قابلية تطبيق مبادئ تكوين المنحوتات في اللغة الإنجليزية عبر اللغات: دراسة حالة للمنحوتات في اللغة الفرنسية

Cross-Linguistic Applicability of English Blend Formation Principles: A Case Study of French Blends

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الكلمات المفتاحية: النحت، مبادئ تكوين المنحوتات، المنحوتات الفرنسية، علم الصرف النبري، تكوين الكلمات

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ملخص

تبحث هذه الدراسة في قابلية تطبيق مبادئ تكوين المنحوتات في اللغة الإنجليزية على المنحوتات في اللغة الفرنسية، ساعيةً بذلك إلى سدّ ثغرة ملحوظة في البحوث الصرفية الفرنسية. فبينما حظيت المنحوتات في اللغة الإنجليزية بدراسة مستفيضة، وخضعت لمبادئ راسخة - تتعلق أساسًا بنسبة مساهمة الكلمة الأصلية والخصائص النبرية - لم تحظَ المنحوتات في اللغة الفرنسية بتحليل منهجي كافٍ. وبالاستناد إلى أطر تكوين المنحوتات الأساسية في اللغة الإنجليزية التي اقترحتها أبحاث سابقة، تُطبّق هذه الدراسة أساليبها التحليلية الكمية والنبرية على مجموعة من خمسة عشر منحوتاً فرنسيًا. ويستخدم التحليل التمثيل الصوتي باستخدام رموز الأبجدية الصوتية الدولية إلى جانب جدول ترميز توضيحي مُعدّل لتقييم مدى قدرة مبادئ اللغة الإنجليزية على التنبؤ ببنية المنحوت في اللغة الفرنسية. تشير النتائج إلى أن الخصائص النبرية - ولا سيما التوافق بين طول المنحوت وطول الكلمة الأصلية الأطول، ودور حدود المقاطع في تحديد موقع نقطة الفصل - تُظهر قابلية تطبيق متوسطة إلى عالية في اللغة الفرنسية. في المقابل، يُظهر مبدأ أن الكلمة الأصلية الأقصر تُساهم بشكل أكبر في المنحوت قابلية تطبيق أقل بكثير. علاوة على ذلك، تصبح المبادئ القائمة على النبر غير قابلة للتطبيق نظرًا لثبات النبر في المقطع الأخير في اللغة الفرنسية. تُحدد الدراسة أيضًا ثلاث خصائص ناشئة قد تكون خاصة بتكوين المنحوتات في اللغة الفرنسية، بما في ذلك ميل الكلمة الأصلية الأطول إلى أن تكون المُساهم الأكبر. تُشير هذه النتائج إلى أنه في حين تُوفر مبادئ تكوين المنحوتات في اللغة الإنجليزية إطارًا تحليليًا مُثمرًا للغة الفرنسية، فإن الخصائص اللغوية الخاصة تتطلب مبادئ مُخصصة لتقديم وصف شامل لتكوين المنحوتات في اللغة الفرنسية.

Abstract

This study investigates the cross-linguistic applicability of English blend formation principles to French blends, addressing a notable gap in French morphological research. While blending in English has been extensively studied and governed by well-established principles — primarily concerning the proportion of source word contribution and prosodic properties — French blending (referred to as *amalgamation* or *mot-valise*) has received comparatively limited systematic analysis. Drawing on foundational English blend formation frameworks proposed by previous research, this study applies their quantitative and prosodic analytical methods to a corpus of 15 French blends. The analysis employs phonemic representation using IPA symbols alongside an adapted illustrative coding table to assess the extent to which English principles predict French blend structure. Results indicate that prosodic properties — particularly the correspondence between the length of the blend and that of the longer source word, and the role of syllable boundaries in determining breakpoint location — demonstrate moderate to high applicability in French. Conversely, the principle that the smaller source word constitutes the larger contributor to the blend shows considerably lower applicability. Furthermore, stress-based principles are rendered inapplicable due to the French fixed final-syllable stress assignment. The study additionally identifies three emergent properties potentially specific to French blend formation, including the tendency for the larger source word to be the greater contributor. These findings suggest that while English blend formation principles offer a productive analytical framework for French, language-specific properties necessitate tailored principles for a comprehensive account of French blending.

1. Introduction

English Blending is a productive word-formation process that produces a new word by joining some parts of other words, mostly two words, e.g., *brunch* <breakfast + lunch>, *motel* <motor + hotel>, and *smog* <smoke + fog>.

English blends were "thought to be unpredictable and irregular" (Bauer, 1983, p. 225) (Marchand, 1969), but recent research (Bat-El & Cohen, 2012) (Bauer, 2012) has shown that their formation is regular and predictable, which means that the structure of the blend can be decided by applying some linguistic principles.

These principles can be related to the orthographic structure of the blend, the prosodic structure of the source words (henceforth, in tables and figures, SWs), and of the blend, or to the formal similarity holding between the source words on one side, and that holding between the source words and the blend.

Most of these principles have been successful in predicting the structure of the English blend, for instance, in determining the amount of formal contribution from the source words to the blend or in determining where the breakpoint in the blend occurs.

The process of blending also exists in other languages, such as French, but it has not received a similar interest in the field of linguistic research. Blends in French have been investigated, but have not been examined systematically as they have in English. The major interest has been in their classification or relation to other processes of word formation. Besides, English studies about blending in French do not analyse the French blend or attempt to propose principles for its formation. Accordingly, no clearly stated blend formation principles can be recognised in French literature.

Hence, why not implement the English blend formation principles in investigating the structure of blends in French? This study is concerned with testing the already existing English blend formation principles against data from French in order to find out the applicability of these principles to blend formation in these two languages. French is a different language with a different linguistic system. It is an Indo-European language that is historically, but not very closely, related to English. Hence, it will be interesting to analyse French blends in terms of English principles to explore whether there exists a linguistic resemblance or similarity that might be arrived at.

Given this background, this study asks the following question:
Which principles are more applicable in predicting the structure of the blend in French, and what is the degree of this applicability?

After the introduction in section 1, this study comprises four sections. Section 2 is an overview of the studies that have been concerned with setting principles for analysing the English blend structure. Section 3 explains the data collection and the methodology of the study. Section 4 presents an overview of French blends and discusses the application of the English blend formation principles to blends in French. Finally, section 5 concludes the study by summarising all the results arrived at from the discussions in section 4.

2. English blend structure

Blending is generally recognised as the process of combining the first part of one word and the second part of another (Booij, 2012, p. 20). This definition seems to be so general. But other definitions have been somewhat specific in defining the structure of the blend. For instance, a blend can be defined as "a new lexeme" (Bauer, 1983, p. 234) produced by "joining two or more forms" where at least one of them is shortened (Algeo, 1991, p. 10). More specifically, a blend is formed "by fusing parts of at least two other source words of which either one is shortened in the fusion and/or where there is some form of phonemic or Orthographic overlap of the source words" (Gries, 2004, p. 639). In the latter two definitions, specifying the blend structure, some criteria are considered. For instance, in the first definition, the process of shortening is involved in forming the blend. The second definition adds the process of overlap to shortening. Yet these definitions do not specify exactly how much the amount of shortening is and where the overlap takes place.

The English blend structure has been thoroughly investigated, and much research has been concerned with the principles that are at work when the blend is formed. Some studies have investigated the blend's structure in terms of the degree of shortening that applies to the source words. For instance, Algeo (1977) has categorised blends according to the type of cut and fusion within the blend constituents into: 1) blends with overlapping, e.g., *filmania* <fil*m* + *m*ania>, 2) blends with clipping, e.g., *foodoholic* <*food* + ~~alc~~*oholic*>, 3) blends with clipping and overlapping, e.g., *Californicate* <*Californ*~~ia~~ + *fornicate*>, and 4) blends with imperfect overlapping, e.g., *grudge* < *gru*tch + gre*dge*> (Algeo, 1977, pp. 49-53). Within the second category, Algeo (1977, p. 51) specifies that clipping takes place at morpheme boundaries, as in *dumbfound* < *dumb* + ~~con~~*found*> where con- is the clipped morpheme. In the fourth category of blends, Algeo (1977, pp. 53-4) explains that there is a kind of phonological similarity and resemblance between blend constituents, though not much detail has been provided about the role of phonology in deciding the overall structure of the blend. This could be due to the morphological perspective that Algeo considers about blends.

Two major criteria can be inferred from the definitions mentioned earlier: shortening together with the phonemic structure of the source words and of the blends. Shortening implies that both the size of the source words and that of the blends are to be taken into consideration. The phonemic structure implies that the prosodic properties can also be taken into consideration.

Most of the studies that have focused on specifying some principles for the English blend formation and how the blend structure is approached rely on these criteria, henceforth referred to in this study by the term 'principles'.

Hence, two major blend formation principles are considered in this study: the proportional contribution from source words and the prosodic properties of source words and blends.

2.1. The proportion of the contribution

This subsection reviews two major studies about the proportion that the source words lend to the blend and their role in deciding the blend structure. They are Kaunisto (2000) and Gries (2004).

In a short paper, Kaunisto (2000, p. 49) proposes a theory on structuring blends where he adopts a definition for blending that reflects his approach. Blending is 'a phenomenon in which two words are combined to form a new word, joining together orthographic, phonemic items of both source words.'

Kaunisto (2000) develops an approach mentioned by Bergström (1906) to investigate the quantity of contribution of each of the source words to the blend. This 'contribution' is important because Kaunisto (2000, p. 49) argues that "a certain amount of 'danger' or 'threat'" can be presented when items from the source words are deleted, thereby affecting the understandability of the resulting blend.

Kaunisto (2000, p. 49) specifies two categories of blends, one with overlap, e.g., *slanguage* <*slang* + *lang*uage> and the other with deletion, e.g., *tangemon* <*tange*rine + l*emon*>, but he assumes that in the process of blending two words, the natural tendency will be to preserve as much as possible from the shorter source word, leading to minimise the loss of information on the source word that is under "threat".

This tendency results in the proposal that:

> [t]he relation between the part of the shorter form represented in the final word and the entire source word is greater than (or equals) that between the part of the longer word in the final word and the entire longer source word, i.e., a greater percentage of the originally shorter source

word is retained in the blend.
(Kaunisto, 2000, p. 49)

But how is the length of the blend measured?

Kaunisto (2000, p. 49) measures the length of the source words and of the blend based on the number of orthographic units. Though he mentions the phonemic units, he does not rely on the phonemic length, justifying that there are several problems related to what is to be counted as one phoneme, with affricates and diphthongs as problematic cases.

Kaunisto's (2000) blend-length hypothesis is formulated in the following axiom:

"If X+Y=Z (where X and Y are the source words, and Z is the blend), then if x > y, then a:x < b:y."

And to explain how this formula works, he applies it to the blend *brunch* as follows:

X = breakfast, Y = lunch; A = br, B = unch; x (breakfast) = 9, y = (lunch) = 5,

a = 2, b = 4 (Kaunisto, 2000, pp. 49-50). Accordingly, *brunch* conforms to the axiom proposed by Kaunisto, where a:x < b:y, that is, the part that *lunch* contributes to the blend is bigger than the part that *breakfast* contributes to the blend.

But the drawback of this approach is that not all blends conform to this axiom, e.g., *Oxbridge*, *infotainment*, and *zebrule* (Kaunisto, 2000, p. 50).

Though his hypothesis does not work for some blends and does not, in fact, consider the phonemic contribution of the source words, his blend-length hypothesis can be considered as one of the factors that help decide where the breakpoint can occur.

Based on Kaunisto's (2000) quantitative analysis of blend structure, Gries (2004) also analyses the structure of blends on a quantitative basis, but this time, orthographically and phonemically.

Gries (2004) develops on Kaunisto's (2000) hypothesis when he puts it into a table where the source words' contribution to the blend is shown in detail with their percentages. Gries (2004) elaborates on Kaunisto's (2000) analysis, saying that it approaches only blend cases with a clear breakpoint, i.e., with no overlap; besides, it does not involve cases where the source words "contribute different portions of themselves."

Gries (2004, p. 650) gives an analysis of the blend *brunch* as an elaborating example of Kaunisto's analysis, as shown in Figure 1 below.

SW1: *breakfast*	e a k f a s t	$\Rightarrow {}^{7}/_{9}$ not in the blend = 77.8%

	b r	⇒ $^{2}/_{9}$ in the blend = 22.2%
SW2: *lunch*	u n c h	⇒ $^{4}/_{5}$ in the blend = 80.0%
	l	⇒ $^{1}/_{5}$ not in the blend =20.0%
breakpoint (no overlap)		

Figure 1. Gries's analysis of the blend *brunch*

Gries (2004, pp. 651-2) develops this analysis to include cases of overlap where the overlap takes place at the breakpoint and/or somewhere else, as shown in the following two figures with the case of the blend *fantabulous*. Gries (2004) analyses cases of the first type according to analysis 1 and of the second type according to analysis 2, as shown in Figure 2 and Figure 3 below, respectively.

SW1: *fantastic*	s t i c	⇒ $^{4}/_{9}$ not in the blend = 44.4%
	f a n t a	⇒ $^{5}/_{9}$ in the blend = 55.6%
SW2: *fabulous*	a b u l o u s	⇒ $^{7}/_{8}$ in the blend = 87.5%
	f	⇒ $^{1}/_{8}$ not in the blend =12.5%
breakpoint with overlap		

Figure 2. Analysis 1 of the blend *fantabulous*

SW1: *fantastic*	s t i c	⇒ $^{4}/_{9}$ not in the blend = 44.4%
	f a n t a	⇒ $^{5}/_{9}$ in the blend = 55.6%
SW2: *fabulous*	f a b u l o u s	⇒ $^{8}/_{8}$ in the blend = 87.5%
		⇒ $^{0}/_{8}$ not in the blend = 0%
	overlap	breakpoint

Figure 3. Analysis 2 for the blend *fantabulous*

These two figures show that in both ways of analysis, Kaunisto's (2000) blend-length hypothesis is borne out. Both analyses show that the shorter source word is the bigger contributor to the blend, but Gries (2004, p. 651) gives cases where the results are contradictory, as shown in the following two analyses of the blend *chunnel* in Figure 4 and Figure 5 below, respectively.

SW1: *channel*	a n n e l	⇒ $^{5}/_{7}$ not in the blend = 71.4%
	c h	⇒ $^{2}/_{7}$ in the blend = 28.6%
SW2: *tunnel*	u n n e l	⇒ $^{5}/_{6}$ in the blend = 83.3%
	t	⇒ $^{1}/_{6}$ not in the blend =16.7%

Figure 4. Analysis 1 of the blend *chunnel*

SW1: *channel*	a	⇒ $^{1}/_{7}$ not in the blend = 14.3%
	c h n n e l	⇒ $^{6}/_{7}$ in the blend = 85.7%
SW2: *tunnel*	u n n e l	⇒ $^{5}/_{6}$ in the blend = 83.3%
	t	⇒ $^{1}/_{6}$ not in the blend =16.7%

Figure 5. Analysis 2 of the blend *chunnel*

The analysis in Figure 4 supports Kaunisto's (2000) hypothesis, i.e., the shorter source word is the bigger contributor to the blend, but the analysis in Figure 5, with a strong orthographic overlap, shows that the hypothesis is not at work, i.e., the shorter source word is not the bigger contributor to the blend.

Based on these analyses and the drawback in Kaunisto's (2000) hypothesis, Gries (2004) proposes his improvement to this approach.

Gries (2004, pp. 653-4) devises a 'loglinear analysis' by means of which he determines the Orthographic and/ or phonemic contribution of each source word to the blend according to analyses 1 and 2 cited above. The analysis relies on the variables of 1) length where SW1=SW2, SW1>SW2, or SW1<SW2; 2) the amount of contribution where SW1 and SW2 contribute equally to the blend, SW1 contributes more than SW2, or

SW1 contributes less than SW2; 3) the medium of using the blend, i.e., spoken or written; and 4) the version of analysis, i.e., analysis 1 or analysis 2.

The present study is interested in the variables of length, contribution, and analysis, since the related results obtained by Gries (2004) and listed below constitute part of the basic principles for the data analysis in this study.

Gries (2004, pp. 653-4) implements this analysis on his data and finds that there is an interaction between the variables of the length of and the contribution from the source words, and that the results strongly support Kaunisto's (2000) hypothesis.

Gries's (2004, pp. 654, 664) results are as follows:

i. When SW1>SW2, then SW2 contributes more to the blend and vice versa, more specifically, the shorter source word is the bigger contributor.
ii. When SW1=SW2, then both contribute equally to the blend.
iii. The length of the blend, counted by the number of syllables, is similar to that of SW2, which justifies why it is *brunch* and not *breakfunch*.

Though Gries (2004) criticises Kaunisto's (2000) analysis of blend structure, stating that it is based only on the Orthographic contribution of the source words to the blend, and he intends to develop it by considering the phonemic contribution, as well, his study does not show how he analyses his data following the phonemic representation of blends. Hence, the present study implements this analysis but with the phonemic representation of the source words to show their actual contribution to the blend and then builds on the results arrived at from this analysis.

The review above has displayed Kaunisto's (2000) and Gries's (2004) contributions concerning the role of the size of the source words and the interaction between their size and that of the blend in predicting the structure of the blend.

As to the role of prosody in blend formation, the following subsection reviews some of the studies that have been concerned with the role of prosodic properties in deciding the structure of the blend, namely the stress position and the breakpoint in the blend.

2.2. The prosodic properties

Blends have been recently analysed phonologically, for instance, López Rúa (2004) measures the degree of shortening and the degree of phonological integration considering the syllabic contribution of the source words to the blend. She focuses on where the cut-off is made and

on the phonological change or variation that takes place where the constituents fuse.

As to the degree of shortening, López Rúa (2004, p. 64) specifies two degrees: maximum and minimum. In the first degree, one or two initials replace one source word. López Rúa (2004) does not give an example for this degree. Besides, this degree seems to be confused with the second degree, where a splinter or a whole word is present in the blend, e.g., the blend *brunch* has the two splinters *br-* and *-unch* from *breakfast* and *lunch*, respectively. What causes this confusion is the fact that these splinters may themselves consist of one or two initials, and what proves this is that López Rúa (2004, p. 65) specifies that if these splinters are shorter than syllables, their constituents may be the syllable onset, the onset and the nucleus, or the rime. This means that the phonological possible cut at the source word can be in one of these three positions.

As to the degree of phonological integration, López Rúa (2004, p. 65) specifies three degrees:

i. High, where there is a sound intersection or overlap, and the phonological integration implies that identical or similar sounds are assimilated in the source words, e.g., *motel* <*mot*or + h*otel*>,
ii. Medium, where there is sound union and the phonological integration does not involve an intersection of sounds from both source words, e.g., *brunch* < *br*eakfast + l*unch* >, or
iii. Low, where there is sound agglutination or clustering, and the integration shows that each source word contributes with a splinter which becomes an independent syllable in the resulting form, e.g., *Nabisco* < *Nat*ional *Bis*cuit *Co*mpany>.

Accordingly, phonic integration for López Rúa (2004) assumes four possible shapes: 1) intersection or overlap, e.g., *bit* < *bi*nary + dig*it* >, 2) sound union, e.g., *avionics* < *avi*ation + electr*onics* >, 3) concatenation or clustering, e.g., *Alcan* < *Al*aska + *Can*ada >, and 4) clustering and intersection as in *syntopicon* < *syn*opsis + *topic* + lex*icon* >.

With even more details about the phonological properties of blends, Plag (2003, p. 123) considers blends to be falling within the realm of prosodic morphology because they have special formal properties. Plag (2003, pp. 116-126) analyses English blends based on their prosodic structure, giving evidence of the prominent role that prosody plays in the blend formation.

Starting with a ‘blending rule’ on which he bases his evidence, Plag (2003, p. 123) specifies the type of blends he considers typical of the

process of blending; they are those whose constituents are the first part of the first word and the second part of the second word as shown in this formula: AB + CD = AD, e.g., *boatel* <boat + hotel>, *chunnel* <channel + tunnel>, *geep* <goat + sheep>, and *Spanglish* <Spanish + English> (Plag, 2003, p. 122).

Relying on the hypothesis that blending is not an arbitrary process but rather one 'constrained by prosodic categories', Plag (2003, p. 123) specifies two types of restrictions on blends: the syllable structure and the size of the blend.

i. The syllable structure

After specifying that the structure of a syllable has four constituents: onset, nucleus, coda, and rime (nucleus and coda), it is stated that prosodic constituents, more specifically syllabic constituents, play an important role in 'constraining the type of material to be deleted or combined' in a blend (Plag, 2003, pp. 123, 125).

Two observations can be made when truncating the source words. The first is that the syllabic constituents are kept intact. The second is that only whole syllabic constituents can be deleted (Plag, 2003, p. 123). Depending on these two observations, the case with monosyllabic blends is simple. The blend is formed from the onset of the first source word and the rime of the second, or from the onset and nucleus of the first source word and the coda of the second, e.g., *geep* <*g*oat + sh*eep*> and *boost* <*boo*m + hoi*st*> (Plag, 2003, p. 123). Whereas with polysyllabic blends, there are many formation possibilities, e.g., *boatel* <*boa*t + ho*tel*> with the onset and nucleus retained from the first source word and the ultimate syllable retained from the second, or *boatel* <*boat* + hot*el*> where a whole syllable, here the first source word and the ultimate rime retained from the second (Plag, 2003, p. 124).

ii. The size of the blend

Plag (2003, p. 125) relies on the number of syllables in specifying the size of blends. He observes two cases. First, if the two source words are of the same size, the blend also has the same size, e.g., *boost* <boot + hoist>, each source word has one syllable, so the blend has one syllable. Second, if the source words have different lengths, then the length of the blend is the same as that of SW2, e.g., *boatel* <boat + hotel>, the blend has the same size as that of *hotel*, namely two syllables.

Plag (2003, p. 125) concludes that three phonological restrictions constrain the formation of blends in English, they are: (1) the initial part of SW1 is combined with the final part of SW2, (2) blends combine only syllabic constituents, and (3) SW2 determines the size of the blend.

To add to the role of prosody in forming the English blend, Bat-El and Cohen (2012) have conducted a study where they analyse the English blend stress system. They claim that the blend's stressed syllable is the same as that of one of the source words, but which source word is the 'stress provider'? To answer this question, they combine two previously set views: the position-based view and the size-based view, where the first considers the right-hand source word as the syllable provider, e.g., *fertigátion* <fértilizer + irrigátion>, whereas the second considers the source word that has the same size as the blend as the syllable provider, e.g., *investopédia* < invésting + encyclopédia> (Bat-El & Cohen, 2012, p. 196). As to their combined view, they set two generalisations, one is default, and the other is specific. The first states that the blend's stressed syllable corresponds to the stressed syllable in SW2. And the second states that when the source words have differing sizes and when the number of syllables in the blend is identical to that of one of the source words, there will be an inter-word variation, that is, in some blends size will be at work, and in others it will be position (Bat-El & Cohen, 2012, p. 197).

This study shows the role that stress plays in deciding the stress position in the blend. Some other studies, for instance, Arndt-Lappe and Plag (2013), find that stress properties play an important role in determining the structure of the blend while giving more details like the length of the blend, the breakpoint location in the blend, and the stress location in the blend (Arndt-Lappe & Plag, 2013, p. 537).

In their more specific study about the role of prosody in the formation of English blends, Arndt-Lappe and Plag (2013, p. 537) build on Plag's (2003) study about the role those syllabic constituents play in deciding the breakpoint in the blend. They state that it is not as important as the role that stress plays in deciding the breakpoint location in the blend.

Arndt-Lappe and Plag (2013, p. 544) have set an illustrative coding table, Table 1 below, where they use several variables to describe the prosodic information for the source words and the blend.

Table 1. Illustrative Coding Proposed by Arndt-Lappe and Plag (p. 544)

Variables	**Values**
surviving part of Word 1	initial, medial, final, complete
surviving part of Word 2	initial, medial, final, complete
medial overlap	yes, no
length number of syllables	(of Word 1, of Word 2, of the blend)
stress from the right, number of	(of Word 1, of Word 2, of the

syllables from the right	blend)
stress from the left, number of syllables from the left	(of Word 1, of Word 2, of the blend)
switchpoint Word 1	number of syllables from the left
switchpoint Word 2	number of syllables from the right
location of switchpoint	at syllable constituent boundary: yes, no
constituent boundary of switchpoint	onset, nucleus, coda

Based on the analysis of their data, they have found the following:

- Blends preserve more material from SW2 than from SW1,
- Overlap takes place in a medial position in the blend,
- The longer the source word is, the more syllables tend to get lost,
- Blends' length is similar to that of the longest source word,
- SW2 decides the breakpoint location, namely, it is located in the main stressed syllable of the SW2.
- The blend tends to preserve the prosodic structure of SW2, with the exception that SW1 is longer than SW2.

The general conclusion they have arrived at is that the stress in SW2 is the major determinant of both stress and breakpoint location in the blend (Arndt-Lappe & Plag, 2013, p. 559).

Before summing up the results arrived at from discussing the properties referred to above, it is worth mentioning here that the length of the source words and of the blend has been considered differently. Once it is measured by the number of phonemic units, and another time by the number of syllables. And to make the discussion even clearer, the present study differentiates between them by means of referring to them by different terms. Hence, when referring to the number of phonemic units, the term 'size' is used, and when referring to the number of syllables, the term 'length' is used. Therefore, there is the 'smaller' and bigger' when referring to size, and 'shorter' and 'longer' when referring to length. The size of the source words and of the blend is measured in the analysis adopted from Gries (2004), whereas the length is measured in the coding table adopted from Arndt-Lappe and Plag (2013).

The results arrived at by the major studies considered in this section are summed as follows:

A. The proportion of contribution:

1. The smaller source word is the bigger contributor to the bend.
2. When both source words have the same size, then both contribute equally to the blend.

B. The prosodic properties

1. When the source words have different lengths, then the length of the blend corresponds to that of SW2.
2. The length of the blend, measured by the number of syllables, corresponds to that of the longer source word.
3. Monosyllabic blends are formed by joining either the onset from SW1+ the rime from SW2 or the onset with the nucleus from SW1+ the coda from SW2.
4. The stressed syllable of the blend corresponds to that of SW2.
5. Overlap occurs medially in the blend.
6. The breakpoint in the blend occurs in the stressed syllable retained from SW2.
7. The blend has the same prosodic structure as SW2 when it is the longer source word.

3. Data and Methodology

In order to find an answer to the question posed in this study, 15 French blends are collected and analysed in Section 4. Each section includes two sub-sections. The first is an overview of the process of blending and blend formation, and the second includes the data analysis and the discussion of results. These results are to be compared with the results summed up in section 2.

The subsection of analysis and discussion for each language starts with the list of blends to be analysed. After listing them, the analysis of two blends is given in detail as an illustrative sample analysis for the rest of the blends.

The data is collected from various sources such as research articles, books, or websites. French blends are compiled from the French articles used in this study and from a number of French websites where blend words are listed with reference to their etymology and meaning. Most of these websites are not academic, yet they have been consulted because they are considered the most available sources for obtaining French blends, which are *Le mot-valise* (n.d.) and *Mots-valises en français* (n.d.). Besides, two online French dictionaries are frequently consulted to get the meaning and pronunciation of the source words, which are *Word Reference* (n.d.) and *Larousse* (n.d.).

The process of data analysis is accomplished through two major steps. First, the analysis implemented by Gries (2004) is adopted in the present study, but with phonemic representation rather than with

Orthographic representation. Hence, the IPA symbols for the French Alphabet are used for the phonemic representation of French blends, as Table 2 below displays.

Table 2. The IPA Symbols for the French Alphabet

French vowels	French consonants
a as in patte /pat/	b as in bal /bal/
ɑ pâte /pɑt/	d dent /dɑ̃/
ɑ̃ clan /klɑ̃/	f foire /fwaʀ/
e dé /de/	g gomme /gɔm/
ɛ belle /bɛl/	k clé /kle/
ɛ̃ lin /lɛ̃/	l lien /ljɛ̃/
ə demain /dəmɛ̃/	m mer /mɛʀ/
i gris /gʀi/	n nage /naʒ/
o gros /gʀo/	ɲ gnon /ɲɔ̃/
ɔ corps /kɔr/	ŋ dancing /dɑ̃siŋ/
ɔ̃ long /lɔ̃/	p porte /pɔʀt/
œ leur /lœʀ/	ʀ rire /ʀiʀ/
œ̃ brun /brœ̃/	s sang /sɑ̃/
ø deux /dø/	ʃ chien /ʃjɛ̃/
u fou /fu/	t train /tʀɛ̃/
y pur /pyʀ/	v voile /vwal/
	z zèbre /zɛbʀ/
	ʒ jeune /ʒœn/
French semi-vowels	
j as in fille /fij/	
ɥ huit /ɥit/	
w oui /wi/	
French vowels	
a as in patte /pat/	
ɑ pâte /pɑt/	
ɑ̃ clan /klɑ̃/	

It is worth mentioning that this analysis has two versions: one is for the blends that show no overlap whatsoever, and the other is for cases with overlap. Sometimes the blend has more than one form of analysis under each of these versions. Each case will be referred to in detail in the discussion for each language. Figure 6 below displays the modified form of analysis implemented in this study.

Orthographic and Phonemic representation of source words and of	Syllabification of source words	Proportions of source words

the blend		
SW1:		$\Rightarrow {}^{0}/_{0}$ not in blend %
		$\Rightarrow {}^{0}/_{0}$ in blend %
SW2:		$\Rightarrow {}^{0}/_{0}$ in blend %
		$\Rightarrow {}^{0}/_{0}$ not in blend %

Figure 6. A Modified Form of Gries's Analysis

Second, the set of properties within the two major blend formation principles for English blends is listed in the illustrative coding table adopted from Arndt-Lappe and Plag (2013, p. 545) with some modifications to meet the purpose of the present study. For instance, but not limited to, the terms 'switchpoint' and 'breakpoint' are used to refer to the place of cut-off in the source words and in the blend, respectively, and the direction-based stress assignment of the source words is replaced by the stress location in the source words and in the blend. Besides, for each language, some properties are removed, and new ones are added, relying on the linguistic nature of each language. These are to be referred to throughout the data analysis and discussion. These properties are tested against the data collected in this study. Table 3 below represents the comprehensive form of the illustrative coding implemented in the present study.

Table 3. Illustrative Coding Implemented in the Present Study

Variables	**Values**
Surviving part of SW1	initial, medial, final, complete
Surviving part of SW2	initial, medial, final, complete
Type of fusion	clustering/ overlap
Length of SW1	number of syllables
Length of SW2	number of syllables
Length of the blend	number of syllables
Stress of SW1	number of syllables
Stress of SW2	number of syllables
Stress of the blend	number of syllables from the left
Switch/ overlap point of SW1	number of syllables from the left
Switch/ overlap point of SW2	number of syllables from the left
Breakpoint/ overlap location in the blend	syllable constituent boundary: yes, no

Constituent boundary of the switchpoint in SW1	onset, nucleus, coda
Constituent boundary of the switchpoint in SW2	onset, nucleus, coda

With the analysis of the data and the comparison of the results with those of English blend formation, the present study will find out which principles in general and properties in particular are applicable and how applicable they are. Besides, some other results can be arrived at, which can be considered as blend formation principles for that language, particularly when being tested against a large amount of data in further study.

4. French Blends

4.1. Overview

Blending in French is referred to by the term 'amalgamation' /amalgamasjɔ̃/ and the blend word as 'le mot porte-manteau', 'l'amalgame lexical' or 'mot-valise' (Léturgie, 2011, pp. 75, 77). The portmanteau words are among the most known processes of forming neologisms in French (Biéder, Bubrovsky, & Callens, 2002, p. 411), e.g., *informatique* <information + automatique>, *tapuscrit* < taper + manuscrit>, *proème* < prose + poème >, *foultitude* < foule + multitude>, and *ordiphone* < ordinateur + téléphone> (Lee, 2014).

Portmanteau words are defined as words formed with more than one syllable taken from several words (Lefèvre, 1891) (Biéder, Bubrovsky, & Callens, 2002, p. 413). Levy (1950, p. 57) states that the process of blending is very old and widespread and that the blend is defined as a new word coined by telescoping pairs of words to connote the meaning of both. These pairs are related phonetically by having one or more syllables in common.

These two definitions specify the phonetic contribution of the source words to the blend, where syllables taken from them are telescoped to form the blend constituents. The former definition does not specify how the syllables combine to form the blend, whereas the definition hints at it by stating that it is processed through telescoping, though it does not specify how and where these syllables are telescoped, i.e., the type of fusion, whether clustering or overlap or both, and the syllabic constituents where the switchpoint occurs, respectively.

Levy (1950, p. 58) states that those cases of blends can be traced in Old French as well as in modern French, e.g., in a French novel, the novelist combined *familiarité* with *millionnaire* to forge the term

famillionnarité. Levy (1950, p. 58) uses the term 'forge' here to refer to the process of merging or fusion, which could indicate that, at that time, such words were not original and were fake ones. Nevertheless, it indicates that this type of blend concerns where intersection and overlap take place. Another example of this type is the blend *ridicoculiser* <ridiculer + cocu + Lise> (Levy, 1950, p. 58), where three words are involved in forming the blend. What is important in Levy's study is that phonological and semantic criteria participate in forming French blends.

More specifically, Lee (2014, pp. 1306, 1309) specifies that such cases of blends constitute a type of blend where one source word is inserted into another, normally the shorter within the longer. This specification appears to give one of the hypotheses for forming French blends with intersection.

Clas (1980) specifies two cases of abbreviation where two source words are involved in the process: sometimes one is abbreviated, at others both are abbreviated. And it is the second case that he considers typical of blending.

In the first type, the first source word may be reduced and end with a vowel or with a consonant if the second source word begins with a vowel, e.g., *Eurasie* <Europe + Asie> and *Eurafrique* <Europe + Afrique>, and if the second source word is reduced, the resulting words will be like *vidéophone* < vidéo + téléphone> and *autogramme* <auto + télégramme>.

In the second type, there is a simultaneous final and initial clipping to the first source word and the second source word, respectively. This type permits forging portmanteau words like *intérphone* <intérieur + téléphone> and *bionique* <biologie + électronique>.

Clas (1980, p. 346) finally concludes that the creation of portmanteau words appears to be a living word formation process used at a time by technical language, and in a way less serious by the current language. Clas (1980, p. 346) gives a very simple rule for blend formation: take a word, delete one or more syllables at the end of the word, add another word of which you subtracted one or more syllables, preferably the initial.

Although Clas (1980) considers blends as being restricted to the second type, his definition of blends shows that while forming a blend, syllables are involved in the process. The initial syllables from the first source word and the final syllables from the second source word combine to form the blend. But he does not mention how many syllables and which ones contribute to form the blend.

A more specific study about French blends is by Lee (2014, pp. 1310-1) where, regarding the process of blending as a phonological process, he confirms that there are no French blends where the two

source words are joined at the boundary between the nucleus and the coda, that is the rime copied to the blend must comprise a contiguous string, e.g., *folksonomie* < Folk + taxonomie > where the second source word cannot be cut but after the first syllable /tak/, then the first source word /fɔlk/ is fused with the surviving part /sɔ.nɔ.mi/ to form /fɔlk.sɔ.nɔ.mi/. Lee (2014, p. 1312) concludes that segmental contiguity of the parts retained from the source words plays a role in producing the blend.

Two properties can be attained from this background. First, in cases of blends where there is an intersection, the smaller source word is inserted within the bigger source word. Second, the possible place of the switchpoint in the source words is between the onset and the rime, if not at a syllable boundary. The first falls within the principle of proportion and the second within the principle of prosodic properties. These two properties will also be tested against the data collected.

4.2. Analysis and Discussion

This subsection displays the discussion of the results arrived at from analysing the data collected from French blends. Below are the French blends with their source words and meaning.

1. *abomifreux <abominable + affreux>* ‘abominable + horrible’
2. *alicament < aliment + médicament >* ‘type of food + medicine’
3. *bionique <biologique + électronique>* ‘biology + electronic’
4. *caïmanchot <caïman+ manchot>* ‘caiman + penguin’
5. *célibattant* <*célibataire* + *battant*> ‘bachelor + warrior’
6. *cybernation <cybernétique + automation>* ‘cybernetic + automation’
7. *famillionnarité < familiarité + millionnaire>* ‘familiarity + millionaire’
8. *foultitude <foule + multitude>* ‘crowd + multitude’
9. *franglais <français + anglais>* ‘French + English’
10. *futurible <future + possible>* ‘future + possible’
11. *informatique <information + automatique>* ‘information + automatic’
12. *mobylette* ‘moped’ *<mobile + bicyclette>* ‘mobile + bicycle’
13. *nuisette* ‘babydoll’ *<nuit + chemisette>* ‘night + light shirt’
14. *proème <prose + poème>* ‘prose + poem’
15. *tapuscrit <taper + manuscrit>* ‘type + manuscript’

One major fact about the stress pattern in French is worth mentioning here. Word stress in French is predictable because it is normally placed on the ultimate syllable if this syllable does not contain a

schwa /ə/, otherwise it is the penultimate syllable that carries the stress (Anderson, 1982, p. 537) (Schane, 1968, p. 60). Regardless of this fact, stress might play a minor role in deciding the structure of the blend, which will be shown during the discussion of the results.

The analysis of two blends is provided in detail below in Figure 7 and Table 4, following Gries's (2004) analysis and Arndt-Lappe and Plag's (2013) illustrative coding table. Some general results are given after the analysis of each blend.

Orthographic and phonemic representation of source words and of the blend	Syllabication of source words	Proportions of source words
SW1: *abominable* /abɔmiˈnabl/	n a b l	$^{4}/_{9}$ not in blend 44.4%
	a. b ɔ. m i.	$^{5}/_{9}$ in blend 55.6%
SW2: *affreux* /aˈfʀø/	**f r** **ø** ↑	$^{3}/_{4}$ in blend 75%
	↑ a.	$^{1}/_{4}$ not in blend 25%
abomifreux /abɔmiˈfʀø/		

Figure 7. Analysis 1: *abomifreux* <*abominable* + *affreux*> 'abominable + horrible'

Table 4. Illustrative Coding for the Blend abomifreux <abominable + affreux>

Variables	**Values**
Surviving part of SW1	Initial
Surviving part of SW2	Final
Type of fusion	Clustering
Length of SW1	4
Length of SW2	2
Length of the blend	4
Switch/ overlap point of SW1	3
Switch/ overlap point of SW2	1
Breakpoint/ overlap location in the blend	Syllable boundary

Constituent boundary of the switchpoint in SW1	Syllable boundary
Constituent boundary of the switchpoint in SW2	Syllable boundary

The analysis of the blend *abomifreux* displays the following results:

- SW1 is bigger than SW2.
- SW1 is the bigger contributor to the blend.
- SW2, the smaller source word, contributes with its bigger part to the blend.
- The length of the blend is similar to that of SW1.
- The breakpoint in the blend takes place at a syllable boundary.

The blend *abomifreux* is analysed according to analysis 1, which shows only clustering and one possible breakpoint in the blend. Whereas, the blend *caïmanchot* can be analysed according to both versions of analysis proposed by Gries (2004), which shows three possible breakpoints in the blend, one is with clustering, and two are with overlapping points. Some of the results are fixed, like the size and length of the source words and of the blend; they are mentioned once after the first analysis. Besides, it is also noticed that the breakpoint is at the syllable boundary in all forms of analysis. But what differs is the proportion of contribution of each source word and the breakpoint location, namely, the number of the syllable where the breakpoint in the blend occurs. Figure 8 below displays the first version of the analysis, and Table 5 shows the illustrative coding accordingly.

Orthographic and phonemic representation of source words and the blend	Syllabic structure of source words	Proportions of source words
SW1: *caïman* /kaiˈmɑ̃/	m ɑ̃	$^{2}/_{5}$ not in blend 40%
	k a i.	$^{3}/_{5}$ in blend 60%
SW2: *manchot* /mɑ̃ˈʃo/	**m ɑ̃. ʃ** **o**	$^{4}/_{4}$ in blend 100%
		$^{0}/_{4}$ not in blend 00.0%

caïmanchot /kaimɑ̃ˈʃo/		

Figure 8. Analysis 1a: *caïmanchot* <*caïman*+ *manchot*> 'caiman + penguin'

Table 5. Illustrative Coding for the Blend caïmanchot <caïman+ manchot>

Variables	**Values**
Surviving part of SW1	Initial
Surviving part of SW2	Complete
Type of fusion	Clustering
Length of SW1	2
Length of SW2	2
Length of the blend	3
Switch/ overlap point of SW1	1
Switch/ overlap point of SW2	2
Breakpoint/ overlap location in the blend	Syllable boundary
Constituent boundary of the breakpoint in SW1	Syllable boundary
Constituent boundary of the breakpoint in SW2	Syllable boundary

This version of the analysis of the blend *caïmanchot* displays the following results:

- SW1 is bigger than SW2
- SW2, the smaller source word, is the bigger contributor to the blend.
- The length of the blend is different from that of both source words
- The breakpoint in the blend is at the syllable boundary

The other form of this version of analysis of the blend *caïmanchot* is presented in Figure 9 below, followed by the illustrative coding in Table 6.

Orthographic and phonemic representation of source words and of the blend	Syllabication of source words	Proportions of source words
SW1: *caiman* /kaiˈmɑ̃/		$^{0}/_{5}$ not in blend 00.0%
		$^{5}/_{5}$ in blend 100%

	k a i. m ɑ̃	
SW2: *manchot* /mɑ̃ˈʃo/	**o** ↑ ʃ	$^{2}/_{4}$ in blend 50%
	m ɑ̃.	$^{2}/_{4}$ not in blend 50%
caïmanchot /kaimɑ̃ˈʃo/		

Figure 9. Analysis 1b: *caïmanchot* <*caïman*+ *manchot*> 'caiman + penguin'

Table 6. Illustrative Coding for the Blend caïmanchot <caïman+ manchot>

Variables	**Values**
Surviving part of SW1	Complete
Surviving part of SW2	Final
Type of fusion	Clustering
Length of SW1	2
Length of SW2	2
Length of the blend	3
Switch/ overlap point of SW1	2
Switch/ overlap point of SW2	1
Breakpoint/ overlap location in the blend	Syllable boundary
Constituent boundary of the switchpoint in SW1	Syllable boundary
Constituent boundary of the switchpoint in SW2	Syllable boundary

This form of analysis shows a different result. SW1 is the bigger contributor to the blend.

As to the second version of the analysis for the blend *caïmanchot* where there is overlap, it is shown in Figure 10 below, followed by the illustrative coding in Table 7.

Orthographic and phonemic representation of source words and of the blend	Syllabication of source words	Proportions of source words
SW1: *caiman* /kaiˈmɑ̃/		$^{0}/_{5}$ not in blend 00.0%
	k a i. m ɑ̃	$^{5}/_{5}$ in blend 100%

SW2: *manchot* /mɑ̃ˈʃo/	**o** **m ɑ̃. ʃ**	$^{4}/_{4}$ in blend 100%
		$^{0}/_{4}$ not in blend 00.0%
caïmanchot /kaimɑ̃ˈʃo/		

Figure 10. Analysis 2: *caïmanchot* <*caïman*+ *manchot*> 'caiman + penguin'

Table 7. Illustrative Coding for the Blend caïmanchot <caïman+ manchot>

Variables	**Values**
Surviving part of SW1	Complete
Surviving part of SW2	Complete
Type of fusion	Overlap
Length of SW1	2
Length of SW2	2
Length of the blend	3
Switch/ overlap point of SW1	1
Switch/ overlap point of SW2	1
Breakpoint/ overlap location in the blend	Syllable boundary
Constituent boundary of the switchpoint in SW1	Syllable boundary
Constituent boundary of the switchpoint in SW2	Syllable boundary

The only different result here is that both source words have a complete contribution to the blend.

After analysing the French blends, the results arrived at have been compared with the results of analysing English blends. Table 7 below displays the percentages of French blends that support these results.

Table 8. Percentages of French Blends Supporting the English Blend Formation Principles

The proportion of the contribution	**Percentages of blends supporting the results**
1. The smaller source word is the bigger contributor to the bend.	33.3%
2. When both source words have the same size, then both contribute equally to the blend.	6.7%

The prosodic properties	
3. When the source words have different lengths, then the length of the blend corresponds to that of SW2.	53%
4. The length of the blend corresponds to that of the longer source word.	66.7%
5. Monosyllabic blends are formed by joining either the onset from SW1+ the rime from SW2 or the onset with the nucleus from SW1+ the coda from SW2.	Not applicable
6. The stressed syllable of the blend corresponds to that in SW2.	Not applicable
7. Overlap occurs medially in the blend.	46.7%
8. The breakpoint in the blend occurs in the stressed syllable of SW2.	60%
9. When SW2 is longer, the blend has the same length.	40%

Table 8 above displays that most of the properties are at work when forming the French blend. Some of them are highly applicable, and others are less applicable. These are among the prosodic properties. The most applicable properties are 3, 4, and 8, and the least applicable are 7 and 9. Whereas the least applicable are among the principles of proportion, and they are 1 and 2, where the first is more applicable than the second. As to 5, the data does not include any monosyllabic blends, which is why it is not applicable. 6 is also not applicable because stress is automatically assigned to the ultimate syllable of the blend and is not determined by the stress of the source words.

Nevertheless, the analysis of French blends also displays three properties that seem to pertain to the French blend formation. One is within the principle of proportion of contribution, and two are within the principle of prosodic properties.

1. 53.3% of the blends show that the bigger source word is the bigger contributor to the blend.
2. 60% of the blends show that when the switchpoint in both source words is at a syllable boundary, then the breakpoint in the blend also occurs at a syllable boundary. Otherwise, if either or both of the source words have the switchpoint at a syllable constituent, then the breakpoint in the blend also occurs at a syllable constituent.
3. 40% of the blends have the same length of SW2; the rest of the blends vary in their relation to the source words as per the variable of length. 20% have the same length as that of both source words,

13.3% have the same length as that of SW1, whereas 26.7% of the blends have a length different from that of both source words.

Now it is the turn of the two French blend formation properties arrived at earlier to be tested against the data collected. As to the cases of blends where there is intersection, there is only one example in the data, which is the blend *famillionnarité* <familiarité + millionnaire> 'familiarity + millionaire'. Although the intersection is not a complete one where a whole source word is inserted in the other source word, yet this case supports the blend formation hypothesis proposed by Lee (2014, p. 1309) which states that the smaller source word, i.e., *millionnaire* (8 phonemic units, 6 of which contribute to the blend) is inserted into *familiarité* (11 phonemic units) accompanied by overlap in four phonemic units.

As to the breakpoint in the blend, most of the forms of French blend analyses support Lee's (2014, pp. 1310-1) confirmation that if the breakpoint is not at syllable boundary, then it must be between the onset and the rime, e.g., *céli|battant* <célibataire + battant> 'bachelor + warrior', where the breakpoint is at syllable boundary, and *cybern|ation* <cybernétique + automation> 'cybernetic + automation' where the breakpoint is at syllable constituent, .i.e., between the onset and rime, where [|] indicates the breakpoint location.

5. Conclusions

The present study has been concerned with testing the applicability of the English blend formation principles on blends from French. These principles have been investigated in English by means of testing the hypotheses proposed about the English blend structure. Many research studies have focused on the internal structure of the blend and how it is formed, namely what the constituents of the blend are, why the blend is made this way and not another, what prosodic features it has, the role that the source words play in forming it, the predictability of the blend's structure in relation to the structure of the source words, where the possible breakpoint occurs in it, and so many other related features.

Testing the hypotheses related to these queries about the structure of the English blend has shown that there is a set of principles that are at work when forming the blend. Some of them are related to the contributing source words, and others are related to the resulting blend itself.

The most investigated blend formation principles are those concerned with the amount of contribution of the source words to the

blend and those concerned with the prosodic structure of the source words and of the blend.

The first has been concerned with the orthographic (and phonemic) contribution of the source words to the blend and its role in deciding the structure of the blend. It has been hypothesised that the smaller source word is the bigger contributor to the blend and that the bigger the source word is, the bigger the loss of material from the source word will be. With some drawbacks to this approach, for instance, neglecting the phonemic contribution of the source words, some other studies have been concerned with filling up this gap. They have hypothesised that it could be more informative if the phonemic contribution is considered. Yet no clear analysis of this hypothesis has been provided.

Nevertheless, some of the results arrived at from both approaches appear to be at work in deciding some of the features of the blend structure.

As to the second principle, it has been concerned with the prosodic properties of the source words and of the blend, and how they play an important role in predicting the structure of the blend. Two major properties have played a role in this regard. The first is the syllabic structure of the source words and of the blend, and the second is the stress location in the source words and in the blend. It has been hypothesised that the number of syllables and the constituents of the syllable can decide where the breakpoint in the blend occurs. In most blend cases, the hypotheses have been at work, and the prosodic properties have really played a role in predicting the stress of the blend and the breakpoint location.

These principles have been effective in shaping the structure of the blend in English.

The question is: can they also be at work in other languages, especially in French? And if they are, what is the degree of their applicability?

Finding an answer to this question has required investigating blend formation in French. The present study has reviewed the process of blending and the blend structure in these two languages and has compiled data to be analysed according to the set of principles adopted from English. The data involves blends from French that have been analysed in section 4. The results of the analysis have been compared with the results of English blends on one hand, and on the other hand, some of the hypotheses that have been found in the literature about French blends have also been tested against the data collected.

The analysis has displayed that for each language, some properties from each principle are at work and effective when forming the blend and in predicting its structure, regardless of the differences in the linguistic

systems of each language from that of English. When there are parts of the systems that are extremely different, some of the properties show null effectiveness. For instance, stress assignment in French is fixed.

What is considered the most important feature of the blend structure in all three languages is the predictability of the breakpoint in the blend. In English, it is the prosodic structure that decides it, as it has been discussed by much research. In French, it is the switchpoint in the source words that decides the breakpoint in the blend. If both source words have the switchpoint at a syllable boundary, then the blend has the breakpoint at a syllable boundary, too. But if one of the source words has the switchpoint at a syllable constituent, then the breakpoint occurs at a syllable constituent, too. The data have also supported the hypothesis, already stated about French blends, that if the switchpoint is at a syllable constituent, then it must be between the onset and the rime, being taken from SW1 and SW2, respectively.

To sum up, the data analysis of French blends shows that some English blend formation principles are applicable, some are less applicable, and some are not applicable at all. Besides, though there are no clear blend formation principles in French, if large amounts of data are collected and analysed, a set of hypotheses and principles might be formulated so that the structure of the blend would no longer be a mystery in French.

References

1. Algeo, J. (1977). Blends, a structural and systemic view. *American Speech, 52*, 47-66. doi:10.2307/454719
2. Algeo, J. (1991). *Fifty Years among the New Words: A Dictionary of Neologisms 1941-1991*. Cambridge: Cambridge University Press.
3. Anderson, S. R. (1982). Where's morphology? *Linguistic Inquiry, 13*(4), 571-612. doi:https://www.jstor.org/stable/4178297
4. Arndt-Lappe, S., & Plag, I. (2013). The role of prosodic structure in the formation of English blends. *English Language and Linguistics*, *17*(3), 537-563. doi:https://doi.org/10.1017/S1360674313000154
5. Bat-El, O., & Cohen, E. G. (2012). Stress in English blends: A constraint-based analysis. In *Cross-Disciplinary Perspectives on Lexical Blending* (pp. 193-212). Berlin: De Gruyter.
6. Bauer, L. (1983). *English Word-Formation.* Cambridge University Press.
7. Bauer, L. (2012). Blends: Core and periphery. In V. Renner, F. Maniez, & P. Arnaud (Eds.), *Cross-Disciplinary Perspectives on Lexical Blending* (pp. 11-22). Berlin: De Gruyter.
8. Bergström, G. A. (1906). *On blendings of synonymous or cognate*

expressions in English. Lund: Hakan Ohlsson. Lund: Hakan Ohlsson.
9. Biéder, J., Bubrovsky, M., & Callens, H. (2002). Réflexions sur les néologismes. *Éditions Scientifiques et Médicales, 160,* 409-415.
10. Booij, G. (2012). *The Grammar of Words: An Introduction to Linguistic Morphology* (3rd ed.).
11. Clas, A. (1980). De la formation de mots nouveaux. *Meta: journal des traducteurs, 25*(3), 345-347. doi:https://doi.org/10.7202/002278arCopiedAn error has occurred
12. Gries, S. T. (2004). Shouldn't it be breakfunch? A quantitative analysis of blend structure in English. *Linguistics, 3,* pp. 639–667. doi:10.1515/ling.2004.021
13. Kaunisto, M. (2000). Relations and proportions in the formation of blend words. Prague: International Quantitative Linguistics Conference (Qualico).
14. *Larousse*. (n.d.). Retrieved from https://www.larousse.fr/dictionnaires/francais-anglais
15. *Le mot-valise*. (n.d.). Retrieved from http://monsu.desiderio.free.fr/curiosites/mots-val.html
16. Lee, S. (2014). Correspondence theory and phonological blending in French. *SHS Web of Conferences 8,* 1299-1314. doi:https://doi.org/10.1051/shsconf/20140801194
17. Lefèvre, C. (1891). Étude Clinique des Néologismes en Médecine Mentale [Thèse]. Paris: Publieur.
18. Léturgie, A. (2011). À propos de l'amalgamation lexicale en français. *Langages, 183*(3), 75-88. doi:10.3917/lang.183.0075
19. Levy, R. (1950). Haplologic Blends in French and in English. *Symposium, 4*(1), 53-69. doi:https://doi.org/10.1080/00397709.1950.9955456
20. López Rúa, P. (2004). The categorial continuum of English blends. *English Studies, 85*(1), 63-76. doi:10.1076/enst.85.1.63.29107
21. Marchand, H. (1969). *The Categories and Types of Present-Day English Word-Formation: A Synchronic-Diachronic Approach* (2nd ed.). Munich: Beck.
22. *Mots-valises en français*. (n.d.). (Wiktionnaire : dictionnaire libre et universelle dictionnaire libre) Retrieved from https://fr.wiktionary.org/wiki/Cat%C3%A9gorie:Mots-valises_en_fran%C3%A7ais
23. Plag, I. (2003). *Word-Formation in English.* Cambridge University Press.
24. Schane, S. A. (1968). *French Phonology and Morphology.* Massachusetts Institute of Technology.

25. *Word Reference*. (n.d.). Retrieved from https://www.wordreference.com/