0. Introduction

The purpose of this paper is to address the question of connectives from a contrastive point of view. By connectives I understand a particular class of linguistic elements, viz. adverbs and conjunctions that function as linkers between clauses, sentences or larger text fragments. The languages to be dealt with are French and Dutch.

The present research grew from the following empirical observation: Dutch speaking students of French encounter very serious difficulties in correctly handling French connectives. Given that connectives also exist in their native language, the obvious question to raise is why this is so: why do those students have so much trouble to use plutôt, tout de même, alors, etc. in an appropriate way? The equivalence problem, which is a central issue in contrastive linguistics, appears to be particularly serious in the domain of connectives.

Furthermore, when we deal with syntactic and semantic problems of French, we can usually refer to some rule system, to a chapter of the grammar or to a dictionary. When we deal with connectives, however, we are often left with a statement such as "this is not quite the way a French native speaker would say it". This amounts to saying that connectives are not only badly used by students, but that they are also often poorly taught by teachers.

In order to gain insight into this problem, and eventually to solve it, I would like to explore two hypotheses, the second being probably a little more controversial - I hope refreshingly controversial - than the first. The first idea I will provide evidence for, is that adequate use of connectives is intrinsically a difficult matter, even for native speakers. This may be so because connectives involve a variety of processes, both cognitive skills and linguistic competence. To the former belong abilities such as deductive capacity, logical reasoning, concentration, etc. The latter in turn involves both grammatical and pragmatic competence, two components of language which are not

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1 I wish to thank an anonymous reader of this journal for his/her very valuable comments and suggestions.

2 Most of the data are taken from M.A. dissertations written by Belgian Dutch speaking, i.e. Flemish students. Although those students are non-native speakers of French, they usually have had an average of 10 years of training in written and spoken French.
necessarily structured in a similar way.

Let me now turn to the second hypothesis. I will adventure the following question: lexicon studies have established that languages vary as to their resources to express different things. As is well known, Eskimos reportedly have many different ways to talk about snow, while Arabic has many different words to refer to a camel: for example, a pregnant female camel is called differently not only from a male camel, but also from a non pregnant female camel. Indeed, she is worth the price of two camels when she is sold at the market. So, my hypothesis will be: why would the same not hold for other domains of language, in particular that of pragmatic connectives? In other words, could it be the case that even if two languages, such as French and Dutch, use connectives, they use them in different ways, and more particularly, to a different extent? In fact, there seems to be some evidence for this, as I will attempt to show.

Although the motivation to undertake the present research on connectives stems from a teaching problem, I would like to point out that other fields of applied linguistics badly need a better understanding and a more thorough knowledge of connectives, for example that of Natural Language Processing. Computers, in more ways than one, can be considered as non native speakers of a language, and are probably the worst foreign language students in the world. In many current NLP projects, the analysis, synthesis or translation of connectives is a major, and to my knowledge unsolved, problem. Therefore, whatever progress can be achieved in our understanding of connectives, it will also be of use in other domains than foreign language teaching.

Another introductory observation runs along similar lines. Although it is usually the case that a scientific theory leads to applications, the road sometimes may also go the other way round. Indeed, a significant need in one of the "applied" fields of a scientific domain may suddenly reveal an area that still lacks solid descriptive research, let alone theory construction. In my view, connectives might be such a case. Although theoretical linguistics has witnessed a strong interest in pragmatically oriented matters for the last decades, there still are many unexplored and unresolved questions with respect to connectives, especially from a contrastive point of view.

The paper is organised as follows. I will, first, sketch a number of general properties of connectives. In the second part, I will illustrate the problem that foreign language students have with French connectives by presenting a sample of errors. Most of them are taken from texts written by my own students, but some can be found in two other papers (Kielhöfer & Poli 1991, Nølke 1989). Interestingly, the authors of these papers, who are respectively German and Danish, report about their students of French having similar problems when dealing with pragmatic connectives. This of course leads to the idea that one of the factors at stake here might be a more general difference between Germanic languages and French. In the third part, I will turn to the language-internal hypothesis and finally, in the fourth, to the typological or contrastive hypothesis.
1. General properties of connectives

Let me recall, for a start, that connectives belong to the basics of language structure, as was pointed out by Harris (1968). According to Harris, language structure is fundamentally based on relationships that relate minimal units to constructs, so that the resulting model includes:

- a set of kernel sentences
- a set of transformations
- a set of connectives
- one set of rules as to which transformations can be carried out in succession on the same kernel
- another set of rules as how connectives can be strung in succession.

Though connectives are essential components of language, we lack systematic knowledge about them. A first reason why this is so may be their extremely heterogeneous character with respect to parts of speech. The parts of speech approach, which is common practice in linguistic analysis, cannot yield satisfactory results because about any lexical category can take on the role of connective, as shown in (1):

(1)  

<table>
<thead>
<tr>
<th>Letter</th>
<th>Category</th>
<th>Examples</th>
<th>Translation/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>ADVERBS</td>
<td>pourtant, donc</td>
<td>however, therefore</td>
</tr>
<tr>
<td>b.</td>
<td>CONJUNCTIONS</td>
<td>mais, de sorte que</td>
<td>but, so that</td>
</tr>
<tr>
<td>c.</td>
<td>NOUN (PHRASE)S</td>
<td>somme toute</td>
<td>lit. sum total, all in all</td>
</tr>
<tr>
<td>d.</td>
<td>VERB (PHRASE)S</td>
<td>cela dit, tout compte fait</td>
<td>lit. this said, however; lit. all bill made, after all</td>
</tr>
<tr>
<td>e.</td>
<td>PREPOSITION(AL PHRASE)S</td>
<td>par contre, en revanche</td>
<td>lit. by against, however; lit. in revenge, however</td>
</tr>
<tr>
<td>f.</td>
<td>IDIOMATIC EXPRESSIONS</td>
<td>tant qu'a faire, comme quoi</td>
<td>lit. so much as to do, while you are at it; lit. like what, from where it shows that</td>
</tr>
</tbody>
</table>

Cases such as those examplified in (1f) are hardly translatable: they are often fossilized remnants of earlier stages of the language, whose original meaning has become totally opaque even to native speakers of French. The examples in (1) show that there is no

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3 French connectives have been more thoroughly investigated than the Dutch equivalents. For French, the most common connectives have been listed and classified (Berendonner 1981; Bieber 1988; Blumenthal 1980; Ducrot et al. 1980; Roulet et al. 1985; Ruquet & Bodin 1988) and there exist several careful and detailed studies of a number of them (e.g. Anscombe & Ducrot 1977; Gühlich & Kotschi 1983; Zenone 1982, 1983). In the Dutch domain, the ANS (Geerts et al. 1984: 401ff and 641ff.) provides significant information on adverbial connectives and on conjunctions, but detailed studies are almost exclusively concerned with connectives of contrast (e.g. Foolen 1993; Spooren 1989; Van Belle & De Vrooij 1992) and cause (Van Belle 1989).
"word class" of connectives, so that if one looks for them in standard grammars, they are scattered in different parts of the grammar, some of them being totally absent.

A second relevant observation is that grammar has traditionally been conceived of in a narrow sense, as the study of word combinations that are to be accounted for in terms of rules and principles within the sentence. However, from a formal point of view, one of the defining properties of connectives is that they mostly function outside the syntactic domain of the sentence, thus falling outside the domain of syntactic rules. This is not only suggested by their positional properties - they usually function at the beginning of the sentence -, but also by the fact that they are not sensitive to basic syntactic parameters such as valency or embedding. As illustrated in (2a-b), connectives do not belong to the actantial pattern of the sentence. In (2a), au fond has a connective function and is not an argument of the verb avoir raison, whereas in (2b), au fond fulfills the role of a locative complement, argument of the verb mettre. Connectives do not have either a valency of their own. Whereas the locative complement of (2b) can take a complement of its own, e.g. du tiroir in (2c), the latter possibility does not exist when we are dealing with the connective, as is shown by (2d):

(2) a. Au fond, Max a raison
   [(lit. At the bottom) In fact, Max is right]
b. Max a mis la lettre au fond
   [Max put the letter at the bottom]
c. Max a mis la lettre au fond du tiroir
   [Max put the letter at the bottom of the drawer]
d.* Au fond de l'histoire, Max a raison
   [At the bottom of the story, Max is right]

The examples in (3) show that, as has been pointed out by Rubattel (1982) and others, many connectives are not subject to elementary linguistic operations such as embedding, i.e. they are not allowed in an embedded clause:

(3) a. Max ne se sentait pas bien. Aussi n'est-il pas venu à la réunion
   [Max did not feel well. So he did not come to the meeting]
b.* Pierre m'a dit que Max ne se sentait pas bien et qu'aujourd'hui il n'est pas venu à la réunion
   [Peter told me that Max did not feel well and that so he did not come to the meeting]

On the other hand, connectives do not seem to exhibit a particular syntactic behaviour of their own, hence the difficulty of assigning a specific syntactic function to this composite class. So, if they can be analyzed neither in terms of lexical categories nor in terms of syntactic categories, what is there to be said about their pragmatic function?

Connectives have at least a twofold discursive function, an argumentative and an interactive function (cf. Berendonner 1981; Mainguenau 1987; Roulet et al. 1985). They either link different text segments or utterances with one another or they simply
connect speaker and hearer. To put it still differently, they may establish relationships between predicative structures as well as between people, viz. the participants of the linguistic exchange.\(^4\) Whereas (4a) contains an argumentative connective, in (4b) its mere function is to signal the relationship with the speech partner:

(4) a. Max a menti à son patron. Par conséquent il a été viré
    [Max has lied to his boss. Therefore he has been fired]

   b. Voyons, c'est évident que Max a menti
    [(lit. Let's see) Come on, it is obvious that Max has lied]

In what follows, I will only deal with argumentative connectives.\(^5\) But even from the argumentative point of view, connectives may contribute to what Lundquist (1987) calls "the argumentative program" by performing quite diversified speech acts. As has also been stressed by other linguists (Auchlin & Zenone 1980; Ducrot et al. 1980; Morel 1984; Rubattel 1982), connectives may refer to the mere propositional content of the utterance, as in (5a), to the speaker's involvement with respect to his utterance, as in (5b), or to its implicit import, as is the case in (5c) where the implicit part of the utterance is something like "...(mais) je n'en boirai pas, parce que ...":

(5) a. Une pierre tombe parce qu'elle est pesante (Stendhal)
    [A stone falls because it is heavy]

   b. Il doit être parti puisque sa voiture n'est plus là
    [He must be gone since his car is no longer there]

   c. J'ai envie d'un whisky mais c'est mauvais pour la santé
    [I feel like having a whisky but it is bad for my health]

Moreover, argumentative connectives may differ according to the illocutionary act performed by the sentence. Roulet et al. (1985: 145) thus uncovered that ainsi and aussi, which both function as connectives of consequence, are not equally compatible with two different speech acts. They are equivalent in (6a), which only contains a statement, but in (6b), which combines a statement and an order, ainsi is no longer possible:

(6) a. Ils ont obtenu leur visa, ainsi/aussi ils ont pu traverser la frontière
    [They have obtained their visa, (lit. so, also) so they have been able to cross the border]

   b. Vous devez obtenir un visa, aussi*/ainsi contactez l'ambassade

\(^4\) In the latter case, Nolke (1989) talks of *secondary* connectives, because they are no longer linkers between utterances properly speaking, but they do give the hearer instructions as to the correct interpretation of the utterance.

\(^5\) For a particular type of interactive connectives, viz. that of verbal connectives, see Lamiroy & Swiggers (1992).
[You have to obtain a visa, so get in touch with the embassy]

Worth noting too is that one and the same connective may have different properties according to whether its function is argumentative or interactive. Sentence (7a) and (7c) are equivalent, but not (7b) and (7d). In (7a), comme quoi introduces a consequence and functions as an argumentative connective: the relation between the two clauses can therefore be reversed into a causal relation, as shown in (7c). In (7b), however, we are dealing with an interactive use of the same connective which allows the speaker to express his conclusion:

(7) a. Il a quitté la région, comme quoi il est impossible que tu l'ayes rencontré
[He has left the region, (lit. like what) therefore it is impossible that you have met him]

b. Il s'est trompé, comme quoi personne n'est infaillible
[He has made a mistake, (lit. like what) from where it shows that nobody is perfect]

c. Comme il a quitté la région, il est impossible que tu l'ayes rencontré
[Since he has left the region, it is impossible that you have met him]

d.* Comme il s'est trompé, personne n'est infaillible
[Since he has made a mistake, nobody is perfect]

A final reason why connectives are a thorny problem for linguistic description is that they hardly can be analyzed without taking into account the larger background or context against which information is processed. That the role of the context cannot be dismissed seems undoubtful, since it supplies the assumptions that bear on the assessment of the adequate interpretation of the text. According to Sperber & Wilson's (1986) relevance theory, hearers interpret utterances on the assumption that they can recover information relevant to them. Following Blakemore's (1989) analysis, connectives can be viewed as constraints on the hearer's choice of context, or to put the same differently, their function is to guide the interpretation process by specifying the relevant properties of the context: connectives are constraints on relevance. Not only do different connectives contribute to the overall coherence of the discourse in different ways, but the very presence of a connective is significant: the speaker, by using one, directs the hearer towards the relevant interpretation by making certain assumptions immediately accessible. In the opposite case, viz. the absence of a connective, the relevant connection is less readily or not at all accessible: the speaker is less directive with respect to his speech partner. For example, both sentences of (8) convey a contrast between the two propositions. However, as Blakemore (1989) points

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6 This view is in fact very close to the analysis proposed by Moeschler (1985) and Roulet et al. (1985) in which connectives are considered as "instructions" for the correct interpretation of the text.
out, in (8b) the idea of contrast is likely, because there is a natural antinomy between tall and short, but the speaker does not necessarily have this contrast in mind, whereas in (8a) it is totally undoubtful, since it is explicitly stated:

(8) a. Jane is tall but Mary is short
    b. Jane is tall. Mary is short

The latter point is, as we will see, not without interest for the typological part of the present research. But before turning to this aspect, let us take a look at some of the current errors made by non-native students of French.

2. Sample of errors

Three types of errors occur in French argumentative texts. A first type consists in not using a connective where we would expect one. The second type corresponds to the incorrect use of a particular connective. The third type is the excessive use of a few connectives such as alors or quand même which, for some reason, are the student’s favorite connectives, not only of Dutch speaking students but also of German students, as Kielhöfer & Poli (1991) report.

The first type of "error" is illustrated by the examples (9 - 11). The texts in (9) and (10) are due to a Belgian student, example (11) is taken from Kielhöfer & Poli (1991). Although the absence of connectives cannot always be penalised as a "mistake", the total lack of linkers between successive propositions brings about a feeling of not having to do with a piece of French text. In certain cases, however, the coherence of the text really requires the presence of a connective, thus ainsi in (9) and néanmoins in (10) seem quite indispensable:

(9) Cette analyse du passif anglais sera présentée dans la synthèse qui suit. [Cependant, toutefois] Notre résumé tient compte du sujet de notre mémoire. [Ainsi] Nous avons essayé de réduire les éléments qui se rapportent uniquement à l'anglais et de mettre en évidence [au contraire, en revanche] ce qui a trait au passif en général.

[This analysis of the English passive will be presented in the following synthesis. (However) our synthesis takes into account the subject of our dissertation. (Thus) we have tried to reduce those elements which regard English only and to stress (instead) what holds for passives in general]

(10) La signification des auxiliaires du passif diffère d'une langue à l'autre. [En effet] en anglais chacun des auxiliaires donne une nuance spécifique à la

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7 The connectives between brackets in (9) and (10) of course did not figure in the original text but correspond to the corrected version. As for (11), (11a) is produced by the German student, (11b) is the corrected version.

[The meaning of the passive auxiliaries differs from one language to the other. (Indeed) in English every auxiliary adds a special nuance to the sentence. They have different properties and (therefore) their own use. (However) they belong to the same semantic domain since they all allow to form passives that express an action. In French (however), the passive auxiliary is used to express a state as well as an action]

(11) a. Le français a beaucoup de grammaire. C'est une langue très difficile. Toutes les règles ont des exceptions. C'est pourquoi il faut l'étudier beaucoup et commencer tôt.

b. Le français est une langue très difficile [car] il possède une grammaire très complexe. [En effet] chaque règle a des exceptions. Il faut [donc] l'étudier à fond pour l'apprendre, [par conséquent] il faut commencer tôt

(French is a very difficult language (since) it has a complex grammar. (Indeed) every rule has its exceptions. (Therefore) one has to study it thoroughly in order to learn it, (so) it is necessary to start early.

The second type of error occurs when students plainly choose the wrong connective. Notice that the same connectives that cause most difficulties to Dutch speaking students also seem to be the most problematic ones for German and Danish students, as reported in the two above mentioned papers. Cases in point are pourtant (yet), d'ailleurs/par ailleurs (moreover, besides), en effet/en fait (indeed, in fact) and parce que/puisque/car (because, since, as). The examples in (12-13) illustrate the case of pourtant. Although pourtant expresses contrast, it is not a mere synonym of mais or cependant. As Moeschler & de Spengler (1982) argue, pourtant denies an implicit conclusion that can be drawn from the preceding clause, as in (12):

(12) a. Il est gentil. Pourtant tout le monde le déteste
[He is friendly. Yet everybody hates him]

b. Bien qu'il soit gentil, tout le monde le déteste
[Although he is friendly, everybody hates him]

Such an implicit conclusion cannot be drawn from the first clause in (13a), from Kielhöfer & Poli (1991). Compare in this respect (13a) and (13c):

(13) a. L'anglais est plus simple. Pourtant le français est plus beau
[English is more simple. Yet French is nicer]
Bien que l'anglais soit plus simple, le français est plus beau

[Although English is more simple, French is nicer]

L'anglais est plus simple que le français. Pourtant les étudiants ont autant de mal à apprendre l'anglais que le français

[English is more simple than French. Yet students have as much trouble in learning English as French]

Bien que l'anglais soit plus simple que le français, les étudiants ont autant de mal à apprendre l'anglais que le français

Example (14), due to a Belgian student, illustrates a confusion between different causal connectives. Whereas the use of car and puisque hinges on the attitude of the speaker towards his utterance, the use of parce que only refers to the propositional content (Ducrot et al. 1980). The former involve a double speech act, the latter involves only one. This is what makes (14a) ungrammatical; the second sentence is equivalent to (14b), in which car or puisque would be totally impossible:

(14) a. Dans certains cas l'échec est dû au fait que les étudiants ne maîtrisent pas la matière. Dans d'autres cas ils échouent car [parce que] ils ne peuvent pas tenir tête au stress des examens

[In certain cases the failure is due to the fact that the students do not master the subject. In other cases they fail since (because) they cannot stand the stress of the exams]

b. C'est parce qu'ils ne peuvent pas tenir tête au stress qu'ils échouent

[It is because they cannot stand the stress that they fail]

As both Nölke (1989) and Kielhöfer & Poli (1991) report, d'ailleurs and en effet are other stumbling blocks for foreign students of French. In example (15), taken from a MA dissertation on connectives by a Belgian student, d'ailleurs got confused with en effet. The former brings in a new argument which corrects or reinforces the preceding one, whereas the latter only confirms what is said before. In (16), taken from Kielhöfer & Poli (1991), en effet and en fait are mixed up:

(15) Un connecteur qui suit les deux sera comptabilisé dans les tableaux dans la position médiane. D'ailleurs [En effet] les phrases reliées par les deux points sont plus fortement liées que les phrases séparées par un point ou un point-virgule.

[A connective following a colon will be counted in the figures as being in the intermediate position. Moreover (indeed) sentences that are united by a colon are linked more tightly than sentences that are separated by

8 In fact, parce que functions as the all-purpose connective of cause and can replace car and puisque in certain contexts.
Le français possède un grand patrimoine: en fait [en effet], c'est la langue de la littérature, de la philosophie
[French has an important heritage: in fact (indeed) it is the language of the literature and of the philosophy]

The final and third type of error covers the excessive use of two or three particular connectives, viz. alors and quand même, less often tout de même. Although more research would be needed to substantiate this, the pervasive use of these particular connectives is maybe to be explained by interference with Dutch dan and toch (German dann and doch), two common adverbial particles in Germanic languages. Another reason, which in fact parallels the contrastive explanation, might be the fact that alors and quand même also are typical of Belgian French. Those adverbs are not uncommon in standard French, but seem to belong more readily than to spoken than to written language: in order to be used in written discourse, alors and quand même have to meet specific semantic and pragmatic conditions that are far more restrictive than the conditions of use observed in the essays of Belgian (German) students. The example in (17a) was produced by a Belgian student, (17b) is due to a German student (Kielhöfer & Poli 1991); alors is superfluous in both cases. As for quand même in (18a-b), both examples by Belgian students, the connective is unnecessary in (18a), whereas it should be replaced in (18b) by mais (or toutefois or cependant):

(17) a. La rigueur méthodologique est grande: les trois constructions sont traitées séparément et leurs attestations sont alors groupées en fonction des temps et des modes
[The methodological rigour is impressive: the three constructions are treated separately and their attentions are then grouped according to their tense and mode]
b. A côté de l'utilité économique il y a alors le prestige social du français
[Besides de economic utility there is then the social prestige of French]

(18) a. Avant d'aborder les résultats de nos observations, ça vaut quand même la peine de faire une réflexion préliminaire
[Before interpreting the results of our findings, it is still worth while to make a preliminary observation]
b. Nous ne doutons pas que cette explication se justifie. Quand même des statisques démontrent que le pourcentage d'agents exprimés ne peut être négligé
[We do not doubt that this explanation is right. Still statistics prove that the percentage of expressed agents is not unimportant]
As I have suggested at the beginning of this paper, one of the reasons why foreign students of French encounter these difficulties may be the fact that connectives are intrinsically a difficult issue, even for native speakers, so that the problem only increases when it has to be mastered by foreign language students.

3. Connectives and native speakers of French

That connectives are per se a difficult matter is in fact strongly suggested by a survey conducted a few years ago at the Université Catholique de Louvain, a French speaking Belgian university (Klein & Pierret 1990). About 2000 first year students, native speakers of French, from different departments, answered a language test bearing on 4 major topics, one of which was connectives. The other topics were: morphosyntax (irregular verbs, choice of indicative vs subjunctive, etc.), grammatical analysis (identification of subject and object, etc.) and lexicon. The score of correct answers for connectives was, surprisingly, only 50%.

The purpose of the investigation was to determine the average level of linguistic competence required to deal with the scientific type of language that students are confronted with during their studies. In order to identify different types of language deficit, separate levels of linguistic competence were distinguished, in particular the sentence level and the discourse level. The test consisted of 90 questions to be answered in 2 hours. Although it was a multiple choice test, "none of the indicated solutions is correct" was always included as a possible answer. Hence students could (and sometimes had to) come up with a solution of their own.

The overall mean score of the test was 59% of correct answers. When the different components of the test are taken into account, the figures break down as follows: 84% of correct answers for grammatical analysis, 66% for morphosyntax, 50% for connectives and 40% for the lexicon. One of the interesting results of the investigation is the following: when the correct answer did not appear among the available solutions, so that the student had to produce it himself, the medium score of the test fell down to only 18% of correct answers. The latter data suggests that arbitrary choice among possible answers plays a much more important role than one would expect, on the one hand, and that it is far more difficult to produce the right answer than to choose it, on the other.

With respect to connectives, the degree of difficulty of the test varied from text to text. The shortest text fragment contained only one connective, the longest five. An example is given in (19):

9 As will appear from what follows, the experiment with French native speakers only illustrates one of the errors mentioned in the previous section, viz. choice of the wrong connective. In order to establish whether native speakers also have difficulties with the other types of error (especially type 1, if the interference hypothesis for type 3 is correct), one should have to look at data stemming from spontaneously written texts by French native speakers. I do not know of any research that has dealt with the topic, but the issue is surely worthy of further research.
With respect to connectives, the main results of the test can be summarized as follows. First of all, the average score can be considered as quite low, since only half of the answers were correct. Furthermore, this figure refers to correct answers for the connectives taken individually. Indeed, when the combination of connectives throughout the text fragment is taken into account, the average score goes down to 21% of correct answers. As shown for example (19), the C(combination)-score is much lower than each of the individual scores: 15.6% for the combination, against 66.8% for (19a), 47.2% for (19b) and 31.2% for (19c). These results provide evidence for the hypothesis that I mentioned at the beginning of the paper, viz. that connectives are intrinsically a difficult matter, even for native speakers of French. The reasons why this is so are probably manifold. Firstly, connectives are far more typical of written rather than of spoken language. Secondly, they belong to a particular type of written discourse, viz. argumentative texts, which first year university students are not necessarily very familiar with. But there may be a further, less obvious reason, which is in fact suggested by a more careful analysis of the results of the test, as will be shown below.

A second surprising conclusion to be drawn from the figures is that there does not seem to be a necessary relationship between the number of connectives to be found in the text fragment and the score of correct answers. For (19), where three connectives are missing, 15.6% of the answers were correct (for the combination of connectives), but in another case, with only two connectives to fill in, the score was only 3.9%. The results of course depend on the degree of difficulty of the text but also, surprisingly, on the place where the connectives are located in the text. In the above mentioned case with two connectives, both were situated at the beginning of the text, so that students supposedly did not concentrate upon the second part of the text which was, however,
necessary to find the correct answers.

Another striking result of the test is that students sometimes offer a correct answer from a logical point of view, but without paying attention to the syntax of the remaining sentence. Some students, for example, proposed comme in (19) instead of car. The second clause introduces an explanation, something that can be expressed indeed in French by comme. However, the comme clause has to precede the main clause, so comme could not possibly be a correct answer here.

A final result, which runs along similar lines, is that students seem to operate on a short-term basis when dealing with argumentative texts. This is suggested by the significant difference between the C-score and the individual scores, as illustrated in (19). Students often propose a connective which is compatible with the chunk of text that immediately precedes or follows, but that does not make any sense when the text is taken as a whole. In other words, they tend to atomize the text, being unaware of its overall logical cohesion. They fail to produce the correct connectives because they fail to perceive the general coherence of the text. This aspect of the problem, which no doubt brings in cognitive capacities such as concentration, memory, etc. and which would require much more research, may shed some new light on the question why connectives are so often badly mastered by students, be they native speakers or not.

4. Connectives in French and Dutch

In order to substantiate the hypothesis that French and Dutch may differ as to the organization of argumentative texts, in particular with respect to connectives, I will provide two kinds of evidence. First, adverbials and conjunctions are traditionally analyzed as a closed class of function words. However, the degree of "closeness" may vary from language to language. Thus the class of French connectives appears to be far more productive than that of its Dutch counterparts. Following a functional principle - "la fonction crée l'organe" -, the fact that there are more connectives in French also strongly suggests that they are used more.

The second kind of evidence stems from a sample study of translations from French texts into Dutch. These have shown that it is possible for two languages to argue in different ways, either by using explicit connectives or by a more implicit kind of argumentation, e.g. by ordering the arguments in a particular way, or by choosing particular lexical items other than connectives. The former solution seems to be preferred by French, the latter by Dutch.

In what follows, I will illustrate the two phenomena by focusing on two particular classes of connectives, those of contrast (in which I subsume concession) and those of consequence.

10 Connectives of contrast and concession share a characteristic, as Moeschler & de Spengler (1982) argue: they are part of an argumentative movement that puts forth an argument in favour of a certain conclusion p and, at the same time, another, stronger argument in favour of the opposite conclusion non-p.
The two phenomena of course point towards a typological distinction between the two languages, which may also be responsible for some of the "errors" made by Dutch speaking students when writing French. When a language uses the ordering of arguments in a text instead of using connectives, this may lead to a lack of connectives used in the L2 of speakers of those languages. Thus the typological difference between Dutch and French points to an explanation for error type 1 in a straightforward way. If the excessive use of particular connectives such as *alors* or *quand même* is to be accounted for, as I suggested before, by interference with the Germanic particles (and maybe by the local variant of French spoken in Belgium), the question remains as to whether error type 2 (wrong connective) can also be explained by the typological hypothesis. I will come back to this point later.

4.1. That French\(^{11}\) connectives, belonging to the two categories of adverbials and conjunctions (coordination and subordination), are more productive than their Dutch counterparts\(^{12}\) is illustrated in (20) and (21). The examples in (20) express contrast, those in (21) consequence:

\[
\begin{align*}
(20) & \quad \text{a.} & \text{[however]} & \quad \text{toch, echter} \\
& & \text{cependant} & \quad \text{toch, desondanks} \\
& & \text{n'empêche} & \quad \text{toch, (des(al)niettemin} \\
& & \text{nément} & \quad \text{toch, nochtans} \\
& & \text{pourtant} & \quad \text{toch (des)niettegenstaande} \\
& & \text{quand même} & \quad \text{toch} \\
& & \text{tout de même} & \quad \text{toch} \\
& & \text{toutefois} & \quad \text{toch, evenwel} \\
& \quad \text{b.} & \text{[whereas]} & \quad \text{terwijl} \\
& & \text{alors que} & \quad \text{terwijl} \\
& & \text{pendant que} & \quad \text{terwijl} \\
& & \text{tandis que} & \quad \text{terwijl}
\end{align*}
\]

\[
\begin{align*}
(21) & \quad \text{[so that]} \\
& & \text{à ce/au point que} & \quad \text{zo(zeer) dat} \\
& & \text{à (un) tel point que} & \quad \text{zo(zeer) dat} \\
& & \text{à un point tel que} & \quad \text{zo(zeer) dat} \\
& & \text{à tel titre que} & \quad \text{zo(zeer) dat} \\
& & \text{à telle preuve que} & \quad \text{zo(zeer) dat}
\end{align*}
\]

\(^{11}\) This list is based on Ruquet & Quoi-Boclin (1988), a textbook with the revealing title "Comment raisonner à la française" (How to reason in the French way), and on theoretical work done by Gross and his team, in particular Gross (1986) and Piot (1978, 1988).

\(^{12}\) For Dutch, the data were gathered in various grammars (ANS 1984, Smedts & Van Belle 1993), dictionaries (Van Dale 1990, 1992) and from judgments by native speakers of Dutch.
<table>
<thead>
<tr>
<th>French Connectives</th>
<th>Dutch Connectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>à tell enseigne que</td>
<td>zo(zeer) dat</td>
</tr>
<tr>
<td>de façon/manière (à ce) que</td>
<td>zo(danig) dat</td>
</tr>
<tr>
<td>de telle façon/manière/sorte que</td>
<td>zo(danig) dat, op zo’n manier dat</td>
</tr>
<tr>
<td>d’une telle façon/manière</td>
<td>zo(danig) dat, op zo’n manier dat</td>
</tr>
<tr>
<td>telle que</td>
<td>zodat</td>
</tr>
<tr>
<td>de/en sorte que</td>
<td>zodat</td>
</tr>
<tr>
<td>si bien que</td>
<td>zodat</td>
</tr>
<tr>
<td>tant et si bien que</td>
<td>zodanig dat</td>
</tr>
<tr>
<td>tant (et tant) que</td>
<td>zodanig dat</td>
</tr>
<tr>
<td>tant il y a que</td>
<td>zodanig dat</td>
</tr>
<tr>
<td>tellement que</td>
<td>zodanig dat</td>
</tr>
<tr>
<td>tellement bien que</td>
<td>zodanig dat</td>
</tr>
</tbody>
</table>

With respect to the French connectives listed in (20), it should be noted that although all of them can be translated by Dutch toch, this does not amount to saying that they are all semantically or stylistically equivalent. As shown in (13), pourtant and cependant are not always interchangeable. And whereas toutefois rather belongs to formal speech, quand même is, as mentioned before, rather colloquial. A similar remark holds for several items listed in (21), e.g. au point que (informal) vs à telle enseigne que (formal). Although the typological hypothesis more readily accounts for error type 1 than for the other types, it seems fair to hypothesize that the more connectives there are (and thus the more variegated) in a language, the greater the difficulty for L2 speakers of that language to master the sometimes subtle semantic and/or pragmatic differences between them and hence, to choose adequately among them. Thus the typological difference between French and Dutch may also account, to a certain extent at least, for error type 2.

Two further remarks are in order here. First, in addition to adverbs and conjunctions, French also has a series of idiomatic expressions for which Dutch equivalents are not always easy to find:

(22) a. encore faut-il que
[lit. still need it that] dan nog [still]

b. toujours est-il que
[lit. always is it that] dit neemt niet weg dat
il n’empêche que [lit. it does not prevail that] desalniettemin
il n’en reste/demeure pas moins que [lit. it stays not less that] dit neemt niet weg dat
il n’en est pas moins vrai que [lit. it is not less true that] zo veel is zeker dat
It is also worth noting that certain connectives which are still used in the Southern part of the Dutch speaking community (Belgium), tend to be considered as outdated in the Northern part (Holland). Cases in point are nochtans (yet), vermits (since) and to a lesser extent, daar (since). As the norm for standard Dutch is determined by the North rather than by the South, these connectives might eventually disappear. The latter fact is of course in contrast with the high productivity of French connectives, as illustrated in (20-21).

4.2. The second kind of evidence for the typological hypothesis stems from a sample study of translations from French into Dutch. Although much more research will be needed to substantiate this, the exploration I have undertaken so far has disclosed two phenomena: on the one hand, a certain amount of French connectives simply disappear in the Dutch translation, as in (23), and on the other hand, certain connectives are replaced by different lexical or syntactic means, as in (24):

(23) a. En 1888 un savant anglais écrivait: "Les femmes non seulement ne sont pas la race, elles ne sont pas même la moitié de la race mais une sous-espèce destinée uniquement à la reproduction" (S. De Beauvoir, Le Deuxième Sexe)

[In 1888 an English scholar wrote: "Women not only do not represent the race, they do not even represent half of it but they are an under-species whose unique function is to procreate]

b. In 1888 schrijft een Engels geleerde: "De vrouwen vertegenwoordigen het ras niet; ze zijn zelfs niet eens de helft van het ras, ze zijn een onder-soort, alleen bestemd voor de voortplanting"

(24) a. Car penser réellement à quelqu’un, c’est y penser minute après minute, sans être distrait par rien, ni les soins du ménage, ni la mouche qui vole, ni les repas, ni une démangeaison. Mais il y a toujours des mouches et des démangeaisons. C’est pourquoi la vie est difficile à vivre (A. Camus, La Peste)

[Since to think really of somebody means to think of him minute after minute, without being distracted by anything, neither the worries of the housekeeping nor the fly that is flying around or the meals nor an itch. But there are always flies and itches. That’s why life is difficult]


To give an idea of the figures: in S. De Beauvoir’s novel, there are 1168 instances of
connectives of contrast, in the Dutch translation there are only 1027. In Camus's novel, there are 340 instances of connectives of consequence, in the Dutch translation there are only 289. These figures are all the more revealing since translations by definition tend to respect the original version. Hence, the amount of Dutch connectives used in spontaneous text may be estimated to be even lower.

5. Conclusion

I have tried in this paper to gain insight into the question why Dutch speaking students of French have serious difficulties to use French connectives, while they have connectives in their native language.

At least three quite different factors seem to be at stake here. First, from a purely linguistic point of view, connectives are complex elements because they function at the crossroad of syntax, semantics and pragmatics. Second, the investigation conducted at the UCL with French native speakers suggests that a good performance in this domain hinges not only on linguistic knowledge, but also on particular cognitive skills that are equally important for native speakers of the language. An important issue here seems to be the capacity of concentrating on the text as a whole and of perceiving its overall coherence. And finally, from a typological point of view, I have adventured the hypothesis that French and Dutch do not make equal use of logical connectives. French seems to be better equipped in this respect than Dutch, which is in itself significant from a functional perspective. Furthermore, translation studies show that a certain amount of French connectives tend to be dropped by Dutch translators (or rendered by something else than a connective). Of course, if my hypothesis is correct, it will be necessary to search for more evidence, and for a better understanding of the given evidence, in order to set up a teaching strategy. At any rate, the question seems important enough to be taken seriously, not only in the field of foreign language teaching, but also, as I mentioned at the beginning, in other domains of both theoretical and applied linguistics.

References


