On the combination of corpus-based and experimental methodologies in the study of causal, contrastive and metadiscourse connectives in L1 and L2 text comprehension and production

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1. Introduction

The purpose of this paper is to give an overview of work in progress, with an emphasis on methodological matters. In our study, our aim is to tackle two fields of (foreign) language learning, viz. text comprehension and text production focussing on the impact of causal, contrastive and metadiscourse connectives on L2[1] text comprehension and their usage in L2 text production. The learner group we aim at consists of learners with a L1 French background learning Dutch as a foreign language. For the comprehension studies, we will follow the methodology used by Degand and Sanders (2002), which is exclusively experimental. Corpora will be topical in the production studies, where it is our intention to use a Dutch learner corpus. However, since there is not any official corpus of that kind available at the moment, one of the first steps of our project will be to collect one. In the following we will present the methods we mean to adopt to gather that learner corpus. The results we will arrive at when using the corpus will subsequently be complemented by an experimental study whose aim will be to compare learners' text productions in their second language to text productions in their mother tongue in order to determine the exact role played by their L1 when writing in their L2 (see Kubota 1998). We hope that this last step will allow us to draw more accurate conclusions as to connective use by French-speaking L2 learners of Dutch. In combining learners' L2 text comprehension and production we hope to be able to detect some degree of interaction between those two aspects of language learning.

2. L2 Text comprehension methodology

In their study, Degand and Sanders (2002) underline the utmost importance of using a successful methodology when studying the impact of connectives on text comprehension. The variety of different methodologies used in past studies has led to a multitude of different conclusions, from which it can be derived that a lack of methodological accuracy can lead to biased conclusions (compare Millis, Graesser, Haberlandt (1993) to Degand, Lefèvre, Bestgen (1999) and Degand and Sanders (2002)). There is therefore at the moment an urgent need for a unified method when studying the impact of given connectives on text comprehension. That is the reason why we intend to replicate the methodology used in Degand and Sanders (2002) and Degand et al (1999), which has shown convincing and homogeneous results.

This methodology is exclusively experimental and can briefly be described as follows: the participants have to read an expository text, e.g. a purely informative text which does not require any particular background knowledge on the part of the reader to understand it, and to fulfill a recall task consisting of four questions about that text. The texts are manipulated with respect to the presence of explicit relational markers and are scaled in terms of difficulty. Two of the questions refer to the coherence relation marked by the connective (or not, if the coherence relation is left implicit) and the other two tap general ideas from the text. The time to read the text and answer the questions is controlled. After having read the text and before answering the comprehension questions, participants perform a distraction task, aiming to empty their short term memory about the text. This process is then repeated as long as there are texts to be read. This is roughly the method we plan to employ to measure the off-line impact of connectives on text comprehension, since it has already led to encouraging results, indicating a positive impact of causal connectives on text comprehension both in L1 and L2 (Degand and Sanders 2002).

In our project, we will nevertheless broaden the scope of these studies in trying to confirm the observed results for causal connectives and to come to first tendencies regarding the impact of other types of

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[1] The abbreviation 'L2' is used in this essay to refer to foreign language learning , not to second language learning.

connectives such as contrastive and metadiscourse connectives. In keeping with Oversteegen (1997) we refer to 'contrastive connectives' as to linguistic devices which establish a link between two utterances and express either a 'semantic opposition', a 'denial of expectation' or a 'concession'. Connectives such as 'maar' ('but'), 'terwijl' ('while', 'whereas') and 'hoewel' ('although', 'however') belong to this category. Our definition of 'metadiscourse connectives' has been borrowed from Halliday (1978) who described them as "linguistic elements that refer to the organization of the discourse itself and to aspects of the relationship that develop between the author and the reader of the texts." As a matter of fact, this category comprises a huge number of linguistic expressions. As exemplified by Jackiewicz (2002), it basically includes connectives expressing enumeration, such as *ten eerste, ten tweede* ('firstly, secondly), *ten slotte* ('finally'),… or denoting spatial organization (*aan de ene kant, aan de andere kant* –'on the one hand, on the other hand', *in de eerste plaats, in de tweede plaats* – 'in the first place, in the second place'…) or temporal organization (*dan*-'then'-, *vervolgens*-'further', *daarna* –'subsequently'-, *tot slot* –in conclusion'-,…) and expressions like *wat mij betreft* ('as far as I am concerned'). It is not our aim to study the impact of all these different forms of metadiscourse (see also, Hyland, 1998; Crissmore et al., 1993). Rather we will concentrate on text organizing markers, also called advance organizers (Corkill et al., 1988).

Another aspect of research we wish to go into concerns the general linguistic and/or proficiency level which is required for connectives to have an impact on L2 text comprehension. Degand and Sanders (2002) correlated the variable 'presence of connectives' with the variable 'language proficiency' (measured by a L2 proficiency test) and showed that all the participants benefited from the presence of explicit causal markers both in their L1 and in their L2, which made them conclude that the "L2 proficiency level [of the participants] was high enough to understand the general functions of the signals and their usage conditions." They backed up their conclusion by means of the *inter-dependence hypothesis* (Cummins 1984) and consequently claimed that

> "as soon as readers master an efficient reading strategy in their mother tongue, including the ability to utilize and infer coherence relations in discourse, they can transfer this skill to another language, provided they have also developed a sufficiently high L2 competence level." (Degand and Sanders 2002: 754)

In our study, we will try to determine that minimum L2 proficiency level by focussing on different groups of learners. We will first distinguish the different participants on the basis of their level of instruction and then on the basis of the score they obtain on a language proficiency test. Two groups of participants of different level of instruction will be selected (six formers[2] versus university undergraduates[3]) and each will subsequently be divided up into three levels of L2 proficiency, on the basis of their results at the test. This subdivision makes it possible to cope with the individual level differences in the selected groups and will allow us to observe the correlation between the impact of the connectives and the L2 proficiency level of the participants more accurately.

3. L2 Text production methodologies

3.1. Collecting a Dutch learner corpus

As already mentioned above, a Dutch learner corpus does not exist at the moment. In order to get round that problem, we have begun collecting a corpus, and this process is still ongoing. Considering our relative inexperience in the matter, we have been inspired by the work of our colleagues of the English Department of the University of Louvain, who have conducted the ICLE-project (Granger 1994, see also http://www.fltr.ucl.ac.be/fltr/germ/etan/cecl/Cecl-Projects/Icle/icle.htm).

Having to compile a Dutch learner corpus in the framework of our project, we have been looking for fellow researchers in order to extend our data. We have consequently established a collaboration with researchers from the University of Namur (FUNDP) and from the University of Liège (ULg). Since our project is still in its infancy, we are still in the early design process. In line with the ICLE project, we have established a certain number of variables to be taken into account in the realization of the corpus. Figure 1 gives an

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[2] Pupils from the last year of secondary school having studied Dutch for at least six years.
[3] 2nd year at the university

overview of these variables. Among those variables, we find for example the mother tongue of the participants (French), but also the medium (written language). We intend to focus in the first place on French-speaking learners of Dutch, because they constitute the major unified group of learners of Dutch. Since more than 70% of the French-speaking Belgians learn Dutch as a Foreign Language at one time or another in their school curriculum, research results and pedagogical implications are most likely to be of interest to a high number of didacticians. Our interest for written language is essentially practical, considering that it would be somewhat premature to try to insert spoken language data in a corpus which does not have any written basis, and that it is far more complicated to obtain spoken language data in a relatively short period. The variable 'genre' will be left open since it is our intention to collect different kinds of material ranging from essays to written proficiency exercises and letters.
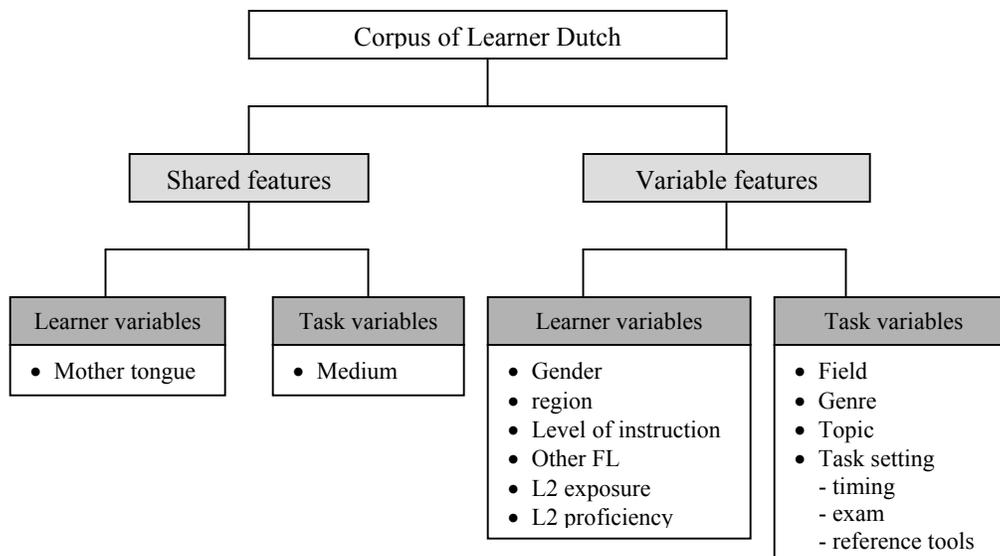

Figure 1: Corpus of Learner Dutch: Learner and task variables (based on ICLE)

In our own research on connective usage by learners of Dutch, we won't be dealing with the whole set of variables presented above, but we will combine some of them to create homogeneous subsets (see Figure 2). In this regard, besides the fixed features, we intend to control the variables 'genre' (essay-writing), 'region' (French-speaking part of Belgium) and to limit the considerable variation resulting from variables such as 'task setting', 'L2 exposure' and the influence of other foreign languages. In addition, we will carefully manipulate the features 'level of instruction' and 'L2 proficiency' in order to detect any differences between diverse groups of learners. This will in turn allow us to relate these variables in the 'production part' of our study to the same variables in the 'comprehension part' (see above), which will possibly point to a correlation between the impact of certain connectives on L2 text comprehension and their use in L2 text production (see below).

So far, we have been collecting data from different sources. The data we have at our disposal for the moment consist of writing skill exercises from six-formers (essays, reports, description tasks), essays from first year undergraduates and essays from learners ranging from first year undergraduate to last year undergraduate, written within the framework of an essay competition, organized by the ANBF (Association des Néerlandistes de Belgique Francophone)[4] and essays from the CNaVT (Certificaat Nederlands als Vreemde Taal)[5]. We won't begin working and derive any frequencies or tendencies before we have reached the level of 300.000 words, which seems to be the minimum limit at which a number of linguists are working (see for example Osborne 1999).

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[4] "Association of the Dutch specialists from the French-speaking part of Belgium"
[5] Dutch counterpart of the Cambridge certificate.

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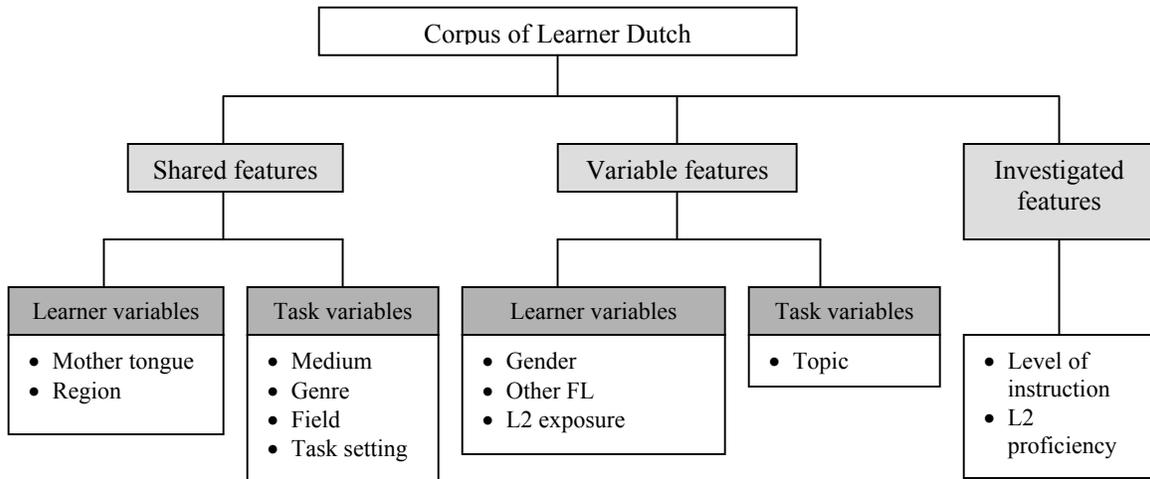
Figure 2: Distribution of the variables in the study on connective usage by French-speaking learners of Dutch .

3.2. Working with the corpus

The contribution of (learner) corpus analyses to this type of research is twofold: firstly, corpora will allow us to work with a large amount of natural language data (Granger 1998), and with specific computerized tools which make it possible to easily approach those data from the desired point-of-view (Granger 1998, Meunier 1998). Secondly, corpus research provides the textual context in which a word or an expression, in this case a connective, appears, which can lead to semantic assumptions concerning connective usage by L2 learners of Dutch. This will indirectly also point to phenomena such as *avoidance*, a strategy regularly used by learners to avoid a particular L2-specific difficulty (Liu and Shaw 2001). We could for instance imagine that French-speaking learners of Dutch would use the connective 'want'('because/for') more frequently than the connective 'omdat'('because'), both making a causal relation explicit, considering that the syntactic environment required by the former is more French-like, and therefore often regarded as easier to use, than the syntactic environment required by the latter. Corpus analyses will besides point to the usage frequency of the different connectives under investigation by the group of learners we focus on and will in turn, when compared to L1 data, lead to the emergence of interesting tendencies, concerning the (over-, under- or mis-) use of those linguistic devices by our group of L2 learners (Granger & Tyson 1996, Osborne 1998, Liu and Shaw 2001).

3.3. Shortcomings of corpus-based studies

Whereas corpora offer incredible quantitative resources, we prefer to turn to more experimental approaches for the qualitative analysis of the results of the corpus analysis. The reason for this is based on one shortcoming of- and one criticism concerning corpus studies, namely their inability to deal with a whole range of different variables and the frequent overgeneralizations of the observed results.

As it has often been claimed, different methodologies can be responsible for result variations. This can be illustrated by contrasting the respective studies of Granger and Tyson (1996) and Osborne (1998), both studying connective use by French-speaking learners of English when writing in their L2, the former using argumentative texts and the latter focussing on more 'neutral' texts. The two studies arrived at different observations about the use of connectives by L2 learners of English: while Granger and Tyson detected an overuse of certain types of connectives, which they related to a case of L1-L2 transfer, Osborne (1998) didn't find any. This clearly illustrates that the variable 'type of text' seems to be a source of result variation. Other variables are likely to influence the results as well: Jarvis (2000) compiled a list of variables, which, according to him, "should ideally be controlled in an investigation of L1 influence". The list in question includes the following variables:

(1)   age
(2)   personality, motivation and language aptitude
(3)   social, educational, and cultural background
(4)   language background
(5)   type and amount of target language exposure
(6)   target language proficiency
(7)   language distance between the L1 and target language
(8)   task type and area of language use
(9)   prototypicality and markedness of the linguistic feature

(Jarvis 2000: 260-261)

Among these variables, some are highly subjective and therefore hard to measure and almost uncontrollable (such as 'personality' and 'motivation'), others can be manipulated in the framework of corpus collection, among which the study-dependent variables such as 'task type', 'area of language use' or 'prototypicality and markedness of the linguistic feature', but still others can only be accurately measured by an experimental study. One of these variables deserves special attention in this regard, namely the 'target language proficiency' variable. The different levels of language proficiency of the participants is a variable which has generally been too vaguely dealt with in most corpus studies. The labels 'intermediate', 'upper intermediate' or 'advanced' have been recurrently used and are most of the time just synonymous with years of instruction. Those generic terms are exceedingly subjective and strongly inclined to personal, group and even geographical variation, or to instruction antecedents. We want to cope with this variable by having a language proficiency test taken by the different participants in our experiment, and by dividing up these participants into well-defined groups of L2 language proficiency (this is basically the same idea as the one exposed in section 2, concerning the distribution of the participants among different levels of language proficiency for the comprehension experiments). Another variable which does not clearly emerge from Jarvis' list but which might deeply influence the results of learner corpus research on L2 text production is the rhetorical ability of the learners in their mother tongue (Kubota 1998; see below). These examples highlight the importance of being highly consistent with the adjustment of the settings of a study and that relying solely on corpus data could lead to some unexpected and undesired variation.

The second shortcoming of corpus research I would like to tackle lies in the almost recurring overgeneralizations or hasty conclusions made by some authors of corpus studies: these often tend to infer a lot from what the observed frequencies point to, and to generalize the obtained results, which often contributes to their drawing of very intuitive conclusions. A common case of generalization in learner corpus researches is the claim that the weird-soundingness of L2 written productions has to be related to a case of L1-L2 negative transfer (Granger & Tyson 1996, Osborne 1999). But this conclusion is not as easy proven as it sounds. The following passage fairly illustrates the phenomenon:

> "Another discrepancy between the MCC [Micro Concord Academic Corpus Collection] and LC [Learner Corpus] was in the grammatical patterning of *because*. In the LC, the pattern *It is because…*, which did not occur in the MC, accounted for 8 out of the 35 instances of *because*. […] There were also several instances of double connectors being used, e.g. *Because…so that…*which is a case of L1 transfer" (Flowerdew 1998: 332).

This conclusion relies upon the own intuition of the author and has further not been verified by further observations. The point is that transfer goes beyond the scope of intuitions and is more than what Jarvis (2000) ironically calls a "you-know-it-when-you-see-it-phenomenon". The literature about transfer of L1 skills or linguistic devices to L2 is huge and disparate. Fortunately, Jarvis (2000) provides a complete state-of-the art of this literature, representing the different trends and trying to combine them to come to a 'unified framework'. His justification for the need for that unified framework within the study of transfer is motivated by his assumption that confusion reigns over the theoretical transfer patterns. He argues that there are "conflicting claims [in the literature] about the nature of L1 influence and its interaction with other factors" and highlights the "lack of consensus concerning what L1 influence is and how it should be investigated", pointing to the difficulty of appropriately defining what the concept 'L1 transfer' stands for. He defines it as an underlying phenomenon which shows itself in three different effects, namely "intra-L1-group homogeneity in learners' IL performance"[6], "inter-L1-group heterogeneity in learners' IL

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[6] "when learners who speak the same L1 behave in an uniform manner when using the L2" (Jarvis 2000: 254).

performance"[7] and "intra-L1-group congruity between learners' L1 and IL performance"[8]. Jarvis consequently states that an ideal analysis of transfer should consider these three effects to come to reliable conclusions:

> "All three should be examined before one is justified in making claims concerning when, where, in what form, and to what extent L1 influence emerges in learner data" (Jarvis 2000: 259).

An illustration of the application of this transfer verification method is indirectly found in Granger and Tyson (1996). They observed an over- and misuse of connectors belonging to what they call the 'corroborative category' ('in fact', 'indeed') in the L2 production of French-speaking learners (this can be related to Jarvis' first effect: 'intra-L1-group homogeneity'). In order to test whether they were confronted to a case of transfer, they "compared the French figures with figures from a comparable corpus of German learner writing" and found that French-speaking learners clearly overused the connector 'indeed' (which corresponds to Jarvis' second effect: 'inter-L1-group heterogeneity'). They finally related those observations to the conclusion that "it is likely that the significant overuse of 'indeed' is transfer-related, especially since it is often viewed by French speakers as the translational equivalent of 'en-effet', a very common connector in written French" (this matches Jarvis' third effect: 'intra-L1-group congruity'). Even if their last assumption does not rely upon any mentioned sources, their conclusion has been consistently verified and seems therefore to hold water.

Besides the fact that transfer cannot be assimilated to an intuition-based concept, one has to consider that (negative) transfer from L1 to L2 is not the solely factor accounting for specific learners' interlanguage features. As Kubota (1998) puts it:

> "non-nativeness in ESL essays can be a reflection of various factors other than L1-specific rhetoric […] what influences L2 texts is not only L1 rhetoric, but also various factors such as previous English instruction, strategies specific to L2 writing, L2 proficiency, and L1 writing ability" (Kubota 1998: 75).

This point-of-view is supported by Jarvis (2000) as well, as he claims that "multiple factors may combine to influence a learner's use of the L2 at any given moment and at all stages of development." He consequently goes into a full consideration of the relation between L1 influence and other variables (see the list above) and tries to determine which combine and which are the most influential in the case of L2 lexical choices. Although he comes to the conclusion that L1 is the predominant factor for influencing L2 lexical choices, he also observes that "many outside variables collude rather than compete", which equally supports the argument presented here.

Among those factors which might exert an influence on L2 text production, L2 proficiency and L1 writing skills deserve special attention. The choice between a whole set of possibilities to express oneself in a foreign language is likely to be conditioned (or restricted) by the lexical knowledge (which is part of the proficiency) one has at one's disposal in the target language. Lack of vocabulary or semantic inconsistencies are often put forward in second language acquisition research to clarify the erroneous use of certain linguistic devices by some learners in their L2 production. This can be illustrated in the light of the following statement made by Liu and Shaw (2001):

> "Learners may not be aware of the gaps in their vocabulary knowledge (Wong 1983; Laufer 1989), especially in cases where there are direct translations between L1 and L2. They tend to perceive the target L2 items as easy to learn, ignoring the fact that each of the translational equivalents has other properties of its own which is distinct from those of its counterpart. This obscures many difficulties and learners are easily trapped by the deceptively transparent target items" (Liu and Shaw 2001: 188).

More specific connective-based studies (Granger and Tyson 1996; Osborne 1998) have led to similar observations, stating for example that "learners seem not to recognize that connectors such as 'in fact' and

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[7] "when comparable learners of a common L2 who speak different L1s diverge in their IL performance" (Jarvis 2000: 254).
[8] "is found where learners' use of some L2 features can be shown to parallel their use of a corresponding L1 feature" (Jarvis 2000: 255).

'indeed' lead the reader to expect some new information" (Granger and Tyson 1996: 22). These examples provide evidence for the relevance of considering the factor lexical/semantic knowledge as a possible explanation for the non-native appearance of L2 writing.

3.4. Within experimental design

Although Jarvis' method to approach transfer appears to be valid and reliable, an even more accurate way to confirm first language influence in second language production is to concurrently compare learners' productions in their native and in their second language. In his study, starting from the assumption that "it seems premature to confirm transfer based on a similarity between a group writing in L1 and another writing in L2", Kubota (1998) tries to find out whether there is a link between L2 text production patterns and L1 writing skills by "investigating whether individual students actually use similar rhetorical structures in L1 and L2 writing", which, according to him, "could provide insightful data that might confirm or challenge the legitimacy of the transfer hypothesis." In comparing the L2 writing of Japanese learners to both productions of native speakers, acting as the control group, and to productions of the same learners in their mother tongue (Japanese), Kubota comes to the conclusion that "good Japanese writers are able to produce well organized ESL essays" while "poor Japanese writers are unlikely to write effectively in English" and therefore that

> "the poor organizational quality often identified in ESL writing may not be so much the result of using 'cultural conventions' as it is a manifestation of the lack of ability to organize a coherent text in L1." (Kubota 1998: 88)

One has to recognize that the former conclusion could never have been drawn from the sole results of a corpus analysis, considering that these two opposed observations would have nullified each other. This points to the extreme care needed when analysing corpus results since the general patterns of a group of L2 learners of some given L1 observed in a learner corpus study, do not reflect the sum of the pattern(s) used by each individual. This highlights the relevance of considering the results from a 'within experimental design' point-of-view when trying to answer to question why discrepancies emerge between native and learners' written production, as exemplified by the work of Kubota (1998).

Even though Kubota's conclusions are appealing, we have nevertheless to keep in mind that Kubota (1998) has been focusing on general rhetorical features such as argumentation or text-orientation, thus working at the macrostructure of language, whereas others, such as Jarvis (2000) or Liu and Shaw (2001) have been dealing with lexical items, which are located at the micro level of language. It is therefore possible that Kubota's methodology would be less relevant in the study of lexical, phonological or morphological aspects of foreign language learning. In this regard, connectives take an intermediate position. While metadiscourse connectives occur at a more global level of language use, and can be seen as being part of the macrostructure of language, causal and contrastive connectives are located at a more local level of language use, and therefore belong to an intermediate structure of language. Considering connectives as rhetorical items will then allow us to lean on Kubota's methodology and to rightly hope it will show significant results.

4. Interaction between text comprehension and text production

One of the major interests of our study, while studying both L2 text comprehension and production, is to arrive at some conclusions concerning the possible correlation between the two. In the literature, a clear link has been established between reading and writing (Shanahan and Lomax 1986, Carson et al 1990). Shanahan and Lomax (1986) concluded for instance that a theoretical interactive model of the relationship between reading and writing, "in which reading knowledge could be used in writing and writing knowledge could be used in reading, provided the best description of the data", which points to the interactive nature of both skills. Carson et al (1990) tried to put this theoretical model into practice and focused on the relation between reading and writing abilities across L1 and L2, and more precisely on the relations between first and second language reading and writing abilities, and between the reading and writing in the learners' native and second language. Their findings point to a (significant) correlation between L1 and L2 reading and a (weak) correlation between L1 and L2 writing, whereas the relation between L1 reading and L1 writing and between L2 reading and L2 writing is highly dependent on language proficiency. Leaning upon

Cummins (1981) they further argue that "transfer of capability emerges only after individuals attain a threshold level of L2 proficiency to permit cognately demanding language use." This idea of threshold level of L2 proficiency matches the observation made by Degand and Sanders (2002) in their study of the impact of causal connectives on L1 and L2 text comprehension (see section 2).

Transferring those observations to our specific study of connectives, we may expect a correlation between the impact of connectives on L2 text comprehension and connective usage in L2 text production. The question whether it occurs in both directions (interaction) or only from the one to the other has nevertheless to be left unanswered at this stage. One can imagine that learners benefiting from the presence of connectives in L2 text comprehension will use them more adequately in L2 text production, but reversing this statement, and claiming that learners who correctly use connectives in L2 text production will benefit more from their presence in text comprehension, does not give rise to an erroneous assumption either. Osborne (1998), by referring to the work of Crew (1990): "c'est souvent au moyen d'une multiplication des connecteurs que le scripteur inexpérimenté tente de donner un semblant de cohérence à des idées désordonnées[9]" and further arguing that "les étudiants eux-mêmes, quand ils sont lecteurs, ne sont pas dupes de cette stratégie[10]" even suggests that a significant overuse of connectives in foreign language production does not imply an absence of their effect in L2 text comprehension. This emphasizes that the relation between the impact of connectives on L2 comprehension and their usage in L2 production can go into completely different ways. It will be our work to determine which direction(s) it can take.

5. Conclusion

Our study of causal, contrastive and metadiscourse connectives focuses on two constituents of second language learning, notably L2 text comprehension and L2 text production. For the comprehension part studies, we will replicate the methodology used in Degand and Sanders (2002) since it has shown conclusive results. For the production studies, after the compilation an adequate Dutch learner corpus, we will try to make profit from the advantages of both corpus and experimental research. In keeping with Osborne (1998) who stated that

> "une étude purement quantitative des mots de liaison dans les productions d'étudiants peut attirer l'attention sur certaines différences entre l'utilisation qui est faite par les natifs et les non-natifs, mais les résultats obtenus sont très sensibles à la nature et à la taille des corpus. Un examen plus détaillé et plus qualitatif est nécessaire pour comprendre pourquoi certains connecteurs paraissent mal utilisés, même lorsqu'il ne sont pas franchement sur-utilisés" (Osborne 1998: 11)[11],

we will adopt a corpus-based method to come to the quantitative observations we could never arrive at without a corpus, but then, when focussing on the question why discrepancies between native and learner language occur, we will turn to a more experimental method which will help overcoming the shortcomings presented by corpus methods, for instance in offering a way to control more accurately a wide range of different variables. Among the variables we wish to manipulate, we find the rhetoric abilities of the participants in their mother tongue, which we will analyse by working with a 'within experimental design', comparing learners' L2 productions with their L1 production, which will eventually allow us to account for individual differences and to be experimentally more accurate (Kubota 1998).

The last step of our study will consist of a comparison between the impact of the connectives under investigation on L2 text comprehension and their usage in L2 text production to see if there exists an interaction between both aspects of second language learning.

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[9] "Inexperienced learners often try to give their written productions in L2 some semblance of coherence in considerably increasing connective usage."

[10] "Learners themselves, when reading, are not fooled by that strategy."

[11] "A purely quantitative study of connective usage by learners may point to certain discrepancies between natives and learners use,

but the observed results are sensitive to the corpus' size and nature. A more detailed and qualitative consideration is needed to

understand why some connectives seem to be misused, even though they are not really overused."

Ellis (1994) once claimed that "good research is research that makes use of multiple sources of data". We can easily broaden the scope of this definition and apply it to a larger methodological framework by stating that good research is research that makes use of multiple sources of methods.

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