

Readability, referential cohesion and interaction in texts of websites, textbooks and workbooks for French language learning

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Abstract

As Internet carries on its growing in an unceasing manner, more and more students are guided by their teachers to access language learning websites to support self-study. The present study examined some linguistic and interactional properties of French learning websites in terms of readability, referential cohesion and interaction. These properties were comparatively analysed with French language textbooks and workbooks. The results showed that the websites were close to workbooks in terms of the number of words and clauses used to teach/learn grammatical subjects. In order to examine readability and comprehensibility, the websites were analysed for lexical density, clause length and referential cohesion. The results revealed that they used less readable and comprehensible texts about lexical density and referential cohesion while they designed readable and comprehensible text regarding clause length. The websites were also analysed for involvement strategies and the use of imperative verbs to look for their interactional features. The results indicated that they showed strong interactional properties through involvement strategies but presented low density of imperatives. The findings of the present study also revealed that the texts of the websites were rather denatured electronic texts which seem to be a simple transmission of information in printed sources as such into digital environment.

Keywords: French, websites, readability, cohesion, interaction.

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1. Introduction

Becoming more and more important, self-learning is a socio-educational fact that has effect not only on education but also on several sectors of contemporary life. For a long time in the history of education, learners memorised and repeated without thinking or even understanding what they learned from the teacher who was considered both as source and generator of knowledge. Later, they found the opportunity to further expand their self-learning, when knowledge ceased to be teacher-dependent, through books and course notes published by teachers. In this new case, although they do not lose their quality of being a source, teachers are rather called facilitators for learners who wish to access knowledge.

With the advent of computers and the Internet in social life, learning process has moved away from the limitations of time (school hours) and space (classrooms). A new world of knowledge where teachers or domain specialists share their knowledge and experiences is born. The Internet, as new common space of learning and knowledge, has increased the importance of self-learning and self-training. Nowadays, formal learning environments can also be found in several websites where they can be followed and reinforced through lectures and exercises. There are many websites for foreign language courses, especially for learning French.

When we look at websites to teach French, we notice that they are rather websites that present grammar topics to teach or reinforce them. Through their digital texts, these websites explain various grammar topics and give exercises.

2. Theoretical background

2.1. Printed texts/digital texts

Hypertexts are digital texts that differ from printed texts. While printed texts are typically linear, static and fixed-format texts that contain a limited amount of information (Henry, 2005; Kymes, 2005; Slatin, 1991; Sutherland-Smith, 2002), hypertexts are non-linear or multilinear texts, which are freer and more dynamic, with neither strict textual stylistic nor constraint on the amount of information available (Burbules & Callister, 1996; Henry, 2005; Kymes, 2005; Slatin, 1991; Sutherland-Smith, 2002). Information is linearly given in printed texts according to an almost canonical introduction–development–conclusion pattern while non-linear digital texts present a design that allows readers, thanks to hyperlinks, to navigate freely and synchronically or in desired order among texts. Sounds, images, graphics, videos and animations are also used as means of presentation in hypertexts where information content is not only reduced to texts (Altun, 2002).

Digital texts are more preferred than printed texts because of their ease of storage capacity, their structural flexibility and their wealth of access (Dillon, 1992). Morrison (2002) claims that the use of hypertexts has at least four advantages in learning: accessibility, renewability, adaptability and interactivity. Garcia and Arias (2000) indicate that since they make it possible to access references and use them more easily and quickly, computer-assisted tasks motivate students even more and thus, facilitate self-learning and the individualisation of the learning process.

Although it is argued that hypertexts make positive contributions to learning processes with rich means of presentation (Altun, 2002; Jonassen, 1986; Kearsley, 1988), their use in foreign language teaching and learning has also some disadvantages such as possible technical problems related to computer use, computer access opportunities that differ from one student to another, student differences in academic levels and individual needs (Morrison, 2002).

Moreover, as they are predisposed to be read on screen, hypertexts involve difficulties caused by the slowing down of the word recognition operation because of different fonts and the change of usual direction of eye movements from left to right due to animated pages. Reading in digital

environment also becomes more difficult by extratextual elements like keyboards, mouse and unusual types of texts (Gunes, 2010). Reading digital texts causes eye strain more than reading printed texts (Dillon, 1992). These difficulties could also increase the cognitive load of digital text readers (Noyes & Garland, 2003). Nielsen (1997) and Belisle (2004) state that screen reading is 25% slower than reading on paper. A kind of haste and impatience were also been observed among digital text readers. Morkes and Nielsen (1997) found that 79% of their participants did not read but scan web pages they encountered while only 16% of them did a word-by-word reading of these pages. The researchers concluded that those who read on screen tend to only scan the screen instead of reading it. These findings clearly show that reading digital texts requires more effort than reading printed texts (Kong, 2009).

In addition, texts used to teach grammar may be different from usual texts, which makes things even more complicated because these texts could often contain individual words, individual sentences or sentence pieces, individual groups of sentences or paragraphs (Lesikin, 2000). Moreover, layout properties such as headings, abbreviations, charts, bullets, italics and bolds differ from site to site. If teachers carefully evaluate each educational material that emerges online before using it, they could anticipate problems that students would encounter by using this material and intervene in time (Kong, 2009).

2.2. Readability

The readability of digital texts is generally measured by clause length and the frequency of difficult words. Kong (2009) points out that there is a general conception which considers that digital texts must contain few words and, moreover, the least difficult words. Concerning the difficulty level of text, the proportion of lexical words in relation to the total number of clauses is another element as important as the number of words and the frequency of difficult words. The calculation of the clauses could provide a more accurate measure compared to the calculation of sentences because they can include not only one but more than one clause.

Halliday (1989) points out that spoken language and written language have complexities of different levels. Spoken language offers an external and clausal complexity whereas written language is remarkable for its internal complexity. In one sentence, the number of clauses linked together by connectors refers to the external and clausal complexity while the proportion of lexical words in a clause indicates the internal complexity of written language. The notion of lexical density helps to understand this relationship. For Halliday (1993), lexical density is the measure of the density of information that lexical words compose by articulating themselves firmly with each other in a text. He uses the following example to illustrate this fact (1989, p. 61):

If you invest in a rail facility, this implies that you are going to be committed for a long term.

(Number of lexical words: 7; number of functional words: 13)

Investment in a rail facility implies a long term commitment

(Number of lexical words: 7; number of functional words: 3)

These sentences are different not only from the point of view of their clause length but also from their lexical charge. The first sentence contains two clauses related by the conjunction 'if' while the second sentence consists of only one clause. The lexical density is calculated by dividing the total number of clauses by the total number of lexical words.

According to this formula, the lexical density of the first sentence is 3.5 (7/2) while that of the second sentence is 7 (7/1). In other words, the second sentence is stronger than the first sentence in terms of lexical density. Halliday (1989) states that spoken language has a lower lexical density because it would imply more than one clause in a single sentence. The lexical density is higher in written language since there could be many lexical words in a single sentence.

2.3. Referential cohesion

The speech, whether written or oral, is not a set that is constituted by random juxtaposition of sentences. The comprehensibility of a discourse is closely related to the relevance of semantic, structural and logical links between sentences. A sentence in a discourse is perfectly understood, and ideally interpreted only in its relation to earlier and later sentences. Sentences that form a discourse are related to each other in various ways. For Halliday and Hasan (1976), the comprehensibility and the interpretation of a unit in a text are possible only by linking it to other textual units, which is called cohesion. In their work, they study cohesion under five headings: a) reference, b) substitution, c) ellipsis, d) conjunction and e) lexical cohesion. The present study will only focus on referential cohesion.

The reference can be defined simply as the replacement of a linguistic element by another linguistic or semantic element that precedes or follows it. The reference has two main parts: referent, an element to which one refers, or antecedent. The antecedent must previously pass somewhere in the speech so that the reference can be completely interpreted and without any problems.

There are two types of reference according to the order of referential elements: cataphora and anaphora. In the following utterance, the third person singular object pronoun 'l' refers to the proper name *Cecile* that follows it on the textual plane. The referent, namely the object pronoun, is used before, while *Cecile*, the element to which reference is made, comes after. As the referential element refers to a being that follows it, the direction of the reference is forward and this is called cataphora.

*Quand je l'ai rencontrée, **Cecile** disputait violemment avec un chauffeur de taxi dans la rue.*

'When I met **her**, **Cecile** was arguing fiercely with a taxi driver in the street'

In the utterance below, the third person singular subject pronoun, *Elle*, refers again to *Cecile* that precedes it. *Elle* is referent while *Cecile* is the antecedent of this referent. Since the referential element refers to a being that precedes it, the direction of the reference is backward and this is called anaphora.

*J'ai emmené **Cecile** à l'aéroport ce matin. **Elle** était en retard.*

'I took **Cecile** to the airport this morning. She was late'

2.3.1. Pronominal anaphora

Pronominal substitution is an indispensable subject for anaphora. Use of pronouns avoids the excessive repetition of nouns and noun phrases and thus, prevents the text from becoming difficult in a formal and stylistic sense. The third person singular and plural pronouns have been particularly targeted by anaphoric reference studies.

2.3.2. Nominal anaphora

Anaphoras which are constructed with definite articles and demonstrative and possessive adjectives appear in this group.

*Un pianiste s'est présentée sur la scène; **le malheureux pianiste** devait savoir qu'il aurait du mal à convaincre (Le Pesant, 2002)*

'**A pianist** appeared on the stage; **the unfortunate pianist** had to know that he would have trouble convincing'

*Un pianiste s'est présentée sur la scène; **le malheureux musicien** devait savoir qu'il aurait du mal à convaincre (Le Pesant, 2002)*

'**A pianist** appeared on the stage; **the unfortunate musician** had to know that he would have trouble convincing'

2.4. Interactional strategies

In order to examine interactional properties of texts in the textbooks, workbooks and websites, some criteria were determined to be based on following Kong (2009)'s study: use of involvement/detachment strategies and imperatives verbs.

2.4.1. Involvement/detachment

Considered as a mixed form of spoken and written language, computer-mediated communication has been an area of study whose main focus was to understand whether spoken language or written language dominates in digital environment.

Spoken language and written language have differences. Chafe (1984) and Chafe and Danielewicz (1987) argue that differences between spoken and written language result from various relationships and levels of involvement and detachment between speakers and hearers.

According to Chafe (1985), the main characteristic of spoken language is the use of involvement strategies which are divided into three: self-commitment of the speaker (ego involvement), commitment of the speaker and the interlocutor (involvement with the listener) and speaker engagement with the topic (involvement with the subject matter). Ego involvement involves first person singular (*je/me/moi*) and plural (*nous/notre*) in utterance while there are second person singular (*tu/te/toi*) and plural (*vous/votre*) in involvement with the listener. As for involvement with the subject matter, a judgement is found on the theme discussed in the utterance.

The main characteristic of written language is the use of detachment strategies such as nominalisation, passive voice and prepositional phrases. However, it must not be forgotten that spoken and written languages are not two sources completely separable and, once produced, they could feed each other (Kong, 2009).

2.4.2. Imperatives

Defined as mode which indicates that it is by ordering that the action must be performed (Vardar, 1998), the imperative designates two tenses (present and past). Imperative is used in French for the first person plural (*chantons*) as well as the second person singular (*chante*) and plural (*chantez*) (Riegel, Pellat & Rioul, 1994). In addition to order and defense, the imperative expresses advice, wish, supposition, etc. The following are examples for these values (Delatour, Jennepin, Leon Dufour & Teyssier, 2004; Dubois & Lagane, 2001):

Regardez ces fleurs, ne les cueillez pas (order)

'Look at these flowers, **do not pick** them'

Attention! Ne touchez pas a ca. C'est un produit dangereux (defense)

'Warning! **Do not touch** that. It's a dangerous product'

Ne vous-enervez pas. Attendez! (advice)

'**Do not get angry. Wait!**'

Passez de bonnes vacances (wish)

'**Have** a nice holiday'

The imperative mode could be built only from textual elements:

Remplacez l'expression de possession par le pronom relatif dont et faites une seule phrase (WB1)^a

^a WB1: Workbook no 1(see Appendix 2). Later in the text, TB1: Textbook no 1 (see Appendix 1) and WS1: Website no 1 (see Appendix 3).

'Replace the expression of possession by the relative pronoun *dont* and **make** a single sentence'

Reliez les elements suivants en utilisant un pronom relatif (WB3)

'Link the following items using a relative pronoun'

As it is a matter of following speaker's and hearer's activities at the time of the conversation including extralinguistic ones and to organise exchange of words between them and as oral communication is more interactive compared to written one, it may be that the imperative could be used more in oral language than in written language. Imperative sentences would guide readers in their interpretation of text (Biber, Johansson, Leech, Conrad & Finegan, 1999). Following utterances, organising them and guiding readers through interaction are some other functions of imperative sentences. Hyland (2002) indicates that the directives can be classified according to their levels of constraint and imposition. Cognitive acts are thus the most restrictive and imposing directives in which readers are forced to a certain way of thinking. Physical acts are the less imposing directives where readers are asked to operate from a directive as in *remplacez l'expression de possession par le pronom relatif*. The least imposing directives are textual acts where readers are guided to other sections of a text.

3. Methodology

The corpus of this study consists of 14 websites to teach French as well as 10 textbooks and workbooks of French chosen to compare them with websites (see Appendices 1, 2 and 3). Textbooks are used to teach French in classroom while websites focus on self-learning and self-training. Workbooks are likely to support both school learning and self-training.

Relative pronouns in French textbooks and workbooks as well as on websites were chosen as subject of the corpus. French students generally have problems in learning and acquiring French relative pronouns, which is the reason for choosing this topic. Syntactic differences of Turkish and French seem to be the main cause of these problems. The expression 'pronoms relatifs' (relative pronouns) was typed in the Google search engine and the first websites that came were chosen for study. Among these websites, those were thought to present relative pronouns satisfactorily were included in the corpus. For textbooks, updated editions, especially those close to and after 2000, were put into the corpus as possible. As for workbooks, they were included in the corpus because they are known, used and proposed by French teachers.

The present study focused on language use for presenting and teaching relative pronouns by French language teaching websites as well as by textbooks and workbooks of French. Explanations given in a language other than French and examples were left out of analysis. The three sources were first analysed for readability in a comparative way in terms of lexical density and clause length developed by Halliday (1989). Then, texts of the sources were examined for cohesive elements. Referential cohesion was particularly targeted in the study. Finally, the sources were then examined for interaction following Chafe's (1985) engagement and detachment strategies and the use of imperative verbs.

4. Results and discussion

4.1. Readability

The workbooks had more words than the websites and textbooks. As can be seen in Table 1, the average number of words is 189, 137 and 64, respectively for the workbooks, websites and textbooks. Sentences showed a similar distribution. The workbooks included, on average, 66.58 sentences while the websites had 53.46 and the textbooks 25.58.

Table 1. Number of words and clauses

	Textbooks (n = 10)	Websites (n = 14)	Workbooks (n = 10)
Number of words	640	1918	1891
Average words	64	137	189
Number of clauses	258.50	748.50	665.80
Average clauses	25.85	53.46	66.58

The numbers of words and sentences seem to be directly proportional to how much place the sources in the corpus give to grammatical exercises. It can be deduced from this that the workbooks gave the most room to grammar exercises and that the textbooks had fewer exercises than the websites.

Grammar explanations in the textbooks seem to be given not based on an explicit grammar where the purpose of the grammar is the grammar itself but with a rate by which communicative tasks could be performed. Fewer words and sentences in the textbooks compared to the workbooks and websites can be explained by this implicit grammar design of the textbooks.

The numbers of words and sentences that the websites used for grammar explanations were close to those of the workbooks, which might suggest that these websites gave as much place as the workbooks for teaching and learning of grammar. Therefore, with these characteristics, the websites seem to be on course for becoming as important as the workbooks with regard to teaching of grammar topics.

Lexical density is used to calculate the ratio of lexical words to the number of clauses. There is an inversely proportional relation between lexical density and the density of text used for linguistic/grammatical explanations. In other words, the readability and comprehensibility of a text decrease as lexical density increases. As can be seen in Table 2, lexical density of the websites was higher (4.1) than the textbooks and workbooks (3.30 for each).

Table 2. Lexical density and clause length

	Textbooks (n = 10)	Websites (n = 14)	Workbooks (n = 10)
Lexical density	3.30	4.10	3.30
Clause length	78	176.00	209.00
Average clause length	7.80	12.57	20.90

Textbooks and workbooks are usually published by same publishing houses and designed to complement each other, which could explain the identical rate of lexical density of the textbooks and workbooks. These results showed that the websites' readability and comprehensibility were more difficult than those of the textbooks and workbooks. Some examples of lexical density in the textbooks, workbooks and websites are as follows:

On utilise dont quand le relatif est complement d'un verbe construit avec de (TB4)

Number of lexical words: 6

Number of clauses: 2

Lexical density: 3

Completez les phrases par le pronom qui convient precede d'une proposition, si cela est necessaire (WB3)

Number of lexical words: 8

Number of clauses: 2

Lexical density: 4

Les pronoms relatifs servent a relier deux phrases pour n'en faire qu'une (WS1)

Number of lexical words: 7

Number of clauses: 1

Lexical density: 7

Clause length, like lexical density, is one of the factors that have an influence on the readability and functionality of texts where linguistic/grammatical explanations are given. The results of this study showed that sentences in the workbooks were longer (20.90) than those in the websites (12.57) and textbooks (7.80) (see Table 2).

These findings showed that the workbooks, which provided texts that were comprehensible and readable in terms of lexical density, did not have the same success with clause lengths. Texts in the textbooks can be said to be about three times easier and more comprehensible than the workbooks. As for the websites, regarding readability and comprehensibility, they provided texts more difficult than the textbooks but easier than the workbooks. Here are some examples of clause length for the workbooks, websites and textbooks:

Dont remplace un complement precede de la preposition de, il est complement d'un nom, d'un verbe, d'un adjectif (WB1)

Number of lexical words: 9

Number of functional words: 10

Total: 19

La subordonnee relative est une proposition complement du nom ou du pronom (WS6)

Number of lexical words: 7

Number of functional words: 5

Total: 12

Les propositions introduites par qui, que, ou sont appelees propositions relatives (TB3)

Number of lexical words: 6

Number of functional words: 2

Total: 8

4.2. Referential cohesion

Table 3 shows frequency of referential cohesion for the textbooks, workbooks and websites. As can be seen, the use of referential cohesion in the websites was more frequent than that in the workbooks (approximately 70 and 46, respectively) while this rate was about one-third in the textbooks (18).

Table 3. Referential cohesion

	Textbooks (n = 10)	Websites (n = 14)	Workbooks (n = 10)
Number of words (referential cohesion)	258(18)	748(70)	665(46)
Average referential cohesion	14.33	10.68	14.45

Use of referential cohesion is of course related to the number of words in textbooks, workbooks and websites. In other words, the number of words and referential cohesion are directly proportional. When taken into account in proportion to the number of words in the textbooks, workbooks and websites, it can be seen that referential cohesion in the textbooks and workbooks was close (respectively, 14.33 and 14.45, respectively) while that in the websites was lower than referential cohesion of the textbooks (10.68). As the creation of coherent and cohesive texts is achieved by referential cohesion, there is a directly proportional relationship between the use of this cohesion and the comprehensibility of text. From this perspective, it is possible to say that the texts in the websites were not very comprehensible as those in the textbooks and workbooks in terms of referential cohesion.

When looking at cohesive reference indicators separately, we see that pronominal anaphora was largely the most used type of anaphora. Table 4 shows that pronominal anaphora was more than six times more frequent than nominal anaphora (116 and 18, respectively).

Table 4. Distribution of anaphoras

	Textbooks (n = 10)	Websites (n = 14)	Workbooks (n = 10)	Total
Pronominal anaphora	17	58	41	116
Nominal anaphora	1	12	5	18

Following are examples of pronominal and nominal anaphoras, respectively.

Qui remplace un mot (personne ou chose) place avant lui; il est sujet du verbe qui suit (WB8)

*Un pronom relatif represente et remplace son antecedent place generalement devant lui. Il prend le genre et la personne de **cet antecedent** (WS12)*

In French grammar system, there is no pronoun that distinguishes living beings from non-living beings like it in English. Third person singular and plural pronouns in French refer both to living beings and non-living beings. The presence of many pronominal anaphoras can be explained by this characteristic of French. Thus, when looking at referential cohesion in the textbooks, workbooks and websites, it is observed that all third person singular and plural pronouns were used only in grammatical explanations and that third person singular and plural pronouns referring to persons or living beings had no occurrences.

Table 5. Distribution of anaphoric pronouns

	Textbooks (n = 10)	Websites (n = 14)	Workbooks (n = 10)	Total
Il/ils	6	34	12	52
Elle/Elles	0	3	0	3
Lui/Eux	0	2	4	6
Le/La	2	2	4	8
Les	1	-	1	2
Autre	0	1	4	5

Table 5 shows that masculine forms of the third person singular (il) and plural (ils) pronouns were more used (52). The reason for this would be related to masculinity of the expression 'relative pronouns' as a grammatical gender which is the subject of this study. Very little use was made of feminine forms of the third person singular (elle) and plural (elles) pronouns and the third person plural object pronoun (les). Following are examples of the third person singular (il) and plural (ils) pronouns that are used as grammatical gender respectively in the textbooks, workbooks and websites:

Les pronoms relatifs permettent d'ajouter des informations sur le nom qu'ils remplacent (TB5)

On ne peut pas utiliser en meme temps un pronom relatif et un autre pronom. C'est logique: ils representent tous les deux le meme mot (WB6)

Le pronom relatif dont peut avoir differentes fonctions. Il remplace des personnes, des animaux ou des choses (WS12)

Relative pronouns constitute one-third of the total occurrence of pronominal anaphoras. Table 6 shows types of relative pronouns used for grammar explanations and exercises. As can be seen, *qui* and *que* were the most used relative pronouns while *ou* was never used and *dont* was used only once.

Table 6. Distribution of relative pronouns

	Textbooks (n = 10)	Websites (n = 14)	Workbooks (n = 10)	Total
Qui	4	11	14	29
Que	4	5	1	10
Ou	–	–	–	–
Dont	–	–	1	1

The relative pronouns *qui* and *que* were mainly used for descriptions. It can be thought that their function of description allows them to be more employed compared to other relative pronouns. Two examples follow for this function of *qui* and *que*:

Le pronom relatif relie deux enonces en evitant la reprise du nom ou du pronom qui le represente (WB1)

Qui et que sont places juste derriere le mot qu'ils remplacent (TB4)

Pronouns that refer to persons were used very little in the corpus. As can be seen in Table 7, the second person singular pronoun *tu*, the second person singular direct and indirect object pronoun *te* and the second person singular possessive adjective *ton* were never used. The second person plural subject pronoun *vous*, the second person plural direct and indirect object pronoun *vous* and the second person plural possessive adjective *votre* were preferred in all sources. These pronouns were not observed in description area but in instructions of exercises.

Table 7. Distribution of subject/object pronouns and possessive adjectives

	Textbooks (n = 10)	Websites (n = 14)	Workbooks (n = 10)
Vous/vous/votre	3	8	3
Tu/te/ton	–	–	–

Here are three examples of *vous* in the textbooks, workbooks and websites:

*Completez ces phrases comme **vous** le desirez (TB1)*

Faites des phrases selon le modele en exprimant vos gouts personnels (WB10)

*Testez **votre** comprehension! (WS1)*

In terms of addressing to users, it is known that websites are more informal than printed sources. Thus, while it is normal for textbooks and workbooks to prefer *vous* to *tu*, it is thought that the similarity of the websites to the textbooks and workbooks with respect to *vous* preference yields information worth noting.

4.3. Interaction

4.3.1. Involvement/detachment strategies

Table 8 shows the frequency of involvement strategies in the textbooks, workbooks and websites. As can be seen, among the strategies developed by Chafe (1985), *involvement with the listener* was the most used. The websites used this strategy 10 times while the workbooks used it seven times. *Involvement with the subject matter* was not used in any source of the corpus.

Table 8. Involvement strategies

	Textbooks (n = 10)	Websites (n = 14)	Workbooks (n = 10)	Total
Ego involvement	0	3	0	3
Involvement with the listener	0	10	7	17
Involvement with the subject matter	–	–	–	–
Total	0	13	7	20

It can be seen that the textbooks did not use any involvement strategies neither in grammar explanations nor in instructions and they preferred a language devoid of features for addressing to person. The assumption that the textbooks would be used in class by the supervision and control of teachers who would also give and explain grammar points and instructions can be considered as an explanation for this lack. Following are examples of involvement with the listener in the textbooks and websites.

Pour faire vos phrases, vous pouvez choisir parmi les elements ci-dessous ou inventer vous-memes (WB1)

Savez-vous employer les pronoms relatifs qui conviennent? (WS3)

As for ego involvement, it was used only by the websites as first person plural pronoun (3). Following are examples of ego involvement:

Prenons un exemple (WS5)

Examinons (WS12)

According to Chafe (1985), the use of detachment strategies distinguishes written language from spoken language. Table 9 shows the distribution of detachment strategies used in the sources. As can be seen Table 9, prepositional phrases were the most used detachment strategy whereas nominalisation had no occurrence. The workbooks and websites employed about three times more prepositional phrases (155 and 140) than did the textbooks (53). As for passive voice, they occurred more than five times less in the textbooks (4) and more than 10 times less in the workbooks (2) compared to the textbooks (25).

Table 9. Detachment strategies

	Textbooks (n = 10)	Websites (n = 14)	Workbooks (n = 10)	Total
Prepositional phrase	53	140	155	348
Passive voice	4	25	2	31
Nominalisation	0	0	0	0

Websites would be expected to be more informal and use less detachment strategies than textbooks and workbooks which are expected to involve rather written language features and present more academic type texts. However, these findings showed that this was not the case. The websites tend to include nearly as many academic type texts as the workbooks and more than the textbooks. Based on these findings, it can be observed that the texts of the websites, instead of being rich

hypertexts, tend to be rather denatured electronic texts which are created by simply transforming information in printed sources as such into digital environment.

In terms of interaction, sources in the corpus were also used imperative verbs as other means of interactivity besides involvement strategies.

4.3.2. Imperatives

Imperative verbs are not found in grammar explanations but only in exercise instructions. The findings concerning imperative verbs are interesting. For example, the websites that used more involvement strategies than the textbooks and workbooks do not seem to prefer imperative verbs. Indeed, only 10 instructions with imperative verbs were found in the websites concerning relative pronouns. With these features, the websites seem to prefer presenting grammar explanations to users with examples that support them with exercises. As can be seen in Table 10, the workbooks used the most imperative verbs (120) and the textbooks employed about four times more imperative verbs than the websites (37).

Table 10. Distribution of imperatives

	Textbooks (n = 10)	Websites (n = 14)	Workbooks (n = 10)	Total
Imperatives	37	10	120	167

When looking at the distribution of imperative verbs, it can be observed that the workbooks and textbooks are close to each other with regard to verb diversity, although the former used four times more imperative verbs than the latter (22 and 17 different verbs, respectively). The websites had only seven different verbs. As can be seen from Table 11, *completer* (complete) and *faire* (make, do) were verbs to which all three sources resorted most often in imperative form. If a closer look is taken at the Table 11, it can be easily seen that *relier* (link, connect), *reunir* (gather), *transformer* (transform), *dire* (say), *repondre* (answer) and *observer* (observe) are other verbs that the textbooks and workbooks dominantly used in imperative. The reason why this is so can be understood when realising that these are verbs that are consistent with operations intrinsically related to the subject of relative pronouns.

Table 11. Distribution of the most used imperative verbs

	Textbooks (n = 10)	Websites (n = 14)	Workbooks (n = 10)	Total
Completez	7	1	48	56
Faites	5	2	12	19
Reliez	0	0	13	13
Dites	1	0	9	10
Transformez	0	0	9	9
Repondez	3	0	5	8
Observez	5	0	0	5
Reunissez	3	0	0	3
Associez	0	0	2	2
Continuez	0	0	2	2
Autre	13	7	20	40

Interestingly, verbs which would be particular to websites like *cliquer* (click) or *telecharger* (download) were used very little, if any. Cliquer appears in imperative mode only twice in second person singular (*clique*).

When examining the types of imperative verbs, it can be seen that they were used as the most physical acts. As can be seen in Table 12, textual acts and cognitive acts were used very little, if any. The websites had physical acts (10) more than three times less than the textbooks (36) and more than

10 times less than the workbooks (119). These findings reveal that the websites do not ideally include an interactive nature which would be consistent with their channel and they seem to have problems in creating more informal and friendly environment.

Table 12. Distribution of imperative verbs according to their functions

	Textbooks (n = 10)	Websites (n = 14)	Workbooks (n = 10)	Total
Textual acts	1	–	–	1
Physical acts	36	10	119	165
Cognitive acts	–	–	1	1
Total	37	10	120	167

Used as physical act, *completer* is approximately one-third of all verbs in imperative. *Faire, relier, dire* and *transformer* are other examples of the most used physical acts.

Completez les quinze phrases par le pronom relatif qui convient (WS3)

Faites une seule phrase en utilisant où, qui ou que (TB6)

Reliez les phrases par le pronom qui convient (WB3)

Transformez les phrases avec dont (WB5)

Next are two unique occurrences of textual and cognitive acts:

Reprenez l'exercice 4 du document B d'Agir-reagir (TB5)

Reflechissez (WB1)

5. Conclusion

Compared to the workbooks and websites, the textbooks seem to use fewer words and clauses to teach grammatical points about relative pronouns. Learners in an educational context where grammar continues to be explicitly taught would have a feeling of inadequacy in language classes where grammatical subjects are only implicitly presented in textbooks. The support of workbooks would be important in removing this feeling of inadequacy. Designing French textbooks to increase learners' sense of self-sufficiency in countries with a strong tradition of explicit grammar would go a long way towards making teaching/learning effective. This study has shown that websites are getting closer to workbooks in terms of the number of words and clauses used to teach/learn grammatical subjects about relative pronouns. Thus, it would be possible to think that with workbooks, teachers could also use websites to eliminate the feeling of insufficiency in learners that create grammatical subjects implicitly presented in textbooks.

In order to examine readability and comprehensibility, the sources in corpus were analysed for lexical density, clause length and referential cohesion. Although weak in terms of the number of words and clauses included in grammar explanations, the textbooks seem to be stronger than the websites and workbooks regarding textual readability and comprehensibility. The workbooks had readable and comprehensible texts relating to lexical density and referential cohesion but made use of less readable and comprehensible texts concerning clause length. As for the websites, they got closer to the workbooks with regard to the part of grammatical explanations. They used less readable and comprehensible texts about lexical density and referential cohesion while they designed readable and comprehensible text regarding clause length. Thus, when they want to support their courses, teachers should be aware of shortcomings of these books and websites in terms of readability and comprehensibility. They should also make effective interventions so that these sources become even more practical and useful. The websites and workbooks could particularly be integrated because of their lack in readability and comprehensibility.

The sources in corpus were also analysed for involvement strategies and the use of imperative verbs to look for the degree of their interactional features. Although they offer mid-level interactional properties through the use of imperatives, the textbooks seem to have a weak system of interaction by the rate of involvement strategies. It is important to note that they did not use any involvement strategy. The workbooks offer middle-level interactional features through involvement strategies while they have a rich level of interaction through the use of imperatives. As for the websites, they showed strong interactional properties through involvement strategies but presented low density imperatives. The websites and workbooks seem to be able to be integrated with regard to interactional properties as well.

But the websites need to solve a series of problems so that such integration can be ideally realised. For example, a general review could easily reveal that the websites in the corpus aiming to teach French are deprived of originality in presenting grammatical subjects that they seem to take from workbooks or textbooks by changing them little, if any.

In other words, far from being hypertexts rich in content, the texts of the websites seem to be rather denatured electronic texts which are only the transmission of information in digital environment as such in printed sources. The fact that verbs specific to digital environment such as **cliquer**, **glisser** and **telecharger** were used very little in the websites could give a clear idea of their nature to resume grammatical references as they are. Taking into account the above remarks, web designers should therefore make even greater efforts to produce original texts with high readability, comprehensibility and interactivity.

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Appendix 1: Textbooks

TB 1	Berger, D. & Spicacci, N. (2001)	Accord 1: Methode de francais (5th ed.). Paris: Didier
TB 2	Gallier, T. & Grand-Clement, O. (2004)	Belleville 2: Methode de francais. Paris: Cle International
TB 3	Girardet, J. & Pecheur, J. (2002)	Campus 1: Methode de francais. Paris: Cle International
TB 4	Monnerie-Goarin, A. & Sirejols, E. (1998)	Champion 1: Methode de francais. Paris: Cle International
TB 5	Baylon, C., Campa A., Mestreit, C., Murillo, J. & Tost, M. (2000)	Forum 1: Methode de francais. Paris: Hachette
TB 6	Merieux, R. & Loiseau, Y. (2008)	Latitudes 1: Methode De Francais. Paris: Didier
TB 7	Capelle, G. & Noelle G. (1998)	Reflets 1: Methode de francais. Paris: Hachette
TB 8	Flumian, C., Labascoule, J. & Royer, C. (2004)	Rond Point 1: Methode de francais. Paris: Editions Maison des Langues
TB 9	Menand, R., Berthet, A. & Kirizian, V. (2003)	Taxi ! 2: Methode de francais. Paris: Hachette
TB 10	Berger, D. & Spicacci, N. (2001)	Accord 1: Methode de francais (5th ed.). Paris: Didier

Appendix 2: Workbooks

WB1	Descotes-Genon, C., Morsel, M. H. & Richou, C. (1993)	L'exercisier. L'expression française pour le niveau intermédiaire. Grenoble: PUG
WB 2	(1992)	Exercons-nous. 350 Exercices de grammaire. Niveau supérieur 1. Paris: Hachette
WB 3	(1996)	Exercons-nous. 350 Exercices de grammaire. Niveau moyen. Paris: Hachette
WB 4	Akyuz, A. ve otekiler (2001)	Exercices de grammaire en contexte. Niveau avancé. Paris: Hachette
WB 5	Akyuz, A. ve otekiler (2000)	Exercices de grammaire en contexte. Niveau intermédiaire. Paris: Hachette
WB 6	Poisson-Quinton, S. ve otekiler (2003)	Grammaire expliquée du français. Débutant. Paris: CLE International
WB 7	Gregoire, M. & Thievenaz, O. (2003)	Grammaire progressive du français avec 600 exercices. Niveau intermédiaire. Paris: CLE International
WB 8	Boulares, M. & Frerot, J.-L. (1999)	Grammaire progressive du français avec 400 exercices. Niveau avancé. Paris: CLE International
WB 9	Gregoire, (1997)	Grammaire progressive du français avec 400 exercices. Niveau débutant. Paris: CLE International
WB 10	Gregoire, M., Thievenaz, O. & Franco, E. (2003)	Grammaire progressive du français avec 500 exercices. Niveau intermédiaire. Paris: CLE International

Appendix 3: Websites

WS1	Bonjour de France	http://www.bonjourdefrance.com/n8/cdm2.htm
WS2	Centro Linguistico di Ateneo	http://claweb.cla.unipd.it/home/smazurelle/dynamots/a1/m3/gr_relatifs.html
WS3	Espace Français	http://www.espacefrancais.com/quiz/divers/pronoms-relatifs/quiz.htm
WS4	Frances para todos en Utebo	http://francesparatodosenutebo.blogspot.com/2010/03
WS5	Français Facile	http://www.francaisfacile.com/exercices/exercice-francais-2/exercice-francais-41289.php
WS6	Français Langue et Culture	http://www.orthogram.com/la_proposition_relative.html
WS7	Global French Language	http://www.french.ch/Lecon_21_pronoms_relatifs_complet.htm
WS8	Intef	http://platea.pntic.mec.es/cvera/hotpot/relatifs_qui_que.pdf
WS9	Lisgar Alumni Association	http://www.lisgar.net/zamor/Fran11/relatifs.html
WS10	Ortholud.com	http://www.ortholud.com/grammaire/proposition_subordonnee_relative/index.php
WS11	Synapse Development	http://www.synapse-fr.com/manuels/P_RELAT.htm
WS12	tolearnfrench.com	http://www.tolearnfrench.com/exercices/exercice-french-2/exercice-french-31128.php
WS13	University of Calgary	http://fis.ucalgary.ca/Elohka/qui_que.htm
WS14	The University of Hong Kong	http://www.french.hku.hk/starters/structures/07_relatifs.htm