DERIVATIONAL MORPHOLOGY UNDER THE INFLUENCE OF LANGUAGE CONTACT IN FRENCH AND GERMAN

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Abstract

This paper analyses deverbal nominalisations in English, German and French: under special consideration is the -ing-suffixation which appears in all three languages. In German and French, more and more -ing-derived loans have been adopted into the language during the past decades. In both languages, they have developed semantic and morphological properties of their own that overlap or contrast with rival native processes, such as the productive -ung and -en for German, and -age, -(t)ion and -ment for French. I will analyse this evolution especially from a semantic point of view and give reasons why the loan as well as the native forms can co-exist. Moreover, I will discuss the question of how far the -ing-suffixation can be considered an established and transparent word-formation rule for French and German.

1. Introduction

The theory on deverbal nominalisations (no matter in which language), focuses generally on the distinction of event interpretations as compared to result, object or “other” readings (Brandtner, 2008; Melloni, 2007). Event denoting nominals are considered special in various approaches because they display verbal and nominal properties in their syntax and semantics (Grimshaw, 1990). For English, the different properties seem quite clearly linked to certain word-formation processes. Alexiadou & Grimshaw (2008), e.g., classify the -ing-derivation as a very “verbal” nominalisation process in its syntactic behaviour. Its derivatives are said to regularly have event and argument structure or (in terms of a different framework) result from a verbal root, whereas rival processes such as zero suffixation exclusively derive nominal root derivatives that do not involve argument or event structure; Eng. -tion suffixed derivatives are considered to be ambiguous between the

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1 I would like to thank Artemis Alexiadou and Achim Stein, all the participants of the research seminar „Latest developments in syntactic and morphological theory“ held by Artemis Alexiadou at Universität Stuttgart, especially Sandhya Sundaresan and Melanie Uth, and the anonymous reviewers for their comments on theoretical and data questions. My research was supported by a DFG grant to the Graduate School 609 at the Universität Stuttgart.
“verbal”\(^2\) and the “nominal” interpretation. When we analyse German and French from this point of view, we do not obtain such obvious results.

In German the nominalised infinitives seem to have a similar role as the -ing-derivatives for English, whereas -ung derives the ambiguous nouns. The merely nominal readings are attributed to stem-derivations. However, the classification for the German nominalisations is not as clear as in English: either there are more exceptions to the rules or the classification tests that Grimshaw (1990) proposes do not give us such evident results as they do for English (Kaufmann, 2005). For French the situation is far more complex. Here, we do not have complementary patterns like in English or German but a lot more overlaps in morphological and semantic particularities of several nominalisation processes: the most productive patterns, -age, -(t)ion and -ment, cannot really be classified under the Alexiadou & Grimshaw distinction into “verbal” and “nominal”. All three processes can derive events as well as results, objects and other, rarer meanings, such as locations or instruments (Heinold, 2005; Lüdtke, 1978). The differences among French native patterns are of a more subtle semantic nature and become often more obvious in the presence of a co-existing rival form (Heinold, 2008, Martin, 2007\(^3\)).

As multi-layered as the classification of the different nominalisation patterns might be already in one language of its own, the situation becomes even more complex under lexical influences of foreign languages. In French as well as in German we find a great number of deverbal nominalisations borrowed from English. In some cases they have been kept in their original form and adopted into the foreign language (Ger./Fr. camping, bodybuilding); in other cases, they have been morphologically adapted via French or German suffixation, existing as hybrid forms\(^4\) (Fr. caravanage, dopage; Ger. das Dopen, das Liften), or even been completely translated (magasinage as translation from shopping with French suffixation\(^5\)) (Heinold, 2008).

In this paper, I would like to show how far English -ing-loans are morphologically analysed in French and German and develop semantic properties parallel to or contrasting with native derivational processes. In part 2, I will concentrate on event interpretations in English, German and French deverbal nominalisations. I will give an overview of the morphological and semantic restrictions of the above mentioned “verbal”, “nominal” and ambiguous processes in the three languages. I will focus especially on nominals with -age-suffixation in French and the nominalised infinitives in German, because derivatives of these suffixes are said to come close to the English -ing-nominals in their semantics, because they all mostly express events (Heinold, 2008; Uth, 2008). In parts 3 and 4, I would like to have a look at -ing-derivatives as loans in French and German, and to discuss if they can co-exist with native derived words (Fr. doping vs. dopage; Ger. Mobbing vs. Mobben). If so, I will analyse if some regular meaning shift has taken place for the French and German forms. Farge (2004) considers -ing a French suffix in its own right that has been taken into the language and accepted by the speakers. I will discuss Farge’s proposal and describe to what extent similar developments can be observed in German. This cross-linguistic contrastive overview (parts 5 and 6) is supposed to shed light on the question why, and under which

\(^2\) The terms ‘verbal’ and ‘nominal’ in the context of nominalisations are taken from different works of A. Alexiadou. Verbal characteristics of a nominalisation result from „the presence of certain structural layers standardly associated with verbal clauses.“ (Alexiadou, 2001a:1). ‘Nominal’ behaviour then describes syntactic properties of nominalisations that is typical for nouns, such as their incompatibility with aspectual modifiers or the facultativity of their arguments. An overview on the different syntactic properties is given in Alexiadou & Grimshaw, 2008, p. 4.

\(^3\) For the same aspectual oppositions that are discussed here for French, cf. Alexiadou, Iordăchioia & Soare 2009 for English and Romanian.

\(^4\) Terminology from Humbley 1974.

\(^5\) Magasinage appears primarily in the vocabulary of the French of Quebec.
circumstances, foreign word-formation patterns can be adopted into other languages and develop into more or less productive derivations there as well.

2. A cross-linguistic overview on event nominalisations

Heinold (2008) compares the semantic properties of the most productive processes of English, German and French deverbal nominalisation, starting with the tests by Martin (2007, 2008) for French that can be seen in (1). Concerning their aspect, French -age-derivatives behave differently than -(t)ion and -ment nominals.

(1) a. *Plusieurs miaulements font ensemble un miaulage.
   ‘Several meows make a meowing’
b. ?Plusieurs miaulages font ensemble un miaulement.
   ‘Several meowings make a meow.’
c. Le chat a poussé un miaulement/#miaulage.
   ‘The cat uttered a meow/#meowing.’
d. Une séance de miaulage.
   ‘A meowing session’
e. */OK Une séance de miaulement/s.
   ‘A meow(s)-session’.

In contrast to -ment, the -age nominalisations seem to denote longer eventive chains (Martin, 2007). One miaulage-event in (1a) consists of several miaulement-events, whereas the opposite is not considered grammatical. Uth (2008) suggests an internal plural operator (P*) for -age derivatives, which bundles the sub-events into a nominal with an eventive chain (1d). Therefore the test in (1c) that suggests a punctual or one-time event does not apply for the -age-variant of the nominalisation. Between co-existing -age and -ment rivals, DURATION (Smith, 1991; Verkuyl, 1993) seems to be decisive. This opposition of interpretations can best be observed when two rival nominals of the same base verb co-exist.

The influence of the base verb, however, is a factor that has not been considered in the examples in (1) up to now. What role do the base verb and the suffix (and a possible realised argument NP) play in the composition of the aspect of nominalisation? Different frameworks have dealt with aspect of nominalisations before (Alexiadou, 2001b; Meinschaefer, 2004; Alexiadou, Iordăchioia & Soare, 2009, among others). It seems however that they cannot entirely capture the situation of the French derivational suffixes where only ambiguous suffixes coexist and overlap massively in their interpretations (Heinold, 2005; Dubois & Dubois-Charlier, 1999; Lüdtke, 1978). In Grimshaw 1990’s or Alexiadou & Grimshaw 2008’s terminology, we would be restricted to Complex and Simple Events as well as Results. This is not sufficient for the semantics of the nominals we are analysing here. Firstly, these terms are very closely associated with syntactic concepts like argument structure and plural formation—two phenomena that are not as clearly linked to the different French nominalisation types as they are for English (cf. for example Roodenburg, 2005). Secondly, the distinction of events in complex and simple is not enough for our discussion here (as we will see especially in the section on German -ing nominals). For French, there are aspectual sub-classes of Complex events. This is why I will use the terminologies from Smith (1991) and Verkuyl (1993) to

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6 The question of the presence or absence of arguments will not be addressed here, because it makes the situation even more complex. However, I am aware that this is a major topic in the discussion on nominalisations. Nevertheless, I think that before analysing what aspect the different realised or unrealised arguments add in the compositional process, we have to know what is going on ‘inside’ the nominalisations themselves, for instance, through the aspect that base verb and suffix bring in.
distinguish among the types of nominalisations. From Smith I adopt the following situation types: 1. Semelfactive (-durative/-telic), 2. Activity (+durative/-telic), 3. Achievement (-durative/+telic), 4. Accomplishment (+durative/+telic). I will use these terms for the classification of the base verbs of the nominals. Verkuyl uses in principle similar terms and concepts but he distinguishes between durative and terminative situations. For him terminative events are bounded and durative situations unbounded. These associations fit well into what we have seen for the distinctions of -age and -ment nominalisations in (1). In Verkuyl’s terms, we could say that -age derives durative unbounded situations that express an event or action that goes on in time. -Ment, on the other hand, creates terminative bounded nominalisations. Here, events are temporal entities that can be counted or quantified over (Verkuyl, 1993:19f). I will use Verkuyl’s terminology in order to describe what happens when the suffix comes into play. In Smith 1991’s terms, for instance, miauler would be regarded as a semelfactive verb. It describes a punctual event without a change taking place. By derivation through -ment, we obtain a temporal entity that can be counted, one meow-cry. The event is bounded insofar as we count the sound emitted by the cat in one breath as one crying event. This breathing and sound emitting has one concrete beginning and one determined ending. By derivation though -age, on the other hand, we obtain, from the same semelfactive base verb, a durative unbounded event. It is unbounded insofar as we do not consider the breath taking of the cat which it needs to utter one (internally structured) cry, but rather a series of cries, of which we cannot (and need not) tell the exact beginning or ending.

With semelfactive verbs (miauler), the duration (or interminativity) that is caused by the -age derivation gets an interpretation of repetition; there is a sequence of repeated events of one kind (in this example several meow-cries). In this way, semelfactives can become activity-like in Smith’s terms; they have uncountable sub-stages. The consequences that the addition of -age has for each of these base verb classes are not easy to show. We would need several doublets of each class in order to attest to these differences. This goes far beyond the limits of this paper and will be analysed in detail in a future work.

The contrastive readings that the suffixes impose on their base verbs can certainly also be observed with situation types that are internally +TELIC, in Smith’s terms, like accomplishments. Here, we can observe the durative/terminative distinction even better. The examples in (2) are again taken from Martin (2007).

(2) a. Le dénazifiage de l’Allemagne (par x) a abouti à sa dénazification.  
   ‘The denazifying of Germany resulted in its denazification.’

b. #La dénazification de l’Allemagne (par x) a abouti à son dénazifiage.  
   ‘The denazification of Germany resulted in its denazifying.’

In contrast to -(t)ion derivatives, the -age counterparts show interminative readings, although both nominalis are derived from the same verb. The boundedness that Verkuyl evokes and that comes along with terminative events can also be seen in this example. Dénazification is bounded

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7 The fifth of Smith’s classes is State. I will not take this class up here for such an interpretation does not come up in the discussion on eventive -ing nominalis.

8 Verkuyl’s idea of composing an event includes among others also the addition of an object argument. At the moment, I will not explicitly take into consideration what happens to the aspect of nominalisations in combination with a PP-argument. In this paper, I would just like to focus on what aspect the different nominalisation suffixes themselves bring in.

9 This example is, in my opinion, ideal to show why e.g. the Grimshaw 1990 distinction in Complex and Simple event nominalis does not help us here: in (2) -age as well as -(t)ion describe a Complex event. With this distinction, we could, as a maximum say, that both derivation processes are ambiguous. With the aspectual opposition, we have two different means for the composition of different event types.
insofar as we can clearly observe the beginning (a lot of Nazis there) and the ending (no more Nazis there) of the entire process. For dénazifiage a beginning can possibly be fixed but not an ending, as the process described here is still going on at the time of the description. Moreover, we do not know if there will be an end state at all.

All in all, we can say that rival nominalisations in -age, -(t)ion and -ment differ mostly in aspect. They can derive Complex events with terminative (-ment, -(t)ion) or durative interpretation (-age). What the exact consequences for all of Smith’s different base verb classes are in terms of composition, especially in the differentiation of -(t)ion and -ment, has to be left open in this paper.

For English the derivational process that expresses a durative perspective of events would be the -ing-derivation; the German aspectual equivalents are the nominalised infinitives in -en (Heinold, 2008), as we can see in the examples below. In (3) and (4), we have again the test for duration/terminativity. For English, the distinction seems almost as clear as for French, although the examples in (3a) and (3b) are both qualified as grammatical. English native speakers, however, note, when judging the examples, that the zero-derivative meow denotes the one-time event executed in one breath, whereas the -ing-noun describes an eventive chain with several sub-events. This is underlined by the d- and e-examples in (3).

(3) a. Several meows make a meowing.
   b. Several meowings make a meow.
   c. The cat uttered a meow/ #meowing (OK for an hour).
   d. A meowing session/Meow sessions
   e. *A meow session

For German the picture is more complicated. The problem we face is in the first place that there is no -ung-equivalent of the same base verb to the nominalised infinitive (*Brüllung). -Ung is considered the other most productive derivational process besides -en and would therefore be the main rival form. There are neither -ung derivatives for other verbs of sound emission which seem necessary at least for the last test (*Schreiung, *Rufung, *Flüsterung, *Hustung, etc). Forms that do co-exist are the suffixed Brüller and the prefixed Gebrüll. In the duration/terminativity tests in (4), it becomes obvious that the nominalised infinitives and the prefixed Ge- forms neutralise each other semantically. The reason for this could be that Ge- also describes a duration (das Gelaufe ‘the running’, das Getanze ‘the dancing’, das Gekraxel ‘the clambering’) or plurality of events (das Gehuste ‘the coughing’, das Gehämmere ‘the hammering’, das Geklopfe ‘the knocking’) depending on the presence or absence of (Smith’s) duration feature in the base verb. When we include the -er-nominal Brüller into the tests, we see that this form seems to describe the singular (bounded) event, whereas Brüllen and Gebrüll both denote the longer eventive chains, as do -ing for English and -age for French.

   ‘Several roar-en make a Ge-roar.’
b. \textit{Mehrere *Gebrülle ergeben ein Brüllen.}  
‘Several Ge-roar make a roar-en.’

c. \textit{Mehrere Brüller ergeben ein Brüllen/Gebrüll.}  
‘Several roar-er make a roar-en/Ge-roar.’

d. \textit{Der Affe hat ein Brüllen/ein Gebrüll/einen Brüller ausgestoßen.}  
‘The monkey uttered a roar-en/Ge-roar/roar-er.’

The (d) example works for all three nominals, although we get different interpretations: the event plurality aspect is still observed for \textit{Gebrüll}, even in this test. \textit{Brüller} is definitively a one-time event (Schäfer, 2008), whereas \textit{Brüllen} is ambiguous between a singular and a plural event. By adding the adjective \textit{stundenlange/s/r} (as in the English example) we can avoid this ambiguity. In this case, \textit{stundenlanger Brüller} would mean that the monkey breathed one time and then (within this one breath) uttered one single cry that lasted for several hours (which does not make sense).

Concerning the terminative/durative distinction, we see in (5) that the tests work in a similar way for German and English as they do for French. The b- and d-example no not make much sense. The only possible reading would be that after a destruction of the city, a new and different destroying began.

\begin{enumerate}
\item \textit{The destroying of the city (by the enemy) resulted in its destruction.}
\item ??\textit{The destruction of the city (by the enemy) resulted in its destroying.}
\item \textit{Das Zerstören der Stadt (durch den Feind) endete in ihrer Zerstörung.}
\item ??\textit{Die Zerstörung der Stadt (durch den Feind) endete in ihrem Zerstören.}
\end{enumerate}

All in all, Fr. \textit{-age}, Ger. \textit{-en} and Eng. \textit{-ing}-derivatives have one thing in common, in contrast to their rival forms: they denote longer eventive chains and are durative. This comparison is already interesting from a cross-linguistic point of view, but what happens when we look at the subject from the language contact perspective? Both German and French have seen a lot of English vocabulary influences in recent decades, especially in the fields of technical inventions, finance, health and sports. Many \textit{-ing} nominals that have been taken over as loans from English have established themselves in German and French. In the next part, I would like to show what happens to derivational processes under the influence of a foreign language in vocabulary. I will discuss how far the presence of English \textit{-ing}-loans can feed a rivalry among the native derivational patterns and trigger semantic and morphological development. French and German will serve as examples of two very different reactions to foreign influences in vocabulary.

3. A French \textit{-ing}-derivation?

Many loan words in French are adopted with the original \textit{-ing} suffix from English

\begin{enumerate}
\item \textit{le doping, le monitoring, le lifting, le zapping, etc.}
\end{enumerate}

Later on, they are adapted as French words and thus marked by French suffixes. Whether this development is a "natural" process that has its origin in the speaker community, or if it is an "artificial" change initiated by the \textit{Académie Française} is hard to determine\textsuperscript{13}. Certainly, the

\textsuperscript{13} My personal opinion is, that it does not matter much, concerning the semantic analysis of \textit{-age} and \textit{-ing} nominals, if the replacement process is initiated by the \textit{Académie Française} or by the speaker community. In
Académie Française makes a great effort to suggest French variants for English neologisms that come into the language. One medium where this artificial creation of French vocabulary can best be observed is the FranceTerme (former CRITER) data base. In this data base, terms for new inventions or concepts are looked for (mostly in special vocabulary). French expressions are proposed to replace the English originals. In an analysis of -ing-suffixed English loans (Heinold, 2008) we find an almost systematic substitution of the English -ing suffix by the French -age:

(7) le dopage, le monitorage, le liftage, le zappage etc.

There often exist equivalent base verbs in the French vocabulary (doper, monitorer, lifter, zapper). The distribution in the former CRITER database of newly created French event nominals that are based on an English term in -ing, is as follows for -age, -(t)ion and -ment:

(8)

<table>
<thead>
<tr>
<th>-ing-based terms</th>
<th>-age</th>
<th>-(t)ion</th>
<th>-ment</th>
<th>others</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ing</td>
<td>171</td>
<td>97</td>
<td>69</td>
<td>66</td>
</tr>
</tbody>
</table>

Although we cannot say much about the reasons for the substitution of -ing by native French suffixes yet, it is clear that -age seems to be the suffix that replaces -ing in most of the cases (Heinold, 2008). This is obviously due to the similar semantics that -age and -ing share. A surprising point is that the replacement of -ing by -age does not apply in one hundred percent of the cases. There are various -ing and -age nominals from the same base verb that co-exist (cf. (6) and (7)); the foreign form often seems to win the battle of acceptance in the speech community in the end.

3.1. Accepted -ing-forms and their constructions

Farge (2004) suggests that -ing is a French suffix in its own right. He discusses the different cases of adoption or adaptation of English -ing nominals. In his analysis of the -ing derivatives that were kept in their original form, he distinguishes among those that appear in a construction with faire, which are in the majority, and those that do not (cf. table in (9), Farge, 2004: 2).

(9)

<table>
<thead>
<tr>
<th>faire du (non-count)</th>
<th>caravanning, camping, bodybuilding, canyoning, rafting, shopping</th>
</tr>
</thead>
<tbody>
<tr>
<td>faire un (count)</td>
<td>briefing, meeting, listing, brainstorming, brushing, lifting, peeling, piercing</td>
</tr>
<tr>
<td>faire du/un (both constructions)</td>
<td>jogging, bowling, footing, mailing</td>
</tr>
</tbody>
</table>

| Without faire        | kidnapping, outing, zapping, parking |

both cases, the important questions would be: why is it exactly -age they pick for a possible replacement of -ing (and not so much -(t)ion or -ment)? Do they think that -age has a meaning similar to -ing? However, it has been remarked by French native speakers that they think this replacement process is artificial.

14 http://franceterme.culture.fr/FranceTerme/
15 The analysis took place when the database was still called CRITER, cf. Heinold (2008).
Among these constructions we can further oppose the ones that take non-count nominals and the ones that take count nominals; they differ in their aspectuality again (which also fits into Verkuyl’s system that I have heretofore adopted). According to Farge, the constructions with non-count nouns describe activities with “no visible result”\textsuperscript{16}. The activity as such is considered apart from its outcome. Constructions with count nouns express rather “dynamic activities” (Farge). Here also the possible end point is taken into account. Maybe we could say that -ing count nouns in faire-constructions describe bounded events whereas non-count nouns describe unbounded events that can be interpreted as “regular” or “hobby-like” (Farge). In the examples in (10) this difference becomes visible. Whereas in canyoning the event is shown from a durative perspective, the piercing-event focuses on the endpoint of the action—a small piece of metal being in the skin—which gives us a terminative point of view.

\begin{enumerate}
\item \textit{faire du canyoning} \hfill ‘go canyoning’
\item \textit{faire un piercing} \hfill ‘get a piercing’
\end{enumerate}

The difference becomes even more clear when we look at the examples in (11). Jogging is one of the few nominals that can be realised as both a count and non-count noun in the faire-construction. In case (a), we have the reading of a singular bounded jogging-event that has a beginning, a middle phase and a endpoint—one jogging unit. In (b), we are talking about the general activity of jogging—a kind of sport or movement\textsuperscript{17}. It can begin and stop at any time. It is not the boundaries which matter, but just the action as such.

\begin{enumerate}
\item \textit{A quoi faut-il penser avant de faire un jogging?} \hfill ‘What do you have to consider before going jogging?’
\item \textit{Pink fait du jogging avec ses chiens.} \hfill ‘Pink is jogging with her dogs.’\textsuperscript{18}
\end{enumerate}

What the count and the non-count faire-construction have in common, according to Farge, is that they both describe not punctual but durative events, but this is certainly due mostly to the presence of faire. Compare for instance the sentences in (12).

\begin{enumerate}
\item \textit{faire un piercing, faire un listing} \hfill ‘get a piercing’, ‘make a listing’
\item \textit{acheter un piercing, trouver un listing} \hfill ‘buy a piercing’, ‘find a listing’
\end{enumerate}

In the (b) reading piercing and listing describe objects that, combined with verbs, give us a terminative expression. This terminativity however, seems to be brought in by the verbs acheter and trouver. Faire rather imposes duration on the whole construction. It seems that especially in the

\textsuperscript{16} This is Farge’s terminology. He does not refer to any of the literature on situation types. Activity, as I understood it, is in his terms just the expression for some action you do regularly.

\textsuperscript{17} For a more detailed description of the linking of the count/mass opposition to the perfect/imperfect distinction, cf. e.g. Asnes (2004), Verkuyl (1993), and many more.

\textsuperscript{18} Examples are extracted from Google.
cases of count nominals, the additional verb *faire* is needed in order to disambiguate in favour of a complex eventive reading\(^\text{19}\). Without the verb, the French *-ing*-nominals of this kind either denote objects or resultant states (*copier un listing* ‘to copy a listing’, *acheter un piercing* ‘buy a piercing’) or what Grimshaw calls Simple events, that is events with no inner structure\(^\text{20}\). *-ing*-nominals that occur in non-count constructions describe unbounded events with the addition of *faire*. Without verbal support, they denote kinds of sports (*canyoning*, *bowling*, etc), kinds of holidays (*caravaning*, *camping*), kinds of movements (*jogging*), etc. In the next section, I will take a look at the differences between French *-ing* and the French native suffixes.

### 3.2. Semantic subtleties of *-ing* and *-age*

Heinold (2008) has suggested that the English suffix *-ing* is regularly being replaced by the French suffix *-age*, be it in an artificial process (such as the propositions of the *Académie Française*), or through a more natural, speaker-based development. Farge goes even further: he sees *-ing* as being increasingly integrated into the French language, though not yet as a real derivational pattern. However, there are semantic regularities that take form and also morphological restrictions that seem to justify the co-existence of *-age* and *-ing*. A presence of rival forms immediately leads us to the question of the economy of language: why would we need two forms that express exactly the same thing? Obviously, there are not only differences in morphology, aspect or the syntactic environment, but also in the semantics of the *-age* and French *-ing*-process. As seen in the previous section, *-age* denotes Complex unbounded events, whereas the French *-ing* cannot denote Complex events at all. For this purpose it needs a verbal support like, for instance, *faire*. On its own, it denotes Simple events as well as objects or resultant states as described above.

Another semantic difference is a positive or corresponding negative bias between the two co-existing derivatives. As mentioned before, there are *-ing* nouns that neither have a verbal nor a nominal base but are just taken over from English and often express their durative readings in constructions with *faire* as non-count nouns (*canyoning*, *caravaning*, *shopping*, *trekking*, *bodybuilding*). Semantically, these nominals express actions “appreciated by the actor” according to Farge. Nominals that have replaced the original *-ing* suffix by French *-age* do not have that positive connotation (*dopage*, *craquage*). *-Age* derivatives are nowadays usually formed from verbal bases\(^\text{21}\). That is why former *-ing* nominals that developed an *-age* variant accepted by the speech community also have derived verbs later on (*doper*, *craquer*). The negative connotation of *-age* nouns has already been noticed in other contexts (Heinold, 2008). In opposition to its rival nominalisation suffixes *(t)ion* and *-ment*, *-age* seems to express this additional nuance. In the examples in (1) (here repeated as (13)) which were used in part 2 to show aspectual differences of *-age* and *-ment* derivatives, French native speakers often remark on the negative bias of *miaulage*. This negativity seems to be due to the duration or repeatedness of (sub)events that *-age* evokes.

\[
\begin{align*}
\text{(13) a.} & \quad \text{Plusieurs miaulements font ensemble un miaulage.} \\
& \quad \text{‘Several meows make a meowing.’} \\
\text{b.} & \quad \text{Plusieurs miaulages font ensemble un miaulement.} \\
& \quad \text{‘Several meowings make a meow.’} \\
\text{c.} & \quad \text{Le chat a poussé un miaulement/#miaulage.} \\
& \quad \text{‘The cat uttered a meow/#meowing.’}
\end{align*}
\]

\(^{19}\) Grimshaw’s terminology.

\(^{20}\) *Meeting*, for instance, can only be found with *fréquent* in the plural (*les fréquents meetings de l’organisation*). It seems that it can only denote an internally unstructured event.

The same is observed for the German prefix Ge- that also has this repeatedness/duration effect. The negative connotation of such nominals increases if the base verb describes unpleasant activities or actions (a); for base verbs that denote a positive action or activity, Ge- adds a negative or ironic touch (b). Other German suffixes, like -en in the nominalised infinitives, express the duration or unboundedness of the event in a more neutral way (c).

(14) a. das Gebrüll, das Geschrei, das Gehupe, das Gekratze
   ‘the roaring’, ‘the screaming’, ‘the honking’, ‘the scratching’

     b. das Gelache, das Getanze, das Gesinge
     ‘the laughing’, ‘the dancing’, ‘the singing’

     c. das Brüllen, das Schreien, das Hupen, das Kratzen
     ‘the roaring’, ‘the screaming’, ‘the honking’, ‘the scratching’

We will see more on German in the next part. For Fr. -ing and -age, we can say that they both can be considered as French suffixes that are able to co-exist because they serve similar, but, nevertheless slightly different semantic purposes. Derivatives of both processes can express events (of different complexity), but sometimes also resultant states or objects (Pulvermüller, 2008; Heinold, 2005; Lüdtke, 1978). Whereas -age derivatives can express the non-terminative reading by themselves, most -ing nominals seem to need the help of faire constructions if they are to do that. -Age derives nominals from verbal bases whereas -ing has not yet developed a real derivational pattern: we have (pseudo)denominal and (pseudo)deverbal forms as well as singular loans without verbal or other bases (trekking, *trek, *trekker). -Age derivatives are often negatively connotated, whereas -ing nouns can express enjoyable activities with a character of repeatedness (hobbies).

The most interesting point from the morphological perspective is, how a borrowing of a certain process can take place in general. It has been argued that structural borrowing is in most cases preceded by lexical borrowing (Matras, 2007; King, 2000). This seems to happen in French as well. Firstly, English -ing-loans come into the language mostly with their original English reading (camping, canyoning, etc). Then the -ing suffix attaches to other Germanic stems that exist in the French language. The final step would be that the -ing suffix can also derive Romance stems into nominalisations with the same meaning. Ing-suffixation in French seems to have reached a level between the second and the last phase at the moment. Speakers obviously analyse -ing-loans as complex words. They derive base verbs (doper, lifter, zapper, and others we have seen above) and develop new interpretations for nominal derivatives by actively interchanging the suffixes -age and -ing (cf. examples in (6) and (7)). A French deverbal nominal -ing-suffixation pattern might still be in a stage of evolution, because the productivity of neologisms with Romance stems is low (Pulvermüller, 2008). Pulvermüller (2008) and Martinet (1988) attest some French -ing-forms that are derived from French base verbs, such as bronzing (bronzier – to tan), flouting (flouter – arg. to blur), frotting (frotter – arg. to dance), ramping (ramper – to crawl), etc. The nominals in question might stem from a lower than the standard variety but it has been noted before that changes in the lower varieties are often underestimated in the language contact literature (King, 2000). To sum up, we could say that the -ing-suffix in French is on its way from a mere lexically based to a structural borrowing.

In the next section, we will have a look at how German behaves under the invasion of English -ing-nominals.

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22 A similar scenario is described by King for the Latin suffix -able in English.
4. The German -ing pattern

Farge (2004) states that the acceptance of loans in French, apart from economic reasons, is mostly due to phonological or recognition reasons: either the nominal in question has to embed itself easily into the French phonological structures (le computer was rejected by the speakers) or it must have a unit in it that can be easily recognised (pressing – presse). As German and English are closer to each other than French and English in pronunciation, one should expect that the acceptance of the original English suffix -ing by the German speech community should have been a lot easier. Moreover, in Germany there is no Académie-like institution that regulates and purifies the language in such a massive way.

4.1. Aspectual particularities

In fact, for German there exist a lot of doublets of -ing and -en derivatives as well. It seems that the borrowed -ing nominals are mostly adopted and kept in their original form. Again, such big overlaps suggest that the two processes might have some essential difference either in their semantics or concerning morphological restrictions. If we compare the doublets in (15), we can indeed observe semantic differences.

(15)  a. Styling, Ranking, Branding, Sponsoring, Outing  
     b. Stylen, Ranken, Branden, Sponsern, Outen

The -ing examples in (15a) describe bounded events (Sponsoring, Outing) or resultant states/objects (Styling, Ranking, Branding, Sponsoring) as do the French -ing-nominals. The infinitive examples in (15b) express unbounded, durative events. The perspective we have for Stylen is the same as for Zerstören in the examples in (5): Stylen is what you do (we do not consider the time frame of this event but just the ongoing action as such), and a Styling is what you (maybe) get in the end as an outcome. The event of Stylen can be stopped at any minute and resumed again later. Just as in French, it seems that in German, too, the durative character of the -ing-derivative can be expressed by the addition of a verbal element.

(16)   ein Styling + machen = das Stylen
        ‘a styling + do/make = the style-en’

From the morphological point of view, -ing nominals in the German language persist in their original form due to the closeness in pronunciation of German and English and the broad acceptance, as well as the active usage, of English elements by the German speaker community. Out of 60 listed -ing nominals in a German dictionary, 14 have no equivalent verbal form. This might be, on the one hand, due to phonological factors (?sightsee(en), ?happenen, ?canyonen), or because the English nominals have been taken over with a very specific meaning already. This is the

23 In the Corpus of the Frankfurter Allgemeine Zeitung 1999 (48.771.236 words) I found 67 English -ing types alone among the non-combined forms of which mostly were of higher frequencies. Among the hapaxes compounds were predominant (although some of them can certainly be considered as established in the German vocabulary). Here, two combinations were possible: English-English (Internet-Banking) or German-English (Ehegattensplittung). Often English-English compounds were spelled with hyphen, whereas the German-English composita mostly were one word forms. Of all found examples, it was possible to create a base verb or nominalised infinitive. The exception was Mentoring. Here das Mentoren or mentoren sound odd, but the reasons for this can be of phonologic nature or be linked to the similarity of the form to die Mentoren which is the plural of der Mentor in German.

24 Pons Großwörterbuch Deutsch als Fremdsprache, ca. 77000 entries.
case with all those nominals that are dominant in the finance and economy vocabulary, and in German express either professional groups (Consulting, Marketing, Merchandising), or describe complex processes that are made up by various complex sub-processes (Merchandising – all measures that further the sale of a product). The 46 other extracted -ing nominals all have a corresponding verb form in German, and therefore rival nominalised infinitive.

When we compare the meanings of the -en with those of the German -ing forms, the picture is quite clear. The nominalised infinitives express unambiguously unbounded durative events. The -ing nominals, on the other hand, have more than one frequent interpretation. The table in (17) gives an overview on the readings that were found.

(17)

<table>
<thead>
<tr>
<th>Interpretation</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bounded event</td>
<td>12</td>
</tr>
<tr>
<td>‘Kind of...’ - reading</td>
<td>16</td>
</tr>
<tr>
<td>Resultant State</td>
<td>4</td>
</tr>
<tr>
<td>Object</td>
<td>6</td>
</tr>
</tbody>
</table>

The readings that the German -ing nominals can have resemble those that were found for French. They often express bounded events, as the one in (18), where Shooting describes a procedure that has its clear beginning and end, and can thus be measured as a time unit, in which the shooting of photos was done.

(18) a. Vor etwa einem Jahr ist ja bereits Pro 7 in meinem Studio gewesen und hat ein Shooting gedreht.
‘About one year ago, Pro 7 was in my studio already and did a shooting there.’
b. Er zeichnet verantwortlich für das Shooting der Anzeigenkampagne.
‘He is responsible for the shooting of the advertising campaign’

The most frequent reading that the extracted, listed German -ing nouns can have was the ‘kind of...’ interpretation. Here the nominals denote a subcategory of, for instance, sports, holidays, techniques, financing, like Canyoning, Bodybuilding, Bowling, Carving, Jogging, Franchising, Leasing, etc. Among these, there are many that do not have a -en equivalent. The other readings that we have seen for French, too, are resultant states and objects.

(19) a. Sonst hätte ich ja das Listing nicht.
‘I wouldn’t have the listing in that case.’
b. Wie erstelle ich ein Briefing?
‘How do I compile a briefing?’
c. Der Club ist vom feinsten [...], das Catering schmeckt lecker.
‘The club is killer [...], the catering tastes delicious.’
It seems that the task sharing of German -ing and the nominalised infinitives do not overlap. Moreover, the distribution of interpretations is similar to the -age and -ing opposition in French (although -age is not unambiguous in contrast to -en). In the next section, I will look at -ing's behaviour in relation to other native German processes and examine what morphological differences persist in comparison to the behaviour of the French -ing suffix.

4.2. Overlaps and differences

For French, we have seen that the -ing suffix can not only be replaced by -age but also by other native suffixes like -(t)ion and -ment (cf. table in (8)). In German, the -ung suffix, rival of -en, curiously does not overlap with -ing.


In Old English as well as in Old High German both suffixes already existed and were used for the formation of deverbal nominals. At that time, there were no differences between the two word formation patterns (Demske, 1999).

(21) gyrstandæ ic wes on huntunge
‘yesterday I was on hunting’
(Alexiadou, 2001a)

In Old English the inflectional class of the base verb was the reason for the choice of either -ing or -ung. In the development of the English language, -ing prevailed. Already in Middle High German, -ung was the form that seemed to come out on top in the competition between the rival forms (Demske, 1999). The fact that the two patterns surface nowadays as mutually exclusive in German might be due to phonological reasons, like the similarity of -ing and -ung in sound. Another, morphological, issue could be the origin of the base verb: -ing attaches to English, -ung to German bases.

For German, we could say that -ing is not so much a rival of the nominalised infinitives, although their functions in their original languages are very similar. It comes a lot closer to -ung in its semantics. As -ung, it derives nominals with ambiguous interpretations that take a range from terminative eventive concepts to objects. From the morphological perspective, the role of the German -ing pattern seems a lot more clear than that of the French, for it only applies to English bases. As the forms are taken over one-to-one into German, we do not know exactly to what extent the speakers analyse them as complex words. As -ing does not attach to German or other than English bases, we do not have a real productivity here but only a large direct loaning process from the English vocabulary. So, we could say that in the evolution of the borrowing processes (King, 2000), the German -ing-pattern is still in the lexical phase. The general meaning shift of the German -ing-derived forms towards terminativity in the event interpretation is due to the rival presence of the nominalised infinitive that exists for almost all -ing-derivatives and covers the durative perspective. In the next paragraph, I will sum up the qualities of nominalising -ing discussed so far for English, German and French.

5. Properties of -ing – a contrastive overview

Having discussed the different morphological and semantic properties of -ing derivatives in different languages, I would like to sum up the outcome in a simplified overview. In (22) we can see
all qualities of the different -ing suffixes that concern morphology. Bases are classified according to their lexical category and their origin\textsuperscript{25}.

(22)

<table>
<thead>
<tr>
<th>Morphology</th>
<th>Eng. -ing</th>
<th>Fr. -ing</th>
<th>Ger. -ing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has V ‘bases’</td>
<td>Almost always\textsuperscript{27}</td>
<td>Sometimes</td>
<td>Almost always</td>
</tr>
<tr>
<td>Has N ‘bases’</td>
<td>Rarely</td>
<td>Rarely</td>
<td>Rarely</td>
</tr>
<tr>
<td>Has English bases</td>
<td>Yes</td>
<td>Not necessarily</td>
<td>Always</td>
</tr>
<tr>
<td>Has native bases</td>
<td>---</td>
<td>Sometimes</td>
<td>No</td>
</tr>
<tr>
<td>Is productive</td>
<td>Highly</td>
<td>A bit</td>
<td>??</td>
</tr>
</tbody>
</table>

In this table it becomes obvious that French -ing, although not very productive (yet), is on its way to developing a real derivational pattern. As we have seen in section 3.2, -ing derivatives of French base verbs exist. This suggests that -ing with its particular interpretation is accepted as such by the French speech community and can be creatively used even with native bases. Moreover, when an -ing and an -age nominal exist of the same base verb, there are often semantic factors (like a negative bias) that make speakers choose one variant over the other as suggested by Farge. This means that the speakers must be more or less aware of these differences in meaning.

For German, we cannot say a great deal about the speaker’s creativity, because we do not find -ing forms that are based on German verbs, which might have other than semantic reasons, as suggested above. The loaned -ing-nouns might appear in large numbers, but they seem to be taken over 1:1 from English with a general meaning shift towards a bounded event, resultant state/object or ‘kind of...’ interpretation. This semantic shift presumably takes place because the durative event reading is covered as the only interpretation by the nominalised infinitive and no other form is available to express, what -ung does for German base verbs. The semantic situation of English, French and German -ing is summed up in (23).

\textsuperscript{25} Certainly the question of origin is in many cases hard to determine. There might be words that were loans centuries ago and are lexicalised in their new language nowadays. Others might be re-loans that existed in one language centuries ago and found their re-entrance (maybe as a new form) via another language.

\textsuperscript{26} In the connection of loan words and derivation the term ‘base’ is quite dangerous. What I mean here, e.g. for French, is that there are rarely corresponding verbs for the -ing-nominals. If they are real bases or derived from the nouns or have developed in parallel is not considered here. For German, the classification means that there are almost always German verbs that co-exist with the nominal. So for the loan words, the term ‘counterpart’ instead of ‘base’ would perhaps fit better.

\textsuperscript{27} There are a few exceptions where -ing can attach to nominal bases: walling, timbering, etc. Interestingly, -ing derivatives of these kind have the same interpretation as denominal -age derivatives in French, like plumage (‘feather-ing’), etc.: they express an inner plurality of an object (Uth, 2008) like plumage - „a thing with several feathers in it“ or walling - „several walls that enclose something“. This means that also in the denominal domain, Eng. -ing and Fr. -age come close to each other in their semantics (Uth).
Semantics | Eng. -ing | Fr. -ing | Ger. -ing
--- | --- | --- | ---
Terminative Events |  | \(+/-^{28}\) |  +
Resultant State/Object |  | + | +
Durative Events | + | + with faire | + with machen

In this contrastive summary we can again observe how the -ing derivatives change aspectually in French and German. In its original English form, famous for imperfectiveness and used in the progressive sense, -ing systematically shifts to terminative and other non-eventive readings in German. As we have seen in part 4, the nominalised infinitives completely cover the complementary interpretations. For French, the situation is not that clear-cut since the language lacks a regular unambiguous pattern for durative event interpretations (recall that all the patterns in question are ambiguous and derive also non-eventive meanings). Here the native processes (-age, -ment, -tion) are as multi-layered in their meaning as the French -ing-forms. It seems that when a competitive situation with other word-formation patterns occurs, it is mostly -age that covers the imperfective readings. The evolution of the French -ing pattern will be an interesting process to observe in the future. In the conclusion of this paper, I will discuss what all of the above means for the acceptance and development of a foreign derivational process that is taken into a language.

6. Reasons for the nativisation of foreign patterns

The reasons for the acceptance and use of a foreign derivational pattern are—as we have seen above—in large part semantic and morphological factors. But, according to Farge, phonological factors also have a role to play and, especially for French, the usage frequency in the very first period of the loan are of importance. But let us proceed chronologically. When the need for a loan word emerges, caused for example by a lexical gap in the native vocabulary or for stylistic reasons (Pulvermüller, 2008; Hagège, 1987), the derivative—in this case the English -ing nominal—is taken up into the language and is used by a larger or a smaller number of speakers. If the word has already established itself (in the sense of Bauer, 2001) before the Académie Française can introduce an official French variant, the chances are quite good that the English loan will be kept (Farge, 2004). The -ing-nominal is then no longer perceived as foreign, so there is no need to get used to a new French word that is supposed to express the same concept. A problem emerges if the phonology of the introduced loan sounds strange to the French ear as in the case of un computer (Farge, 2004) which was replaced by ordinateur.

However, semantic and morphological reasons seem to be the most obvious and frequent cause for a loan to be accepted by speakers, especially in order for a whole derivational pattern to be taken over. We have seen that in French as well as in German the -ing-derivatives cover a kind of morpho-semantic gap. Here the origin of the bases (Ger. -ung vs. -ing) as well as the aspectuality (Ger. -ing vs. -en), or a certain semantic bias (Fr. -age vs. -ing) which the suffixes are able to add to the entire nominal, are decisive.

The development of a real productive derivational pattern, however, in contrast to the lexical one-to-one loaning of derivatives of a certain kind seems to be of a mere morphological nature. In German, for example, as we have seen in part 4, -ing-affixation is only possible with English bases up to now. The German based nominals are still covered by the -ung-derivation. -Ing in German has

28 Depends on quantification as seen in part 3.
not yet developed a certain semantic property that would make it special and worth using on native bases in comparison with the available German processes (-ung). In French, on the other hand, -ing shows such strong semantic characteristics of its own that it can even be attached to native French bases (although not very productively up to now). Alltogether, we can say that the morphological borrowing of the English -ing pattern is at different stages of evolution in German and in French: for German we have only seen lexical loaning so far, whereas in French we are in a transition period from lexical to structural borrowing.

References


