the context. Group I realized more types of CL, namely /z/, /n/, /t/, and /ʁ/, while group II only /z/, /n/, /t/, and native speakers can realize all of them. In French, *liaison* with CL /ʁ/ is only found in the words *premier* and *dernier*, CL /p/ in *trop* and *beaucoup*, and /k or g/ in *long*. Only one student can realize CL /ʁ/ in *premier étage*, and no one realizes /p/ and /k or g/. This result confirms Morin's (1987) statement that both CLs are no longer productive, so they are often not considered when analyzing *liaison* realization. Inappropriate use of CL is one of the factors that hinders the realization of *liaison* such as *un [s] œuf, sont [z] arrivés, quand [n] elle* instead of *un [n] œuf, sont [t] arrivés, on [n] est, quand [t] elle*. The following is an example of a spectrogram of inappropriate use of CL in realizing *tout à coup*, which must be pronounced *tout [t] à coup,* not *tout [z] à coup*.



(a) (b)

Figure 1. Realization of LO *tout à coup* with appropriate and non-appropriate CL

The voiceless plosive consonants /t/, such as /p or k/ in the spectrogram, are marked with vertical lines, as seen in Figures 1a and 1b, and it is only found in Figure 1a. The consonant in Figure 1b is substituted with the consonant /z/, a voiced fricative consonant marked in the upper black area.

2. Realization of Enchaînement

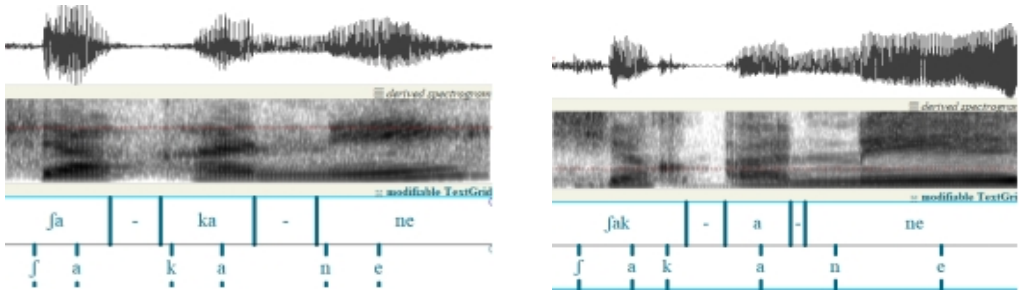
From the analysis of text reading recordings supported by the use of PRAAT software, the results of the realization of EC and EV in Indonesian speakers and native speakers are as follows:

Table 2. EC and EV Realization of Indonesian and native speakers

	EC			EV		
	R	**P**	**%**	**R**	**P**	**%**
Group I	527	1.998	26,37	156	1.694	921
Group II	335	1.258	26,62	133	1.062	12,5
Native speakers	597	814	73,34	457	586	77,98

As in *liaison*, both groups of Indonesian speakers with different lengths of study show almost identical levels of EC realization. The levels of realization are also significantly different from those of native speakers. The instrument has 16 types of contexts spread across 74 potential word sequences. Of these, 28 words sequences in Group I and 30 in Group II are not realized at all, including *commence ≠ à, ma tante ≠ a bien, danse ≠ acrobatique, étudiante ≠ en, langue ≠ arabe, bonne ≠ équipe, tarte ≠ aux pommes.* For native speakers, there are only *faire ≠ une* and *mon oncle Éric et ma tante Anne ≠ habitent,* which is not realized, and most word sequences have a relatively high level of realization, and even 100%.

In contrast, potential word sequences' realization levels in Groups I and II are generally relatively low. The total realization level, as shown in the table, is dominated by the realization of particular contexts; verbal phrase *il‿y a,* subject pronoun + pronoun *y (il‿y retrouvera),* and subject pronoun + verb (*il/elle‿est* and *il/elle‿a*). Below is an example of a realized and not realized EC spectrogram of *chaque année* (Figure 2a) [ʃa.ka.ne] and (Figure 2b) [ʃak.a.ne]. There is a pause in front of the vowel /a/ in Figure 2b, while in Figure 2b, there is a plosive consonant /k/.



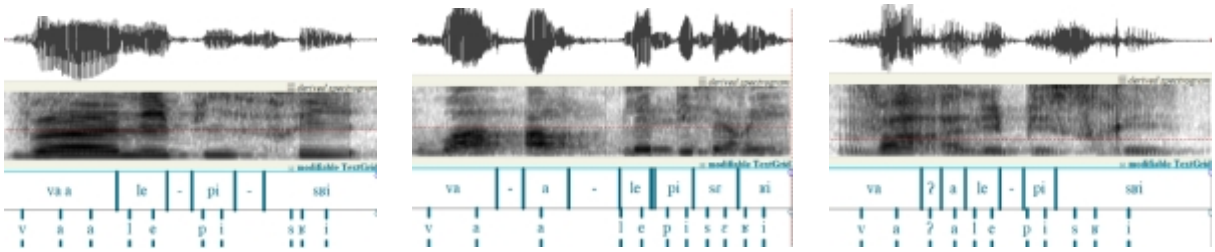
(a) (b)

Figure 2. Realization with and without EC in *chaque année*

Although CE is graphically and phonically present in W1, the realization is still tricky for Indonesian speakers. Several participants were found to use inappropriate CE such as *huit [s] ans, trente [n] ans,* or *même [z] âge* instead of *huit [t] ans, trente [t] ans, même [m] âge*. In the instrument text, there are 11 potential CEs, namely /l, k, m, n, ʁ, g, z, t, s, d, v, or f/, and all of them can be realized by native speakers (/s/ is the least). Meanwhile, Group I do not realize CE /s and g/, and and only /g/ for Group II in *prince ≠ italien* and *langue ≠ arabe*. The most frequently realized CE is /l/, which is influenced by the high level of realization of the verbal phrases *il‿y a, il‿y retrouvera, il/elle‿est*, and *il/elle‿a*.

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Unlike in *liaison* and EC, there is no re-syllabication in EV. The adjacent vowels remain in their respective syllables. Table 2 shows that EV realization is relatively low and lower than that of EC, while in native speakers, it is relatively high. In addition to being read one by one, EV realization is often hindered by the glottal stop /?/ between the two vowels, as in the example of the spectrogram below. The figure shows the EV realization of the verbal phrase *va à l'épicerie* [va.a.le.pi.sʁi] (Figure 3a). Meanwhile, Figure 3b shows an unrealized EV due to separately pronounced [va. ≠ a.le.pi.sʁi] and Figure 3c shows a glottal stop between the two vowels [va.ʔ.a.le.pi.sʁi].



(a) (b) (c)

Figure 3. Spectrograms of realized and non-realized EVs (separated and glottal stop)

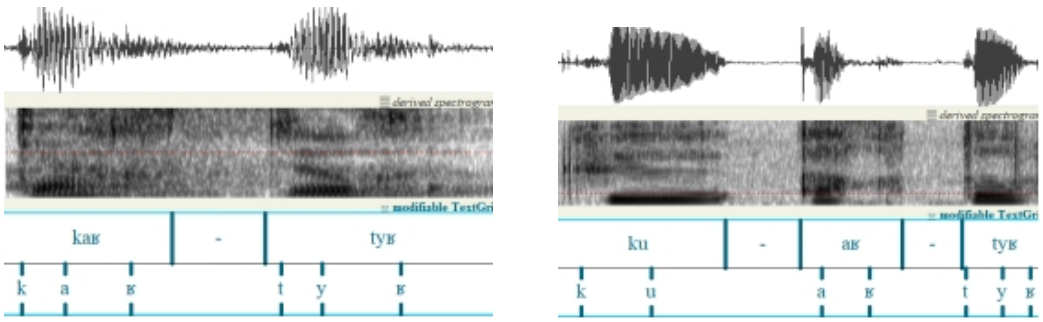
3. Realization of Élision

The following table shows the level of *élision* realization in both groups of Indonesian speakers and native speakers.

Table 3. *Élision* Realization of Indonesian and native speakers

	L'élision		
	R	**P**	**%**
Group I	1.644	1.755	93,60
Group II	1.021	1.105	92,39
Native speakers	715	715	100

The table shows that Indonesian speakers' realization of *élision* in oral reading is excellent, although not as perfect as native speakers (100%). This result explains that the mastery of *élision* of Indonesian speakers is significantly better than *liaison* and *enchaînement*. Of the several grammatical structures, the lowest level of realization is in the structure with W1 containing the morpheme *que,* such as the preposition *jusque*, the conjunctive locution *alors que, parce que,* and the comparative or coordinating conjunction *que*. The following is an example of the spectrogram of realized and non-realized *élision* (Figure 4a) and (4b) in *qu'Arthur.*



(a) (b)

Figure 4. Realization with and without *élision* of *qu'Arthur*

The phrase *qu'Arthur* comes from two words; *que* [kə] and *Arthur* [aʁtyʁ]. Some participants failed to realize *élision* because they pronounced all the graphemes listed in *qu'* as [ku]. The Indonesian orthography

system influences this realization, where each grapheme generally represents one phoneme.

The results above show the level of mastery of FLE Indonesian students which is still relatively low, especially in *liaison* and *enchaînement*. The realization of LO in Spanish students (Geneva), Italian students (Trieste & Milan corpus), and Japanese students who had ever lived in France *(avec séjour)* and who had never lived in francophone countries *(sans séjour)* are respectively 90.9%, 94.48%, 79.13%, 85.10%, and 72.48%. At the same time, for LF, it is not very different. Compared to the realization of native speakers, the level of LO realization of Indonesian speakers is also lower. In contrast, in a study by Nawafleh (2023), the realization of Jordanian students who speak Arabic is 70.09%, and native speakers are 100%.

This significant difference also occurs in the realization of *enchaînement*. Indonesian speakers realize only 26.62% of the total potential word sequences of the text, while native speakers reach 73.6%. Andreassen & Lyche (2016) showed that the EC realization rate of Norwegian students at level B1 reached 42% and level A2 at 20%, prospective teachers from Tanzania at 60% (Chiwinga & Iddy, 2017), and high school students from Ghana at 25% (Agbolete, 2021). Meanwhile, compared to native speakers, Jordanian speakers make up 45.05% of EC and native speakers 96.7% (Nawafleh, 2023).

The results of this study indicate that connecting speech with these three phonological phenomena is still tricky for Indonesian students. Indonesian, which does not have a similar phenomenon and each word has a clear boundary, still strongly influences Indonesian speakers so that they pronounce words separately when reading texts. In addition to the influence of L1, the ability to segment words also affects the realization. French is a language dominated by open syllables. The phenomena of *liaison, enchaînement*, and *élision* restructure the syllables of W1 and W2 to form open syllables (CV pattern). For example, in *langue arabe* [lɑ̃g] [a.ʁab] becomes [lɑ̃.ga.ʁab] or *leur ami* [lœʁ] [a.mi] which becomes [lœ.ʁa.mi]. This segmentation is another difficulty for Indonesian students. In French, the phonological syllable boundaries do not always coincide with the graphic syllable boundaries; for example, *femme* graphically consists of 2 syllables *fem-me*, while phonologically only one [fam]. This differs from Indonesian, where phonological and graphic segmentation tends to be the same. In addition, the difficulty of this segmentation is also reflected in the use of *liaison non-enchaînée*, a condition where CL is realized but not linked, for example, *des amis* which is pronounced [dez.a.mi] instead of [de.za.mi].

Rhythm or timing in speech (Prieto & Roseano, 2019) affects the meaningfulness of spoken language, including in oral reading. Rhythm in French is regular (Abry & Abry, 2007). Pronunciation in French is not word by word but per group of words (rhythmic group). These three phonological phenomena occur within rhythmic groups. Therefore, the neglect of the appropriate use of rhythmic groups in reading, manifested by irregular stops or stresses, affects the realization of all three. For example, the pause practiced by Indonesian speakers in the sentence *<Ils habitent/au premier/ étage/d'un grand/immeubles/ dans un/appartement de six pièces:/quatre chambres, une salle/ à manger/et/un salon.>,* whereas for native speakers it becomes *< Ils habitent au premier étage / d'un grand immeuble,/ dans un appartement de six pièces:/ quatre chambres/ une salle à manger /et un salon>.*

The sequence of words connected with CL /n/ originating from W1 ending in a nasal vowel such as *un* /œ̃/, *mon* [mɔ̃], *son* [sɔ̃], *en* /ɑ̃/, and *on* /ɔ̃/ in Delattre's classification are all included in the LO category. Its realization in native speakers reaches 100%, ranked/n/ as the most realized, followed by CL /z/ and /t/, whereas in Indonesian speakers the realization is relatively low, namely 29.79% (Group I) and 26.47% (Group II). In addition to being caused by the representation of graphemes in French, which is quite complex, such as *-on, -ien, -in, -ain*, etc., Indonesian also does not have nasal vowels. Grevisse & Goose (2008) stated that in some contexts, *liaison* with CL /n/ can experience denasalization, especially for W1 ending in *-ain, -ein, -en, -in*, for example, *plein air* [plɛ. nɛʁ], while it is

facultative after the adverb *non* and possessive adjectives *(mon/son)*. This exception also does not facilitate connection. The contexts with W1 ending in a nasal vowel are more often pronounced separately from W2 by Indonesian speakers. Some are realized by substituting CL /n/ with the consonant /ŋ/, for example, *mon [ŋ] ami, un [ŋ] œuf, and on [ŋ] a,* instead of *mon [n] ami, un [n] œuf, and on [n] a.*

In addition to CL /n/, another inappropriate use of CL is devoicing, namely the substitution of /z/ into /s/, such as *très [s] amusant, pays [s] étranger* instead of *très [z] amusant, pays [z] étranger.* Some CL errors are caused by a lack of mastery of French spelling, where the relationship between graphemes and phonemes is not as transparent as in Indonesian. French has many vocabularies with silent consonants such as *quand, grand*, and *habitent*. Some participants use CL found in W1 graphically, for example, *quand [d/n] on, grands [d] espaces,* and *ils [l] habitent*, instead of *quand [t] on, grands [z] espaces,* and *ils [z] habitent*. Meanwhile, some others are caused by random reasons, such as *Je suis [t] étudiant, vont [z] aller*, and *son [z] habitude*, which must be pronounced *je suis [z] étudiant, vont [t] aller, and son [n] habitude.*

The use of inappropriate linking consonants is also found in EC. *Enchaînement consonantique* (EC) which does not require mastery to produce silent consonants or new consonants, is inseparable from inappropriate CE even though graphically and phonically already exists in W1. In addition to the devoicing of /v/ to /f/, for example, *neuf [f] heures*, instead of *neuf [v] heures*, there is also the use of the consonant [ŋ], such as in the phrase *chaque [k], année* which is pronounced as *chaque [ŋ] année*. However, the inappropriate application of CE is mainly dominated by the use of /z/ for example, *langue [z] arabe, chaque [z] année, huit [z] ans, comme [z] il,* or *cette [z] affaire.*

The interference from Indonesian is also in the grapheme <h> pronunciation. In Indonesian, this grapheme represents the non-sibilant fricative consonant /h/, which can be distributed at a word's beginning, middle, or end. Although in some words, the grapheme <h> is voiceless, in most words, it is still pronounced and is part of the consonants in Indonesian. The pronunciation of the grapheme <h> prevents the realization of *liaison*, e.g., *en haut* [ɑ̃.ho] or of EV *Amélie a hate* [a.hat], instead of [ɑ̃.o] and [a.at], while in EC, e.g., *elle habite* or *neuf heures* which are pronounced [ɛl.ha.bit] and [nœf.hœʁ] instead of [ɛ.la.bit] and [nœ.vœʁ]. The difference in phoneme-grapheme relationships between French and Indonesian is also found in the realization of *élision*. In Indonesian, two graphemes represent the sound /k/, namely <k> and <q>. Meanwhile, in French, the phoneme /k/ can be represented in several graphemes, namely <c> as in *carte, cours, culte*, <qu> in *qui,* <ch> in *orchestra*, <k> in *kilo,* <cc> in *occasion*, <cu> in *accueil,* <q> in *acquisition*, <ck> in *stock* (Abry & Abry, 2007, p. 42). Some Indonesian speakers pronounce the ending *que* as [ku] so that *qu'un* is pronounced as [ku.œ̃] or *jusqu'au* is pronounced as [ʒys.ku.o].

The explanation above confirms that the differences in French and Indonesian phonological and orthographic systems cause negative transfer in Indonesian students in realizing *liaison, enchaînement,* and *élision*. This negative transfer makes Indonesian speakers apply their L1 knowledge in French. This is also emphasized by the statement of Kranke & Christison (1983) in Richards & Renandya (2002) that the influence of the L1 phonological system on L2 acquisition is significant and greater than that of other systems. Indonesian clauses provide clear boundaries, especially between words (Muslich, 2008). Language learners, such as FLE students, should be able to change their habits in articulating and applying prosody or rules related to other sound systems different from L1 (Wachs, 2011 in Xi, 2019).

The realization of *liaison* depends on the cohesion of W1 and W2. The higher the level of cohesion between the two, the greater the possibility that the two words are always pronounced connected (Léon, 2011 in Mårtensson, 2012). According to Bybee (2001), syntactic cohesion is the frequency of co-occurrence of W1 and W2. The LO contexts most often realized by Indonesian speakers are determiners (numerals/possessive adjectives) + nouns and subject pronouns + verb, and for LF, it is *c'est* pattern. These are

also the contexts most often realized by FLE students from other L1s. In addition to confirming that these contexts have a high frequency of co-occurrence in learning French, these contexts also mean the ones most often encountered by FLE students. In other words, exposure or input to these three phonological phenomena influences the realization of all three. However, this study shows that the realization of Group II, which has a more significant length of study and is assumed to be more exposure to French, does not make the realization better. The length of exposure alone is not too significant. However, the quality of exposure rich in using the three phenomena, e.g., communication with native speakers or listening to the use of language by native speakers, is also determined.

With the same analogy, the frequency of occurrence and learners' input influence the EC and EV contexts most realized. The phrases *il y a, il/elle est*, and *il/elle a* have high productivity in French. Bybee & Thompson (1997) said that the higher the frequency of a structure use, the more the form is maintained or remembered. Relying on memory or recollection is proven, among others, by the pronunciation of *il y retrouvera* into *il y a retrouvera* by 60% of participants from both Groups I and II. The verbal phrase *il y a* is included in *figement*, an expression that is frozen and cannot be changed anymore, and its formation is complex to explain (Laks & Peuvergene, 2017), so it is very mastered by FLE learners. On the other hand, Delattre (1955) and Durand et al. (2011) stated that the length or number of syllables of W1 *(mot liaisonnant)* and W2 *(mot liaisonné)* affects the realization of *liaison.* From the analysis of W1 and W2, especially in *liaison* and *enchaînement* in this study, there is a tendency for polysyllabic W1 to have a slightly lower level of realization; for example, in *quelques‿amis, plusieurs‿article*, but on the other hand, monosyllabic W1 also does not always have a high level of realization such as *on‿a, une‿entreprise*, etc. It can be concluded that the length of the syllable is not very significant; some other factors, such as syntactic cohesion, are more dominant.

The carelessness factor in reading also affects the realization of *liaison, enchaînement*, and *élision*. The omitting, addition, substitution of W1 or W2 are found, for example the omitting of /i/ from the grapheme <y> in *ajoutez-y (liaison),* the addition of /a/ in *il y retrouvera → il y a retrouvera (enchaînement)*, *j'en ai prie → je n'ai pris (élision).* Some changes could be strategies for learners to overcome difficulties in realizing the phenomena, for example, the inversion verbal phrase, written *faut-il* but pronounced *il faut* by many Indonesian speakers, which does not require a connection. Many factors influence the realization of these three phonological phenomena. The analysis results show that among the three, *élision* is the most acquired phenomenon; conversely, EV is the least acquired phenomenon by Indonesian students. In addition to being marked by an apostrophe graphically, the nature of *élision* related to grammatical rules makes it more quickly acquired than other phenomena. In native speakers, there are no errors in using CL or CE or due to carelessness in reading. Although the level of realization of the LF category is not too high, its realization is often replaced by EC or EV, for example, *réussissent‿à* or *beaucoup‿à faire*, as well as for LI to EV, for example, *et‿a deux fils*.

Using these three phenomena is part of the natural spoken language for native speakers. Although there are changes mainly related to LO use, all three remain an important part of oral communication. Linking is not only related to meaning; for native speakers, it is also important for sound harmony and even distinguishes formal and informal registers (Kusrini et al., 2023). This relatively low level of mastery affects the learners' oral communication performance and the meaning to convey.

Conclusion

This study proves that the mastery of phenomena of connected speech, especially *liaison* and *enchainement*, in Indonesian FLE students is still very low. The realization is mainly influenced by their L1, which has significant orthographic and phonological differences with French. The results of this study also confirm the use of all three in oral communication from native speakers. This very large difference in the level of realization

implies the difficulties faced by the students in realizing good and effective communication in French.

The difference in the length of study, which means more time spent studying and interacting in French, does not prove a difference in the level of mastery. Moreover, their mastery is only dominated by structures with strong syntactic cohesion obtained mainly in the use of French in the classroom. The inappropriate use of CL and CE as well as the application of LI show a lack of understanding of all three in terms of concept. Many sequences of words that are not linked also show a lack of ability to segment speech and use the rhythm in French. For this reason, in addition to rich input on the use of *liaison, enchaînement*, and *élision*, explicit teaching is also needed for a deeper understanding along with practice and reinforcement. Furthermore, reviewing the curriculum by including more significant phonological aspects such as these three types of linking is also crucial.

This study only examines the domain of production. These results are expected to provide an insight for other research related to the three from other sides, for example in the domain of receptive and teaching.

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