

RESEARCH – EVOLUTION – APPLICATION

**LSP
&
PROFESSIONAL COMMUNICATION**

Fagsprog og Fagkommunikation
Langues de spécialité et communication professionnelle
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EDITORIAL:

Il est parfois utile de remonter dans l'histoire, comme nous pouvons le faire dans le présent numéro grâce à la recension par notre collègue, le professeur Christer Laurén, du livre publié en 2005 par Thorsten Fögen sur les LSP dans l'antiquité (page 118). L'anthologie de Fögen aborde de nombreux sujets qui sont encore d'actualité de nos jours. Elle nous rappelle que les LSP et la communication professionnelle ont toujours existé, qu'à l'époque aussi il y avait des textes qui étaient bien écrits et d'autres qui étaient lamentables, et enfin (et surtout) qu'il n'y a jamais eu de cloisons étanches entre les LSP et la langue générale. Le livre nous donne aussi l'occasion de nous rappeler qu'après la fin de la domination de l'Empire romain, le latin resta pendant des siècles la langue utilisée en littérature, en sciences, en droit et en religion dans une Europe où les frontières politiques et linguistiques flottaient.

En France, par exemple, il fallut attendre la fameuse ordonnance de Villers-Cotterêts, signée en 1539 par François 1^{er} et qui substituait le français au latin dans les jugements et les actes notariés, pour que le français devienne la langue officielle de l'administration en France.

Pour le pouvoir politique la priorité était surtout de se faire comprendre des populations qui ne parlaient ni ne comprenait le latin.

Au 16^e siècle naissent alors les grammaires françaises et dès le début du 17^e siècle paraissent les premiers grand textes scientifiques et philosophiques, écrits en français et non en latin.

Dans les autres pays européens le latin resta encore un certain temps la langue intereuropéenne dans certains domaines, notamment scientifiques, mais vers 1800 les langues nationales avaient pris le dessus.

C'est donc, en quelque sorte, un retour au 15^e siècle que souhaiteraient les partisans d'une langue unique en Europe, au détriment des langues nationales.

Heureusement, ces visions ne sont pas celles de l'UE, ce qui ressort clairement de l'article particulièrement intéressant que Monsieur Leonard Orban, membre de la Commission Européenne, a bien voulu écrire pour le présent numéro de notre revue.

La partie n'est pourtant pas gagnée pour autant car, comme le souligne Monsieur Orban, la politique du multilinguisme est en premier lieu une compétence nationale.

Il s'agit donc de persuader les décideurs politiques (qui ne s'encombrent pas toujours de connaissances historiques ou linguistiques) de la nécessité de renforcer très rapidement l'enseignement de la langue maternelle dans les écoles, et de rendre l'étude de deux langues étrangères obligatoire, de préférence pendant qu'il y a encore des professeurs pour les enseigner.

Nous espérons que la déclaration de Monsieur Orban sera un instrument utile, entre les mains des collègues européens, dans leurs efforts pour se faire entendre par leurs gouvernements.

Le comité de rédaction

EDITORIAL:

It is sometimes useful to go back in history as we are able to do in this issue thanks to the review by our colleague, Christer Laurén, of the book published in 2005 by Thorsten Fögen on Language for Special Purposes (LSP) in ancient times (page 118). Fögen's anthology tackles a number of subjects that are still topical today. It reminds us that LSP and professional communication have always existed, that in those days too there were texts that were well written and others that were deplorable, and finally (and especially) that there have never been any impenetrable barriers between LSP and everyday language. The book also gives us occasion to remember that after the end of the domination of the Roman Empire, Latin remained the language used in literature, science, law and religion for centuries in a Europe where the political and linguistic borders were on the move.

In France, for example, it was not until the famous Villers-Cotterêts Decree, which was signed by François I in 1539 and replaced Latin with French in judgments and legal documents, that French became the official language of the French administration.

The overriding priority for those exercising political power was to make themselves understood by populations who did not speak or understand Latin.

The 16th century saw the first French grammars, and at the beginning of the 17th century came the first serious scientific and philosophical texts written in French and not in Latin.

In the other European countries, Latin remained the inter-European language for a while in certain fields, notably scientific, but the national languages had prevailed by 1800.

So in a way, the supporters of one single language in Europe to the detriment of the national languages are seeking a return to the 15th century.

Fortunately, these views are not held by the EU, as can be clearly seen from the particularly interesting article that Mr Leonard Orban, member of the European Commission, has kindly written for this edition of our journal.

Still, the game is not over for all that, because, as Mr Orban points out, policy on multilingualism is first and foremost a national competence.

It is thus a question of convincing the political decision-makers (who do not always burden themselves with historical or linguistic knowledge) of the need to strengthen the teaching of the mother tongue in schools very quickly and make the study of two foreign languages obligatory, preferably while there are still teachers to teach them.

We hope that Mr Orban's statement will be a useful instrument in the hands of our European colleagues in their efforts to make themselves heard by their governments.

The Editorial Board

ARTICLES:

**Article de M Orban
pour la revue
LSP and Professional Communication**

Leonard Orban
Membre de la Commission européenne
Bruxelles, Belgique

Chez certains de nos partenaires, l'Europe est parfois perçue comme une mosaïque de langues et de cultures. Loin de nier cette diversité, l'Europe la revendique et la considère comme une richesse et une fierté. Chaque langue, qu'elle soit « grande » ou « petite », a sa place et contribue à notre patrimoine commun. Le principe de l'égalité des langues s'est affirmé dès le début du processus d'intégration européenne. Les pères de l'Europe n'avaient sûrement pas prévu qu'en 2008, 23 langues officielles cohabiteraient avec 60 langues minoritaires ou régionales, mais ils avaient parfaitement saisi toute la valeur politique et symbolique de la diversité linguistique.

Cette pluralité des langues n'a pourtant jamais été un obstacle à l'intégration européenne et au dialogue entre ses peuples. Bien au contraire, le multilinguisme a permis à l'Europe de « s'unir dans la diversité », d'utiliser sa richesse culturelle et linguistique pour bâtir une Union toujours plus solide et pour rapprocher ses peuples. Contrairement à l'image trop souvent répandue, l'Europe, loin de vouloir uniformiser, a fait de ses différences et de sa diversité un atout.

C'est dans cette optique qu'à mon initiative, la Commission européenne a adopté, en septembre 2008, une ambitieuse communication, intitulée "*Le multilinguisme, un atout pour l'Europe et un engagement commun*". Ce texte présente les grandes orientations de la Commission en ce qui concerne la politique des langues à moyen terme. Il couvre des sujets aussi divers que l'apprentissage des langues, les nouvelles technologies, l'interprétation et la traduction, le rôle des langues en matière d'intégration, le volet extérieur du

multilinguisme, les langues et les affaires, etc. Ce texte apporte un éclairage original sur le multilinguisme et sur le rôle qu'il joue dans tous les domaines de la vie des citoyens européens. Enfin, dans cette communication, la Commission fait un certain nombre de propositions novatrices, qu'il nous appartiendra de mettre en œuvre, en coopération étroite avec les Etats membres. En effet, il faut se souvenir que la politique du multilinguisme est en premier lieu une compétence nationale.

Trois langues pour tous

Depuis Barcelone en mars 2002, un des objectifs phares de l'Europe est que chaque citoyen européen soit capable de s'exprimer dans sa langue maternelle et dans deux langues étrangères de son choix.

Les jeunes Européens devraient avoir la possibilité de suivre des enseignements couvrant une large palette de langues, et pas seulement une *lingua franca* qui pose autant de problèmes qu'elle en résout. Si l'enseignement des langues occupe bien évidemment une place de choix dans la politique linguistique de l'Europe, celle-ci ne se limite pas aux jeunes ou aux étudiants. Elle s'adresse véritablement à tous les citoyens, jeunes ou adultes, suivant des enseignements et des formations professionnels, aux personnes peu qualifiées ou sans emploi, aux seniors,...

Apprendre des langues étrangères est bien sûr un plaisir intellectuel, une porte ouverte sur de nouvelles cultures, de nouveaux pays. Au-delà de cette dimension personnelle, les compétences linguistiques sont un atout précieux dans le monde des affaires. Des études récentes démontrent que les entreprises européennes qui n'ont pas un niveau suffisant de compétences linguistiques perdent des contrats partout dans le monde. Pour les Européens, les langues sont une clé pour accéder à l'emploi et pour évoluer dans le monde des affaires. Le "forum des affaires" présidé par le vicomte Davignon a récemment mis en lumière toute la valeur économique du multilinguisme pour l'Europe. Car - attention! - l'anglais n'a pas réponse à tout.

L'anglais ne suffit plus

Le monde des affaires est de toute évidence largement dominé par l'anglais. Cette belle langue ouvre, il est vrai, de nombreuses portes. Cependant, aujourd'hui, elle ne suffit plus. Seule la maîtrise de plusieurs langues donne un vrai avantage compétitif aux individus, aux entreprises et à l'Europe tout entière. Notre diversité linguistique est une chance qu'il ne faut pas laisser échapper en négligeant les autres langues.

On ne saurait délaissier les autres langues européennes sans risquer de voir échapper de nombreuses opportunités. Le Danemark et sa région fournissent un exemple édifiant : les jeunes Danois, Suédois et Norvégiens ont la chance de parler des langues proches, qu'ils peuvent facilement maîtriser ou, à tout le moins, comprendre. Pourtant, aujourd'hui, de plus en plus, l'anglais poursuit sa progression et détrône les autres langues voisines.

L'omniprésence de l'anglais se répercute aussi au niveau de l'éducation. L'anglais est de plus en plus considéré comme une connaissance nécessaire plutôt que comme une langue étrangère. Au Danemark, comme dans de nombreux pays européens, l'anglais est d'ailleurs une matière obligatoire à l'école, au détriment d'autres langues comme l'allemand, le français, l'espagnol, ... Pourtant, cette tendance n'est pas irréversible. Des chiffres récents montrent qu'au contraire le nombre de langues proposées dans l'enseignement primaire et secondaire a tendance à augmenter, et que les jeunes Européens apprennent plus de langues qu'avant. C'est tout le défi de l'Europe que d'arriver à encourager cette tendance et à faire fructifier les connaissances linguistiques de ses citoyens.

L'anglais est une vraie richesse pour l'Europe. Nous devons en tirer profit tout en respectant et en valorisant les autres langues. En effet, le multilinguisme est une des pierres angulaires de l'Union. Il ne saurait être question de perdre cette incroyable richesse culturelle et linguistique qui donne toutes ses couleurs et sa vivacité à l'Europe.

Bruxelles, le 18.12.2008
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Article by Mr. Orban for the Journal LSP and Professional Communication

[Translation of original text in French page 8]

Leonard Orban
Member of the European Commission
Brussels, Belgium

Some of our partners sometimes perceive Europe as a mosaic of languages and cultures. Far from denying this diversity, Europe rejoices in it, regarding diversity as its wealth and pride. Every language, whether “large” or “small”, has its place and contributes to our common heritage. The principle of the equality of languages has been asserted since the beginning of the process of European integration. The fathers of Europe certainly did not foresee that in 2008, there would be 23 official languages alongside 60 minority or regional languages, but they did fully understand the whole political and symbolic value of linguistic diversity.

This plurality of languages, however, has never been an obstacle to European integration and dialogue between its peoples. Quite the contrary, multilingualism has allowed Europe “unity in diversity”, using its cultural and linguistic wealth to construct a Union ever more solid and bringing its peoples closer together. Contrary to the image too often put around, far from wanting to become uniform, Europe has turned its differences and diversity into an asset.

It is in this perspective that in September 2008, on my initiative, the European Commission adopted an ambitious communication entitled “*Multilingualism: an asset for Europe and a shared commitment*”. This text presents the general views of the Commission on language policy in the medium term. It covers subjects as diverse as the learning of languages, new

technologies, interpretation and translation, the role of languages in respect of integration, the external aspects of multilingualism, language and business, etc. This text brings special clarity to the question of multilingualism and the role it plays in all areas of the life of European citizens. Finally, in this communication, the Commission makes a number of innovative proposals, which it is up to us to put into practice in close collaboration with the member states. For we must remember that policy on multilingualism is first and foremost a national competence.

Three languages for everyone

Since Barcelona in March 2002, one of the prime objectives in Europe has been that all European citizens should be able to express themselves in their mother tongue and in two foreign languages of their own choice.

Young Europeans ought to have the option of being taught a large palette of languages and not just one *lingua franca* that creates as many problems as it solves. If the teaching of languages quite naturally occupies a special place in Europe's language policy, this is not limited to young people and students. It is really for all citizens, young or old, people taking vocational courses and training, people with few qualifications or out of work, senior citizens, and so on.

Learning foreign languages is certainly an intellectual pleasure, a door opening to new cultures, new countries. In addition to this personal dimension, linguistic skills are a precious asset in the business world. Recent studies show that European companies that do not have a sufficient level of linguistic skills lose contracts all over the world. For the Europeans, languages are a key giving access to work and development in the business world. The “business forum” chaired by Viscount Davignon has recently thrown light on the whole economic value of multilingualism for Europe. Because – pay attention! – English is not the answer to everything.

English is no longer enough

Clearly, the business world is largely dominated by English. It is true that this beautiful language does open many doors. But today it is no longer enough. Only the mastery of several languages gives real competitive advantage for people, for companies, and for Europe as a whole. Our linguistic diversity is an opportunity that must not be missed by neglecting the other languages.

We cannot neglect the other European languages without risking the loss of a large number of opportunities. Denmark and Scandinavia provide an edifying example: young Danes, Swedes and Norwegians are fortunate in speaking

languages that are closely related and which they can easily master or at least understand. But English continues its progress today, increasingly dethroning other neighbouring languages.

The ubiquity of English also reverberates in education. English is increasingly considered as a necessary knowledge, rather than a foreign language. In Denmark, as in many European countries, English is also a mandatory subject in school to the detriment of other languages such as German, French, Spanish, etc. But this tendency is not irreversible. On the contrary, recent figures show that the number of languages offered in primary and secondary education is on the increase and that young Europeans are learning more languages than before. The challenge for the whole of Europe is find ways of encouraging this tendency and turning the linguistic skills of its citizens to good account.

English is a real treasure for Europe. We must profit from this while respecting, valuing, and making good use of the other languages. For our multilingualism is really one of the cornerstones of the Union. There must be no question of losing this incredible cultural and linguistic wealth that gives Europe all its colour and life.

Brussels, 18.12.2008
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Keep an Eye on Information Processing: Eye Tracking Evidence for the Influence of Hypertext Structures on Navigational Behaviour and Textual Complexity

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1. Interpreting eye tracking data in the context of information processing

When interpreting eye tracking data, the metrics fixation duration, saccade lengths and the occurrence of regressions are used to infer moment-by-moment processing of the text by the reader. Of course, these features of eye movements are also influenced by factors such as text difficulty caused by lexical or syntactic ambiguity. More difficult text leads to longer fixation durations, shorter saccades and more regressions.

Fixations are commonly interpreted as signs of processing new information. Eye fixations of skilled readers last between 200 and 250 ms on average (Pollatsek, Rayner and Collins 1984). Reading saccades or short rapid eye movements, which intermingle with fixations, cause the eye to move between 1 and 20 characters, with the average span being 7 to 9 letters. It is a widely accepted view that skilled readers show longer saccades, shorter average fixation durations and fewer regressions. Whether a word is fixated by a reader depends on its length and its word class. 85% of the content words and 35% of the function words are fixated while 2-3 letter words are skipped 75% of the time (Carpenter and Just 1983).

When processing information, saccades normally land between the beginning and the middle of a word (Morris, Rayner and Pollatsek 1990). A reader gathers information from a text at and around the fixation point. At this fixation point the text is perceived clearly and within a window of a certain character length the text appears normal. Outside this perceptual span the text

is garbled. Depending on the size of this perceptual span we can distinguish between unaffected and impaired reading. When the window extends 3-4 letters to the left of the fixation and 14-15 letters to the right we talk about unaffected reading (see e.g. McConkie and Rayner 1976). The asymmetry of the perceptual span in reading is caused by the fact that readers typically move their eyes forward when reading. However, 10 to 15% of saccades move backwards. This happens when readers fixate previous letters or words. In a study dealing with the processing of anaphor Murray and Kennedy (1988) relate regressive saccades to difficulties in processing an individual word or to difficulties in processing the meaning or structure of a sentence. Readers tend to re-fixate parts of the text that causes comprehension problems.

The presentation format also plays an important role in the processing of information and influences eye movements. In a study monitoring reading speed, comprehension and task load on mobile phone screens Öquist and Lundin (2007) found that the paging format offers the best readability. Their results show that text presented in the page format is read significantly faster and yielded more regular eye movements than other presentation formats such as scrolling, or RSVP (Rapid Serial Visual Presentation). However, the presentation format did not significantly affect comprehension, a result which also holds true for this investigation.

Eye movements are also sensitive to inconsistencies in a text. Rayner et al. (2006) found out that readers fixated longer on regions where inconsistencies occurred, a finding which was also confirmed by the present study. However, we have to bear in mind that in hypertext inconsistencies are often the result of the fragmentation effect produced by the text structure.

Eye-movement data have been used to study lexical ambiguity, syntactic ambiguity and discourse variables such as inferences. However, some of the results drawn from these studies should be evaluated critically. Due to the complexity of cognitive processes and the great variability of fixation duration that exists between readers and within readers, the measures taken are often subject to systematic and/or random errors. While the average fixation duration for some readers is 200 ms, for other readers it is close to 300 ms. There are also enormous differences in the saccade length, which may vary between 6 and 10 letter spaces. Engbert and Nuthmann (2008) have found that distributions of within word landings of fixations are rather broad and show overlapping tails. Their approach is based on the iterative computation of the proportions of several types of oculomotor errors, the underlying probabilities for word-targeting, and corrected distributions of landing positions. Engbert and Nuthmann found that a fraction of the

fixations, namely about 10% to 30% depending on word length, is mislocated. Their results indicate that fixation probabilities are affected by oculomotor errors.

2. The impact of hypertext structures on navigational behaviour

2.1. Experimental design

The main aim of this study was to find eye tracking evidence for the hypothesis whether navigational behaviour in hypertext is also dependent on its information structure. The study is a follow-up investigation of a test series conducted to evaluate the influence of hypertext structures on navigational behaviour, reading speed and comprehension (Reitbauer 2007), in which navigational behaviour was tested using recall protocols developed during interviews. Since the retrospective perspective is always subject to lapses of memory, a real time measurement such as eye tracking was considered to be an ideal means of verification.

The previous study had shown that prototypical hypertext structures, i.e. the typical information architecture in hypertexts such as the axial structure or the network structure, which were investigated by Landow (1994) and Engebretsen (2000), triggered prototypical navigational behaviour, i.e. readers chose paths that were influenced by the textual structure. To further analyse these prototypical reading paths a source text on the topic of speed reading consisting of 597 words was converted into an axial and a networked hypertext version. The subjects in this test series were 22 students of English and American studies from Graz University, who had passed a series of language courses corresponding to the level of C1 according to the common European Framework of Reference. To sample the position of the user's eye on an average of very 20 ms the Eye Tracker Tobii 1750 was used. The data were analyzed using the software program Clearview. The metrics used were the number of fixations overall, the sequence of fixations, dwell time mean and the mean number of fixations per area of interest. It was assumed that scan path data depicting the sequence of fixations would provide valuable insight into reader interaction with the hypertext and indicate the efficiency of the arrangements of elements in the surface text. It is important to mention at this point that pictures and other forms of media common in hypertext were deliberately excluded from the presentation format used since the main aim was to focus on the perception of text.

The subjects, 19 female and 3 male students of English and American Studies, were split into two groups. Each group was presented with one of the hypertext versions. The subjects had to read the text and then take a short

comprehension test with 11 multiple-choice questions. To answer the comprehension questions the subjects did not have to resort to prior knowledge. All answers to the questions could be found in the text without having to make inferences.

Fig. 1 (see below) depicts the text as presented in the axial condition. Here three links are embedded in a central node which always remains on the screen. The text at the top with the heading 'Is speed reading for you?' also remains on the screen whenever a link is opened. The central node serves as a trunk which in our case has three "branches" with additional information which readers may choose to click on. Since the links are embedded in a running text, they indicate a recommended reading strategy. In Fig. 1 the link comprehension is opened, which is marked by a change in colour.

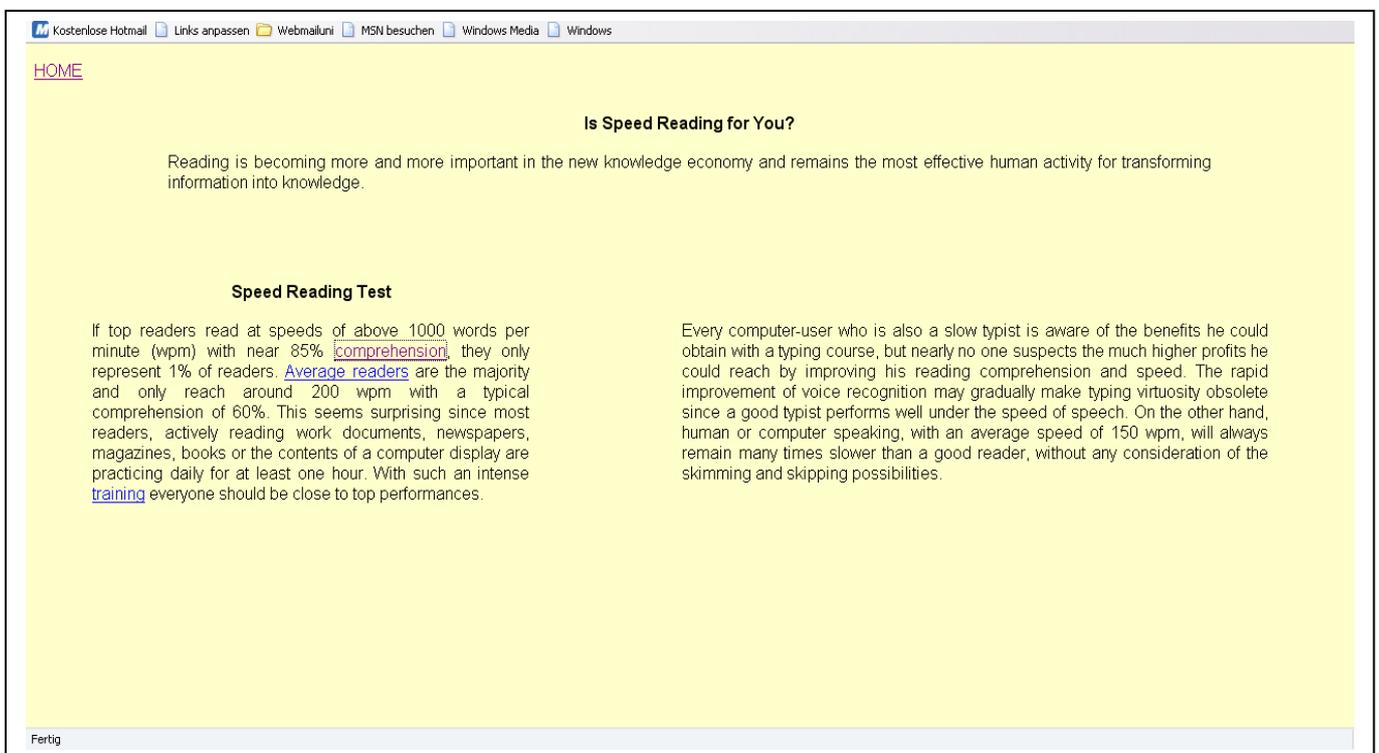


Fig. 1: Axial condition

Four areas of interest (AOIs) were defined in this condition in order to investigate eye tracking data that depict gaze replay and hot spot images of areas of highest fixation count: AOI 1: central link with no link opened; AOI 2: central link and link comprehension opened; AOI 3: central link and link average readers opened; AOI 4: central link and link training opened.

In the network condition (see Fig. 2) the same text was presented, this time with 7 links outside the main node. Networked hypertexts are characterized by the absence of a centering "trunk" or any other device to order the nodes

(see Bertin 1981). Nodes are linked on the basis of semantic criteria, or other criteria which the hypertext designer applied. In this condition the reader is supposed to have more navigational freedom since the links do not indicate a hierarchy or suggest a preferable order in which they should be opened. The main node in this condition is entitled speed reading test and remains on the screen whenever other nodes are opened.



Fig. 2: Network condition

In order to control for the number and sequence of fixations and fixation duration eight areas of interest were defined, again on the basis intersection points in the text, i.e. points at which the readers had to decide which link to open next. It is important to note at this point that the texts in the two conditions were transformed verbatim and thus the number of words to be read was the same for both groups. In addition, the mean value for the number of fixations counted in each area of interest was weighted statistically according to the number of words to be read. This was necessary because the nodes in the network condition were shorter since the text had been split up into eight chunks.

2.2. Results

2.2.1 Scan paths as reflections of the textual structure

The scan path is one of the most important metrics measured by eye tracking systems. Scan path pictures of the defined areas of interest show the number and the order of fixations. Dots labeled with numbers in the scan path pictures represent fixations and connecting lines represent saccadic eye movements between the fixations. The pictures are very informative as far as the usability of a webpage and its global information structure are concerned.

Scan paths offer evidence to validate the user-friendliness of textual structures. They are therefore often used in the prototype testing of homepages. In a study conducted by Bojko (2006) it was found that the re-design of a homepage which in its old form had produced numerous and scattered fixations resulted in focused fixations due to a more clearly presented navigation design.

The fixations gathered in the present study show a similar focus of fixations around links and corresponding nodes. The analysis of scan path data reveals that the order in which links and nodes received first fixations was relatively stable throughout the two conditions. The scan path images show prototypical sequences of fixations made by the users and very effectively illustrate how individual users navigate in the two different hypertext structures.

The gaze patterns that emerged in the axial condition show clear prototypical tendencies. 91% of the subjects opened the links in the order of their occurrence in the main node. This can be verified by looking at the consecutive numbering of the fixations. The users' main paths through the text were further characterized by a focus on the node they had opened by clicking the link. Regressive eye movements only occurred when the readers got back to the central node to search for the next link to be opened or when comprehension problems occurred (see section 2.2.2.).

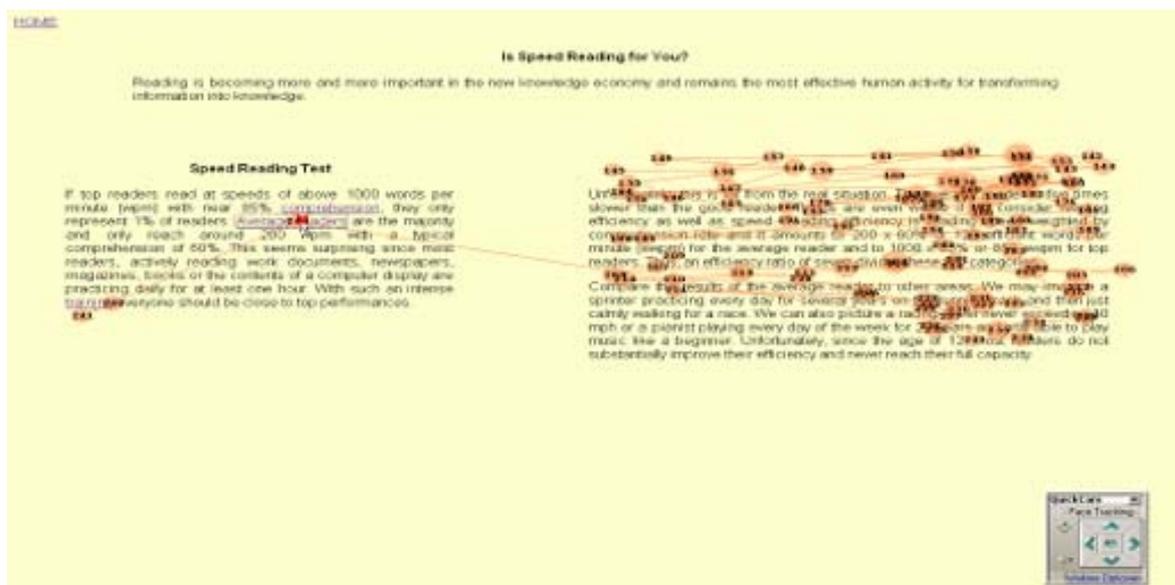


Fig. 3: Prototypical scan path in the axial condition

When we analyse the corresponding hotspot image that summarizes the gaze position, we see that the central node is only fixated to move on to the next

link in the hierarchy (see the colour-coded map in Fig. 4, with red being the most viewed area, graduating down to light yellow to indicate less fixation time).

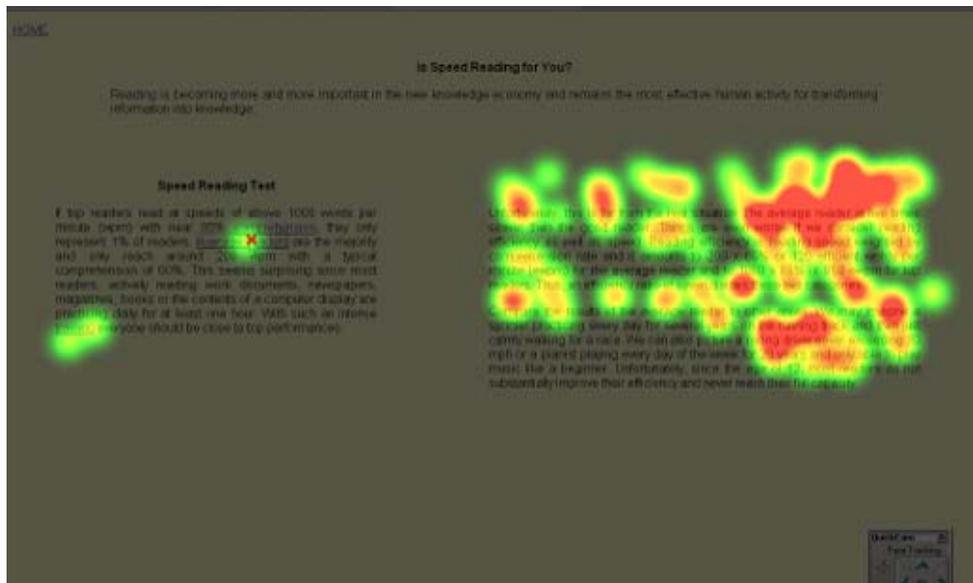


Fig. 4: Hotspot map of a prototypical scan path in the axial condition

In the network condition we can observe a similar tendency. There is a clear focus of fixations centred in the node opened and links are only fixated when readers decide to open the next node. However, due to the arrangement of links outside the main node the order in which the links were opened was not as homogenous as in the axial condition. Although there was some variation, the majority of readers, namely 73%, opened the links starting with the one at the top (short version) and then following a horizontal order from left to right (see Fig. 5 and 6). Again this finding confirms the results of the previous study, in which readers drew a retrospective log file of their path through the text (Reitbauer 2007).

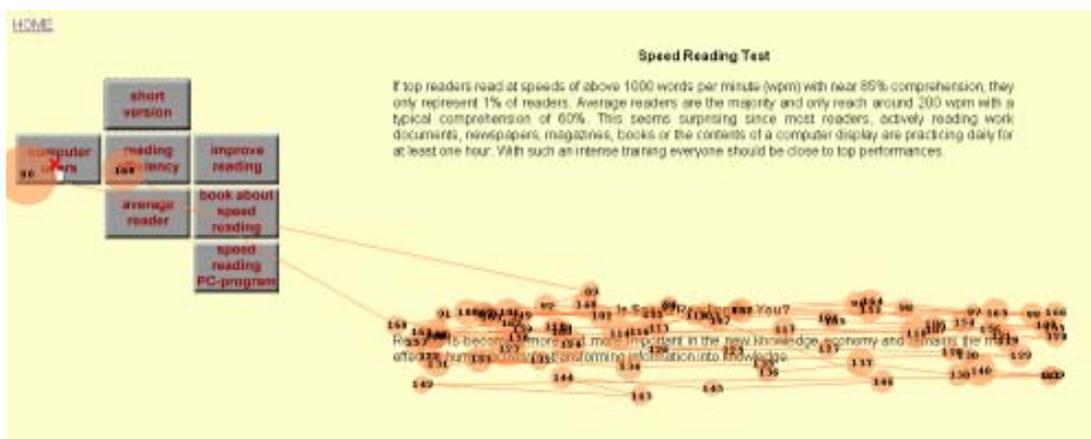


Fig. 5: Prototypical scan path in the network condition

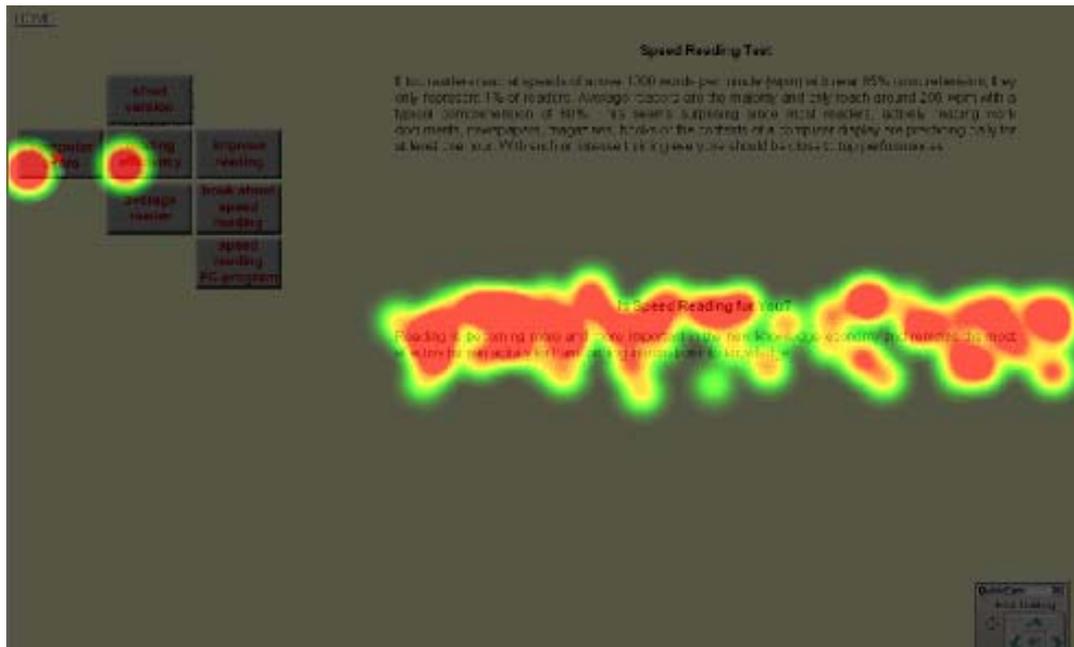


Fig. 6: Hotspot map of a prototypical scan path in the network condition

The analysis of scan paths shows that the feedback on navigational behaviour that users gave in the previous study is supported by eye-movement measurements. Gaze replays that were watched with readers during the interviews after the comprehension test confirm that navigational decisions were based on aspects of textual structure. These biometric measures were chosen for this follow up investigation because they are generally considered more reliable than data acquired through survey methods. They give a more accurate picture of the users' immediate experience in comparison to interviews after task completion.

If you compare the pictures of the prototypical paths in the previous study with the hot spot images and scan path pictures, you find that the preferred routes readers take through the text were identical in both studies.

In the axial condition the links were opened in the order of their occurrence in the running text of the main node (Fig. 7a: blue arrow = first link opened, red arrow = second link opened, green arrow = third link opened). The same behaviour was observed in the present study. As an example, Fig. 7b depicts how the reader moves from the second to the third link, which corresponds to a switch from the red to the green arrow in Fig. 7a.

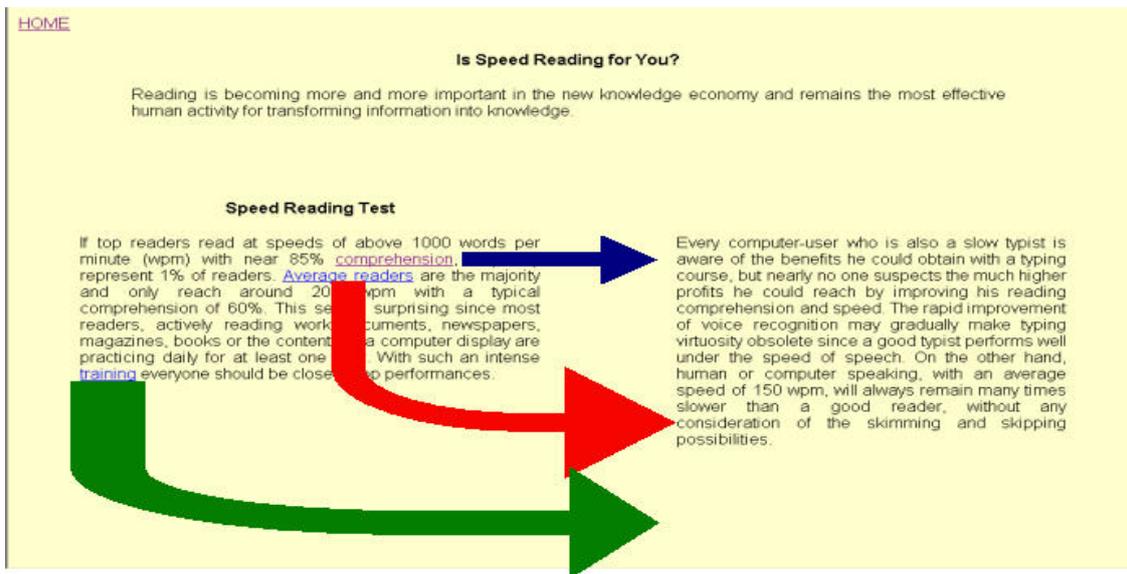


Fig. 7a: Prototypical paths in the axial condition (Reitbauer 2007)

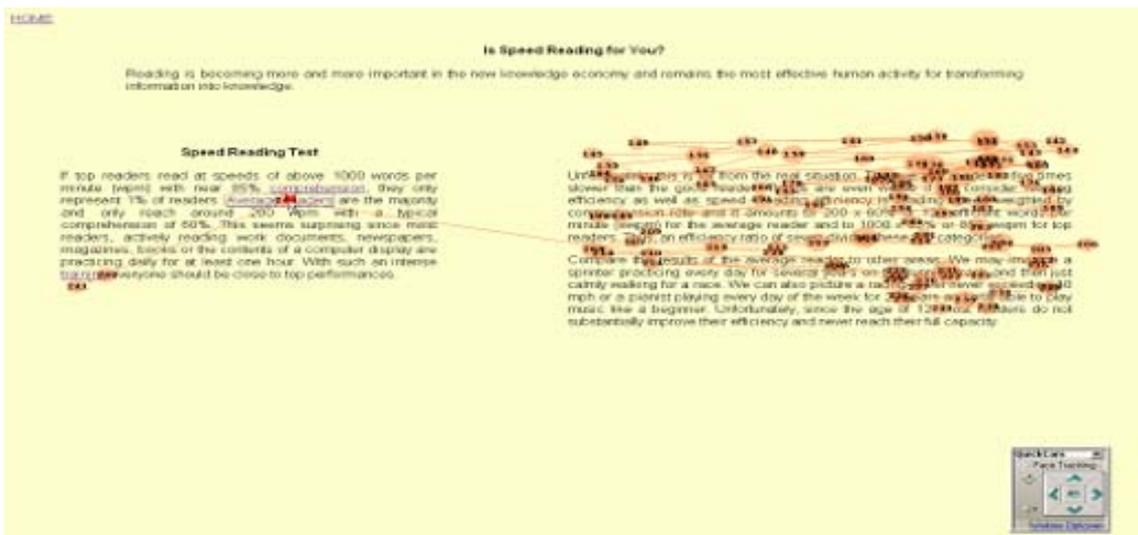


Fig. 7b: Example of a corresponding scan path of current study

In the network condition three paths were found to be dominant in both studies. The arrows in Fig. 8 illustrate the typical progression from link to link for each of these paths (red = path 1, green = path 2 and blue = path 3). A corresponding example from our current study is provided by the hotspot map in Fig. 6, which illustrates the switch from the second to the third link in path 1 (red spots in the top-left corner).

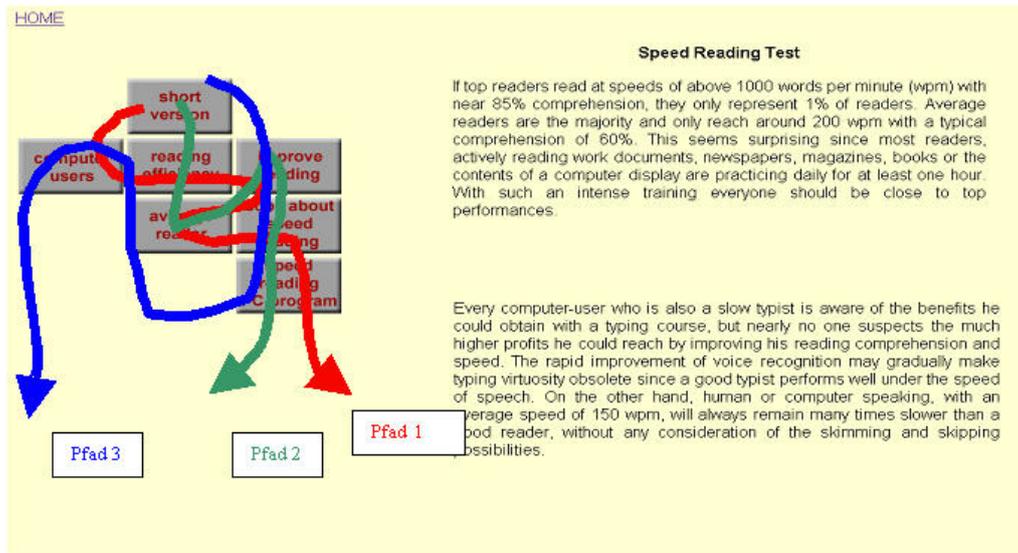


Fig. 8: Prototypical paths in the network condition (Reitbauer 2007)

2.2.2 Regressive eye movements as indicators of textual complexity and problems in the information architecture

Regressive eye movements have become an object of investigation since they are associated with comprehension problems, problems of text design and textual complexity. The readers refocus on elements that are either unusual in particular circumstances, unfamiliar or incomprehensible. Disruptions of the visual flow occur when the layout of the text does not guide the readers' eyes effectively through the whole document. Eye tracking data is thus very useful in detecting problems in the information architecture.

In the course of an ordinary reading situation the readers fixate on each word sequentially. They skip some of the words, fixate on others twice and sometimes regress to preceding words. The reader is often not aware of these regressions. Researchers assume that eye movements during reading are mainly controlled by reasonably low-level processes in the brain. Higher level processes only occur when something needs to be clarified and cognitive processes such as reasoning and inferring are involved.

About 10–15 % of the fixations are regressions to previously read words. Regressions are commonly accepted as indicators of higher-order cognitive processes and are often associated with text difficulty. Many studies have shown that text difficulty has a strong influence on the number of regressions the readers make. Regressions are triggered when readers encounter a word indicating that their prior interpretation of a sentence was wrong. Therefore it is likely that some of the regressions are due to comprehension failures (see Rayner 1998).

However, regressive eye movements can also be caused by oculomotor error. Findings of O'Regan (1990) and Engberg and Nuthmann (2008) support the idea that regressions are sometimes due to simple motor error because whenever the eyes fixate near the end of a word, they often move back a few character spaces because they have missed their intended target, which is usually near the middle of a word. The identification of a word is most rapid if it is fixated in its so called *optimal viewing position*, which is just to the left of the words centre (Clark and O'Regan 1999).

In the present study regressive eye movements occurred more often with readers who had low scores on the comprehension test. This was the case in both the axial and the network condition. Although no significant comprehension differences were found between the two conditions, a comparison of subjects who achieved the same comprehension score shows very similar patterns of regressions. The pattern of these regressions was found to be fairly consistent within the respective textual structures. In the axial condition regressive eye-movements were accompanied by long fixations and the pre-reading of the central node in which the links were embedded. In the network condition regressive eye movements only occurred within the node that had been opened. Moreover, the mean duration of fixations was shorter and the central node was not pre-read. The following figures illustrate the pattern of fixations of two subjects that had both achieved a low score on the comprehension test, namely 45%.

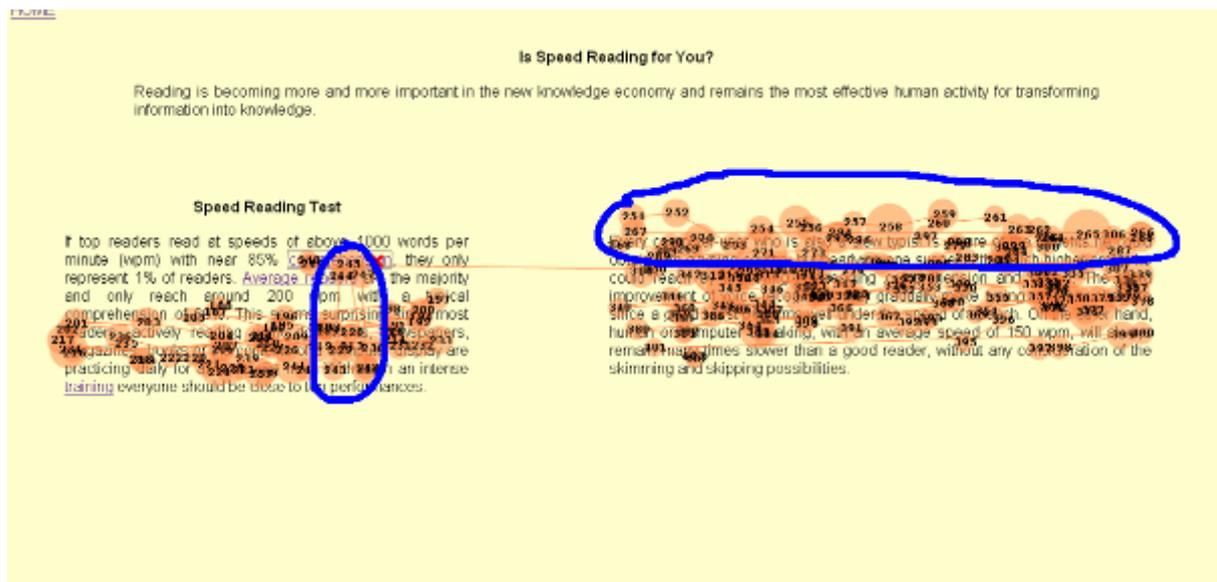


Fig. 9: Scan path of a reader with a low comprehension score (45%) in the axial condition

spot images for readers who performed poorly on the comprehension test. On the left you see the scan path in the network condition. On the right you see that the reader in the axial condition who fixates all links and the surrounding co-text again before opening the third link below (see blue arrow).



Fig. 11: Mixed review navigation strategy: scanning of links by unsuccessful readers

In comparison pictures of readers with top scores (91%) show longer saccades, fewer regressions and shorter durations of fixations on links.

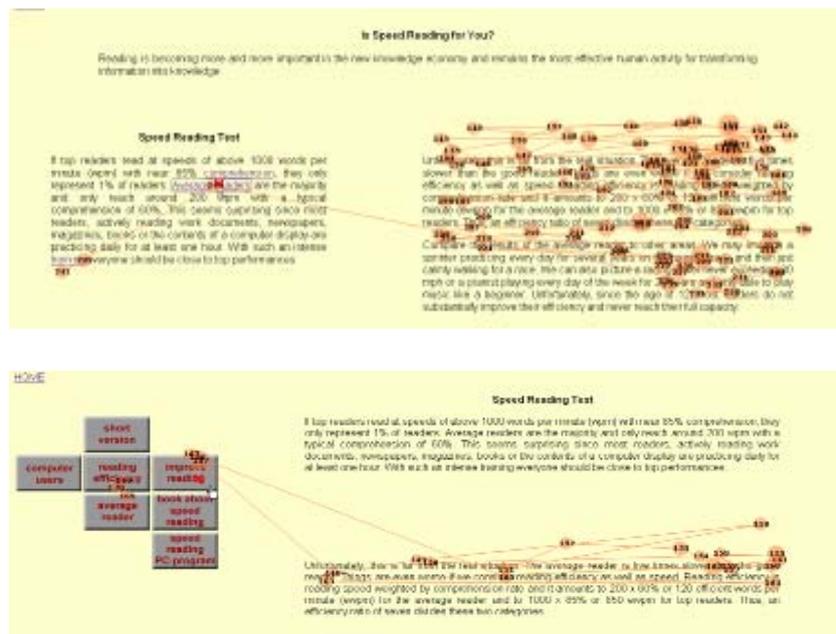


Fig. 12: Scan paths of highly skilled readers

In both conditions comprehension problems and regressive eye movements occurred with discourse markers that balance contrasting points (e.g. *on the other hand*) or introduce a counter argument (e.g. *however*). These discourse markers add to textual complexity and are therefore likely to trigger regressions. The following sentence triggered regressions:

On the other hand, human or computer speaking, with an average speed of 150 wpm, will always remain many times slower than a good reader, without any consideration of the skimming and skipping possibilities.

36% of subjects in the network condition and 27% of subjects in the axial condition re-read the preceding sentence when encountering the discourse marker *on the other hand*. This finding is consistent with studies that show that regressions are triggered when readers assume that their first interpretation was wrong or is challenged by the following statements (see. e.g. Rayner 1998). Since discourse markers aim at making conceptual relationships clear it would be interesting to see in a follow-up investigation if hypertexts equipped with additional means such as navigable topical overviews that map conceptual relationships help to reduce comprehension problems in these areas. The findings of Naumann et al. (2007) indicate that hypertexts equipped with additional hypertext-specific signals may compensate for deficits in reading skill.

After discussing prototypical scan paths and regressive eye movements we will now turn to the analysis of the individual variables controlled for in this study, namely the number of fixations in the defined areas of interest, dwell time and comprehension.

2.2.3. Number of fixations and dwell time

The variables fixations and dwell time were chosen for the current investigation because they are commonly associated with the ease or difficulty of processing information. In general, higher numbers of fixations and longer fixation durations are related to difficulty in processing and both factors have an influence on when the eyes move.

The evidence of many empirical studies suggests that it is primarily the linguistic properties of words that are responsible for the decision of when to move. High frequency words are fixated for a shorter time than low frequency words (Just and Carpenter 1980, Vitu, Mc Conkie, Kerr and O'Regan 2001). Moreover, fixating low frequency words is often accompanied by the so-called *spillover effect*, which describes the fact that the fixation time on the next word is inflated by the longer fixation time of

the low-frequency word read before (Rayner and Duffy 1986). Another factor that influences fixation and dwell time is the predictability of a word. Words that are highly predictable from the context are fixated for a shorter time or skipped (Ehrlich and Rayner 1981). The results of the present study confirm these findings and also indicate that fixations and dwell time are in fact dependent on linguistic properties of words rather than on aspects of textual structure. Many similarities concerning the fixations of numerals, negations and causal relations were found in both conditions.

A comparison of the two groups showed great differences in the number of fixations and in dwell time across groups and across individual subjects. In the axial condition the mean values for dwell time and number of fixations in the areas of interest was much higher than in the network condition (see Fig.13 and 14 below). However, due to the huge differences among individual readers and within readers the variance was too big to produce any significant effect. Neither the t-test nor the multivariate test produced effects that attained the level of significance.

group		N	Mean	Std. Deviation	Std. Error Mean
fixations	axial	11	469,2727	333,36769	100,51414
	net	11	347,3636	146,85522	44,27851

Fig. 13: Group statistics fixations

group		N	Mean	Std. Deviation	Std. Error Mean
dwell	axial	11	22678,8636	25726,84661	7756,93611
	net	11	6060,1255	2681,09068	808,37926

Fig. 14: Group statistics dwell time

Although the data gained did not provide statistical significance for a relationship between the independent variable *textual structure* and the dependent variables *dwell time* and *number of fixations* some interesting aspects of reading behaviour triggered by linguistic properties of words were revealed and proved to be similar in both conditions. We found interesting parallels as far as dwell time in connection with causal relations and numerals is concerned. The measure used for investigating these two items was gaze duration, which is the sum of all fixations on the words in question prior to moving to another word. These parallels will be discussed in the following.

It is commonly assumed that discourse markers expressing causal relations lead to increased reading speed (e.g. Just and Carpenter 1980). This was also

the case in the present study in which words such *since*, *as* and *thus* either show short fixation times or are skipped by readers. Fixation duration was short with an average of 169 ms in the axial condition and 188 ms in the network condition. These findings are consistent with findings of Menno van der Schoot et al. (2008), who in their study on reading strategies in primary school children found that successful readers invest most of their processing time in content words and very little time in the processing of discourse markers.

However, in the current study causal discourse markers were fixated frequently, namely by 77% of readers in the axial condition and 66 % of readers in the network condition. In both conditions highly successful readers fixated for a shorter time while less successful readers invested a lot of processing time in them. With readers who had a low comprehension score causal discourse markers sometimes triggered the re-reading of the previous sentence (see Fig. 15, where this behaviour is illustrated for a *Thus* at the beginning of a sentence).

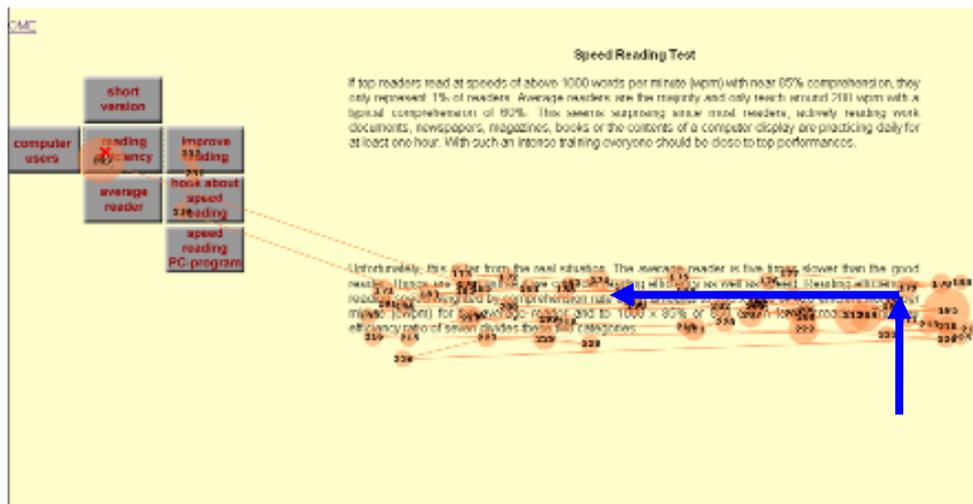


Fig. 15: Scan path of a reader who has difficulty in discovering the causal relationship between two sentences

In contrast to discourse markers numerals showed longer fixation durations in both conditions. Both successful and unsuccessful readers fixated numerals longer than other elements in the text. In the axial condition the average fixation duration on the five numerals in the central node was 360 ms while in the network condition it was 300 ms. The picture is similar with the node opened by the link average reader, which elaborates on the reading efficiency of average readers and contains nine numerals with an average fixation of 340 ms in the axial condition and 320 ms in the network condition. The following hot spot image (Fig.15) illustrates the long fixations on numerals in

the network condition. The blue arrows point at figures that were fixated longer than 300 ms.

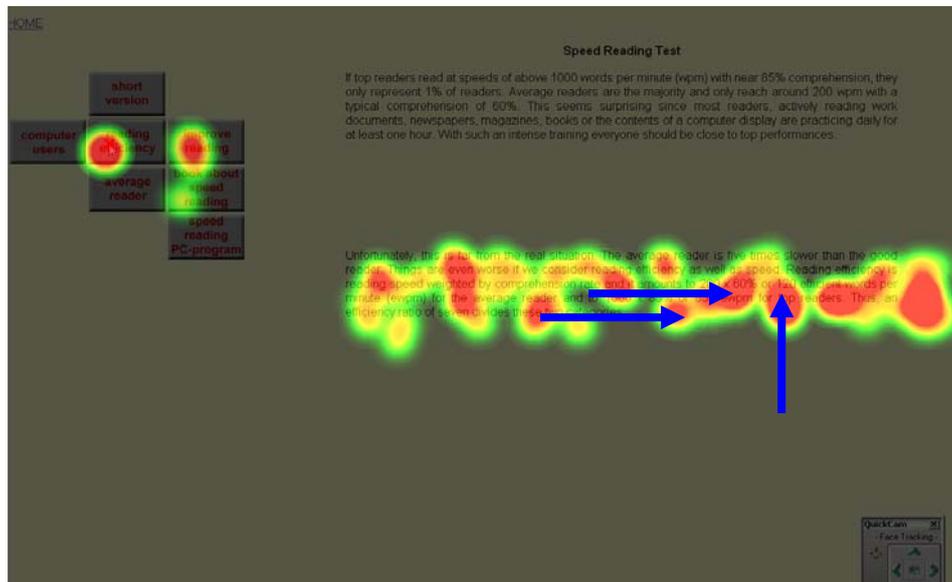


Fig. 16: Long fixations on numerals

These observations have to be interpreted with great care because they are the result of a descriptive analysis and therefore only hold true for this small sample of subjects. No statistical analysis was done for the data on dwell time on discourse markers and numerals.

2.2.4. Comprehension problems and textual complexity

In order to identify text passages that caused comprehension problems the scan path recordings of the defined areas of interest were analysed. As mentioned in Section 2.1. these areas of interest were defined at points in the text at which the readers had to decide where to go next, i.e. which link to open next. The mean value for the number of fixations counted in each area of interest was weighted statistically according to the number of words that had to be read in each area of interest. Dwell time was also controlled for. The sum of the individual fixations and their durations in the defined areas of interest were used as the primary measure.

The results of the comprehension test did not reveal any significant differences between the two groups. The mean comprehension score in the axial condition was 59.45 % while in the network condition it was 76.09 %

These results suggest that comprehension problems might be attributed to lexical and syntactical complexity rather than the presentation format. It is important to note at this point that the following discussion of text passages that proved to be difficult and thus showed a higher number of fixations and

longer dwell does not claim to relate reading difficulties in these areas to the reading competence of the subjects since no statistical evidence was gained for this assumption.

If you compare the results of the multiple choice comprehension test you find that in both conditions the problematic questions, i.e. those that caused most comprehension problems were similar. In Fig. 17 you can see that questions 5, 7, 10 and 11 were difficult for readers in both conditions.

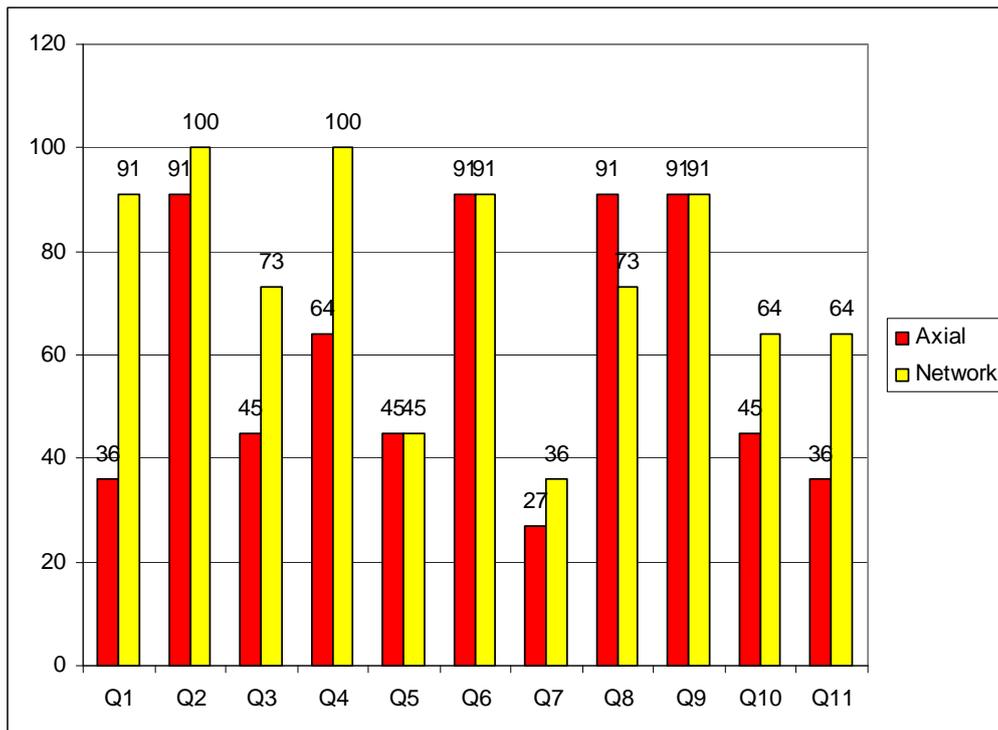


Fig. 17: Comprehension questions: comparison of results

Text passages containing metaphors caused comprehension problems. In both conditions only 45% of the readers answered question 5 correctly, which asked for a decoding of metaphors. The understanding of one idea in terms of another conceptual domain is a difficult task and involves the ability to map, i.e. to establish correspondence between the source domain from which the metaphor was drawn and the target domain that the reader tries to understand. This complex cognitive activity has been described by many linguists, e.g. by Lakoff and Johnson (1980). If you compare question 5 with the corresponding text passage

Q5. A sprinter running as the average reader reads, runs 100m in?

A 10 seconds (near record time)

B 35 seconds (jogging)

C 70 seconds (walking speed)

Compare the results of the average reader to other areas. We may imagine a sprinter practicing every day for several years on the running track and then just calmly walking for a race. We can also picture a racing driver never exceeding 30 mph or a pianist playing every day of the week for 20 years and only able to play music like a beginner. Unfortunately, since the age of 12, most readers do not substantially improve their efficiency and never reach their full capacity.

you can see that the series of comparisons using metaphors is introduced by the ‘non-affirmative’ expression ‘*We may imagine*’ and we also find two other numerals which might have distracted the readers. The scan paths show that these two numerals were mostly fixated longer than the other elements in the text. Moreover, the metaphor for average reading speed with the sprinter walking for a race does not explicitly contain the figure “70 seconds” in the text, which might be another reason why many readers did not choose this item in the multiple-choice test and neglected the hint walking speed which is provided in brackets.

The second area of comprehension problems were numerals. As already mentioned, they were fixated long and often but they were only reproduced correctly when no transfer on the part of the readers was required. The answer to question 7 could be found in the text itself, where the numeral asked for is explicitly included. Nevertheless it required the ability to transfer the meaning relation of hyponymy from *human speaking or computer speaking* used in the text to *speaking speed of a race driver*, which was used in the comprehension question. This transfer was made even more difficult because the sentence is opened with the discourse marker *on the other hand*, which balances contrasting points that do not contradict each other (see Swan: 2005: 139). Moreover, the ability to decode a syntactically complex sentence was required from readers. The prepositional clause introduced by *without* contains a complex noun phrase, which makes it difficult for the reader to relate it to the main clause. The syntactic structure also creates a kind of end focus that might mislead the reader by seemingly putting informational weight on the last part, which is in fact only an extension. The long fixations and regressions in this last part could reflect the subjects’ difficulties in interpreting this part of the text – at least if you proceed from a

top-down approach that bases the interpretation of eye tracking data on a cognitive theory. In this case you could assume that fixations increase in number and duration when the material gets more difficult for the reader and when there are structural constraints on interpretation (see Goldberg et. al. 2002).

The following figure depicts regressive eye movements triggered by the complex *without* clause and shows a long fixation on the numeral asked for.

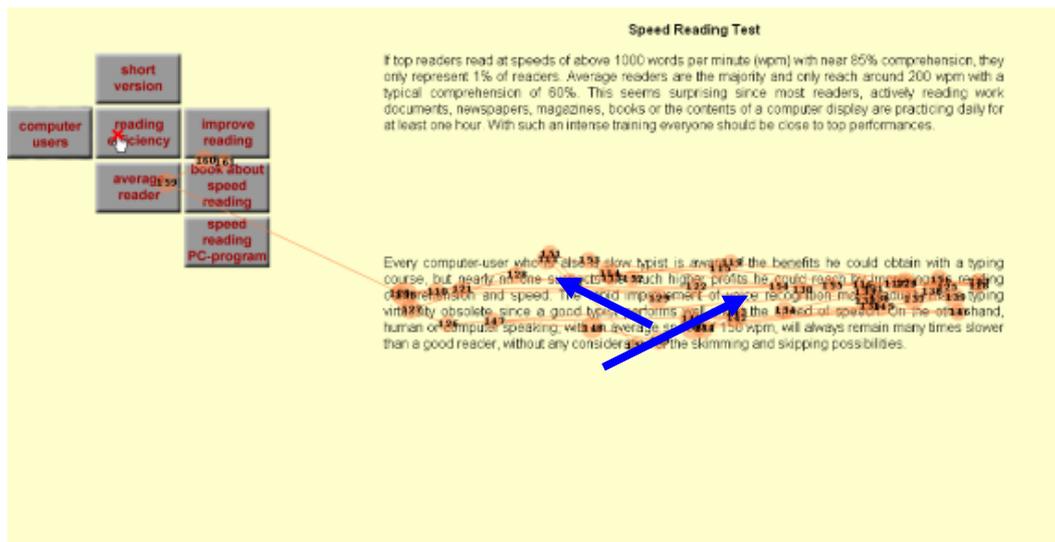


Fig. 18: Regressive eye movements triggered by syntactic complexity

The decoding of anaphoric reference also proved to be difficult for many readers. Question 10, which 55% of readers of the axial condition and 36% of the network condition did not answer correctly, involved the identification of an anaphoric reference established through *This is the task* at the beginning of the last sentence, which refers back to *giving the consistent practice offered by speed reading software*, asked for in Question 10.

Finally, comprehension problems were caused by the use of synonyms. The ability to detect and interpret synonyms was decisive as far as question 11 was concerned. Only 36% of the readers in the axial condition answered this question correctly while 64% in the network condition were able to do so. Finding the correct answer involved relating the terms *speed reading computer program* used in the text passage and the synonym *speed reading software* that was used in the question.

It is interesting to notice that the difference in the scores achieved in connection with question 11 was rather big between the groups. A possible explanation for this effect might be the fragmentation effect produced by the

different presentation formats. The readers in the network condition were confronted with a shorter node which was opened after clicking the link speed reading pc-program. The fact that this additional link contains another synonym might have helped to memorize the concept and could have functioned as an additional cohesive device. In the axial condition the speed reading program appeared at the end of the node as one of three possible ways of training suggested after the readers had clicked on the link training.

3. Conclusion and critical evaluation of the results

In this study eye movement data were seen as a means of accessing the moment-to moment comprehension process in readers. The metrics used in this study, i.e. number of fixations overall, dwell time mean and number of fixations on the individual areas of interest produced results that showed great inter-reader and intra-reader variation. Thus, no significant differences between the groups were found. Nevertheless the results provided valuable insights into prototypical navigational behavior triggered by hypertext structures.

The statistical results of this pilot study with two relatively small experimental groups might have been influenced by individual differences between the subjects and their screen-based reading behaviour, which involved very complex cognitive activities such as browsing and scanning strategies as well as selective reading, which due to their interrelatedness are difficult to evaluate. The high between-subject variability may also be due to influences of low-level perceptual factors such as attentional shifts. Critics of eye tracking say that data have to be interpreted carefully since, whenever the brain is planning an eye-movement, it shifts covert attention to the eye's destination (see Peterson et. al. 2004). This attentional shift questions the eye-mind hypothesis because we may also find traces of attention to something that one is not looking at. In such a case eye tracking would not indicate cognitive processing at all.

In conclusion we can say that the comprehension problems were similar across groups and seemed to be independent of the hypertext structure. In both groups comprehension difficulties were accompanied by higher numbers of fixations, longer fixation durations and regressive eye movements. A comparison of subjects' comprehension results and corresponding text passages showed that eye movements seemed to be sensitive to global text passage difficulty and inconsistencies in text created through lexical ambiguity or syntactic complexity.

Since the main aim of this study was to find eye tracking evidence for the influence of hypertext structures on navigational behaviour, a descriptive

approach to data evaluation was chosen and the sequence and the length of fixations were taken as primary metrics for the evaluation of data. Although there are many computational models such as the E-Z reader model (Reichle, Pollatsek, Fisher and Rayner, 1998; Reichle, Rayner, and Pollatsek, 1999) that provide a theoretical framework for understanding how word identification, visual processing, attention, and oculomotor control jointly determine when and where the eyes move during reading, such data were not included because they do not reveal information on strategies behind navigational decisions that are taken. Such data can only be gathered in interviews or recall protocols. Thus, the data about navigational strategies which had been collected in a previous study (Reitbauer 2007) were reassessed in this follow-up study using real-time measurement. The findings largely verified the data collected in interviews. It was found that the fragmentation of the text through a higher number of links in the network condition was experienced as beneficial for the recognition of semantic relations. Moreover, the hierarchical organisation of links in the axial condition made readers open the links in the order of their appearance in the main node. Links outside the main node arranged on a criss-cross basis caused a greater variety of navigational paths and sometimes led to orientation problems. As far as reading comprehension results are concerned, the previous study with 60 participants produced a significant effect in that the axial group showed better results ($p=,005$, Duncan Post Hoc Test). This finding could not be verified in this follow up study.

Summing up we can say that the use of eye-tracking data can enhance our understanding of the navigational processes in hypertext in areas such as processing mechanisms and attentional distribution. However, for a more comprehensive approach and an in-depth understanding of the reading process we need to include other methods of research such as computational and qualitative approaches. We have to find out why and how navigational decisions are taken because it is not enough to only record where and when readers change paths.

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ABSTRACT

Keep an Eye on Information Processing: Eye Tracking Evidence for the Influence of Hypertext Structures on Navigational Behaviour and Textual Complexity

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In the following empirical study the influence of hypertext structures on the processing of information will be examined using eye tracking data. It will be tested whether the organizational structure of hypertexts influences navigational behaviour. Moreover we want to find out whether the information architecture has an effect on the number and duration of fixations and reading comprehension. A source text on the topic of speed reading consisting of 597 words was converted into an axial and a networked hypertext. The subjects in this test series were 22 students of English and American studies from Graz University, who were all on the level of C1 according to the common European Framework of Reference. To sample the position of the user's eye on an average of every 20 ms the Eye Tracker Tobii 1750 was used. The data were analyzed using the software program Clearview. The eye tracking data depicting scan paths and hot spot images of areas of highest fixation count suggest that prototypical hypertext structures trigger prototypical gaze patterns, which means that the order in which links and nodes received their first fixation was stable. The average dwell time in the defined areas of interest was lower in the network structure while the axial structure produced fewer regressive eye movements and caused fewer orientation problems. The presentation format did not significantly affect comprehension.

An Investigation into the Generic Features of English Requestive E-mail Messages

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1. Introduction

1.1. Email as a mode of Communication

In recent years, technological changes have influenced everyday interaction and have brought new electrically mediated modes of communication. One of these organized forms of communication is electronic mail which is heavily employed at many work-sites and within large institutions (Gains 1999) to the extent that it has become part of the daily routine (Hawisher and Moran 1993). Baron (2000) points out that email has emerged as a system of language conveyance in situations where neither speech nor writing can easily substitute. What has led to its success is its convenience, marginal cost, speed of transmission and flexibility (Baron 1998). Furthermore, as communication in general is increasingly characterized by 'a preference for directness over indirectness' (Cameron, 2003: 29), email has become one of the most acceptable means of communication to meet this purpose.

Email has pragmatic and social functions. The pragmatic function is evident in its use in the academic and business environments, where its practices include thanking people for job interviews, soliciting advice and requesting, among other functions. Its social dynamics includes privacy in that it enables participants to interact in a less constrained way than when face-to-face (Baron 2000). Expansion of email functions (e.g. using email in academic and business environments) made editing more important. This in turn led to

the emergence of formal (edited) emails and informal (unedited) ones comparable to writing and speech.

Although it has a schizophrenic character (part-speech, part-writing), email can be considered, according to Baron (1998 and 2000), a type of (bilingual) mixed contact system, reflecting the linguistic profile of four dimensions: social dynamics (the relationship between participants), format (the physical parameters resulting from the technology), grammar (the lexical and syntactic aspects of the message) and style (the choices made to convey semantic intent expressed through selection of lexical, grammatical and discourse options).

1. 2. Literature Review

Developments in telecommunications over the last century have made possible new communicative modalities that blend the presuppositions of spoken and written language (Baron, 1998). One of these communication modalities is e-mail that displays hybrid characteristics of both spoken and written language. Shapiro and Anderson (1985: 10) argue that e-mail is ‘a fundamentally new medium with significantly new characteristics that cannot be treated with the old rules alone’. Therefore, studies on e-mail have considered the rhetoric of this new medium in terms of its linguistic features, genres, style, and form, as well as pragmatic functions. In particular, a number of researchers have found themselves confronting ultimate questions such as the extent to which these rhetorical and linguistic features are influenced by the properties of e-mail, the differences between the writer’s relation to a screen and his/her relation to a written letter or memorandum, the distinctions between email and traditional media, and the communicative purposes for which interactants use e-mail.

Regarding the differences between e-mail and paper-mail, Selfe (1989) sheds light on the ‘grammar’ of the screen and the grammar of the page. The differences between the screen text and the paper text include size, and the way in which text is read and structured. For example, screen readers move through the text scrolling whereas paper text readers move through it page turning. Other researchers paid attention to such matters as how one can structure the message to direct the reader’s attention to the appropriate parts of the text to elicit the reader’s response. While Halpern (1985) calls for placing the most important part of the e-mail message (i.e. a request) at the head of the message, Hawisher and Moran (1993) recommend placing it at the end. However, Lea (1991) notes that e-mail users often write fast and spontaneously without paying attention to where to place the most important points in a single e-mail message.

Concerning the stylistic features of email correspondence, many studies have come across a range of e-mail stylistic features. Collot and Belmore (1996) and Yates (1996) state that electronic messages seem to resemble writing when focusing on particular linguistic variables (e.g. type/token ratio or frequency of adverbial subordinate clauses) and speech when focusing on contexts where senders appear involved (e.g. first- and second-person pronouns, contractions and modal auxiliary traditional letter writing conventions; this is supported by the occurrence of opening and closing formulas. As for the stylistic devices of electronic messages, he points out that the frequency of informal honorifics increases at the same rate as the level of informality. In addition, the expression of emotion through punctuation and the use of abbreviations increase in less formal messages. According to Slembrouck (1998), email is a transformation of an already existing discourse type called the 'memorandum'. At the purely formal level, electronic mail messages make use of a rather fixed template borrowed from memorandum and the behavioral routines into which the texts are inserted.

Gimenez (2000) observes that the spoken nature of electronically mediated communication has started to affect business written communication, making it more informal and personalized, and showing a tendency of a more flexible register. Likewise, Hard af Segerstad (2000) finds that email messages, in comparison to formal business templates, tend to be more 'speech-like' in terms of the ease and rapidity of production and transmission and more 'written-like' since they are written and need to rely more on the typed word. However, in an investigation of real email examples drawn from commercial and academic environments, Gains (1999) reports that commercial emails in his data followed the linguistic conventions adopted in standard written business English, whereas academic emails showed a pseudo-conversational form of communication though conducted in extended time and with an absent interlocutor.

Other studies in a variety of sender-recipient correspondence among university students have yielded more findings on e-mail messages. At the university setting, these e-mails were found to be characterized by 'more casual language, truncated syntax, abbreviations, and symbols' (Biesenbach-Lucas, 2007). However, students in general write more formal e-mails to their professors (Chen, 2006) as e-mail messages can be edited like hard copy although they are most often composed on-line rapidly (Hawisher and Moran 1993).

Researchers have also investigated the communicative functions of e-mail messages. They have found that e-mails are used to make requests, respond to information, maintain contact, chat, promote, enquire, direct, and to have

fun. For example, mail messages, as found by Gains (1999), are heavily employed in business to disseminate information (45%), to make requests (32%), and to issue directives (11%), whereas they are used in academic affairs mainly for transmitting information (41%) and responding to prior requests (31%). Other studies have reported that students use e-mails with their professors to get information/advice about course materials, quizzes, and showing interest in course material (Martin et. al, 1999; Marbach-Ad & Sokolove, 2001).

Few studies have applied the well-known Cross-Cultural Speech Act realization Project (CCSARP) coding framework developed by Blum-Kulka, House and Kasper (1989) to examine the differences in request strategies for request realization in a cross-cultural communication perspective. Using this coding framework, Chang and Hsu (1998) examine the request structure in English email messages written by Chinese learners of English and native American English speakers. Due to cultural differences, the requestive act structures of Chinese are found to have an indirect sequence but their linguistic realizations are more direct. However, the request structures of the native speakers are in direct sequence whereas their linguistic realizations are indirect. Likewise, results from the investigation of request speech act in emails written by Australian and Thai students in English show that Thai students' messages in making requests are less direct and more polite than those of Australian students (Swangboonsatic, 2006). The researcher points out that these differences in requesting style are attributed to the difference between the Thai and Australian cultural values. In an analysis restricted to the head requestive acts of email messages, Biesenbach-Lucas (2007) examines how native and nonnative English speaking graduate students formulate low- and high-imposition requests sent for faculty. Her results show that most requests are realized through direct request strategies; however, native speakers demonstrate greater resources in creating e-polite messages to their professors than nonnative speakers.

While e-mail messages have been the focus of a number of studies, no work of which we are aware has been carried out on analyzing the generic structure of the standard elements of requestive e-mail messages or has looked for evidence of socio-pragmatic norms that govern email as generic norm of communication in different linguistic communities, drawing on a corpus data indicative of generic complexity and staging. To the best of our knowledge, mere attention has been paid to studying the generic structure of email messages written by native and non-native speakers to find out culturally preferred discourse generic options. Therefore this study is an attempt to analyze the generic structure and registerial features of email messages written by American native speakers and Jordanian non-native speakers of

English and to shed light on the nature of the discourse strategies used by the two groups of writers to organize this type of genre. In particular, the research questions are:

1. What are the generic options that govern the rhetorical construction of email messages available to the American native and Arabic nonnative speakers of English?
2. What are some rhetorical moves of Americans and Jordanians that are similar or different?
3. What are the socio-cultural resources that have given rise to these similarities and differences?

2. Methods

2.1. Participants

A corpus of eighty e-mail messages was written by two groups of subjects participated in this study: forty English speaking Americans in the United States and forty non-native speakers of English from Jordan. The American and Jordanian students were undergraduate students; they were between 19 and 25 years of age. The Jordanian subjects were native speakers of Arabic. They were third and fourth year students studying towards a BA degree in English language at Jordan University of Science and Technology, and Yarmouk University; both are public universities in Irbid City. Sixty eight percent of the subjects were female students, and 32% were male. They studied English as a school subject in their home country, Jordan, for eight years prior to university admission, as English is taught as a foreign language in Jordan. The students have the level of proficiency that qualifies them for participating in this study as they have been pursuing undergraduate English courses and majoring in English language for three years. In addition, all students are required to take an English language proficiency test before entering the Department of English. The second group constituted forty American university students (23 were female students and 17 were male). They were undergraduate students in different majors (Political Science, Biomedical Sciences, Software Engineering, General Engineering, Biology, Communication Studies, Marketing, Journalism, Business, History and Law) at three American Universities: University of Texas, University of South Alabama and University of Massachusetts Amherst. Only native speakers of English were selected.

2.2. Method of Data Collection

The sample consists of eighty e-mail messages written by eighty undergraduate students. They were all requestive written for the purpose of eliciting a positive response from the readers of these messages in order to

create a possibility of accepting their requests. To ensure qualitative comparability and reliability of sampling, the data for this study were collected through distributing a simulated written paragraph to the participants via email. All the emails collected were written in response to a written paragraph describing a fictional situation in which the subjects had unavoidably exceeded the deadline to participate in a competition for selecting the best essay. Each subject's task was to send an email message to the committee to give him/her another chance to submit his/her essay. Two equal sets of data of 40 messages each were collected from the participants. The first set was collected by the researchers themselves who made contacts with the Jordanian students. Only students who showed willingness to participate in the study were asked to electronically respond to the email sent to them. In addition to the written task description, the situation was explained orally in person to them. By using the same situation for both groups of respondents, the researcher could directly compare the genre component preferences and the language used by both groups to address the same prospective reader. The second set was obtained from a corpus written by English native speakers in the United States. It was collected by three Jordanian MA students in Applied Linguistics and teaching Arabic courses to American students at the American universities previously mentioned. The researchers sent them the email containing the situation, and explained this situation orally to their students. The American students sent their responses either to their teachers who in turn forwarded the emails to the researchers or to the researchers directly. In addition, some further ancillary personal information was to be provided by the subjects. They were asked to provide information about their age, gender and education. All names and any other information likely to identify the participants were removed.

Admittedly, the data collection instrument used in this study is not without its own drawbacks because the data elicited was not natural. However, it was decided to adopt this instrument for the mere reason that this instrument allows the researchers to control the same situation for both groups of participants (Maier, 1992; Al-Ali, 2006a) so that we could compare the e-mail feature preferences used by both groups to the same situation.

3. Theoretical Framework

Each subject in this study is not a speaker, but a writer writing an e-mail message to an addressee (the selection committee); therefore, no actual interaction takes place since the situation is hypothetical and the reader is not able to respond directly. We drew on the framework of genre analysis to examine both sets of e-mail messages for specific generic features and their linguistic realizations. A request in the form of e-mail message may be sent to seek information on a detail, or to pursue good will and sympathy (e.g., 'in

situations where the writer's party perhaps needs to report that they will be unable to meet their commitments' (Yli-Jokipii, 1996: 306).

The e-mail messages collected share a main communicative function of requesting some kind of response such as some appropriate action for the benefit of the requester. The users of genre share some set of communicative purpose realized by a schematic structural component moves in a particular context (Swales 1990; Bhatia, 1993). I utilized Al-Ali's (2004) coding scheme on a corpus of English and Arabic job applicant letters written by English native speakers and Arabic native speakers, with modifications and additions of certain moves. The researchers found it necessary to add other communicative moves in order to articulate new rhetorical functions specific to the communicative needs of the English email messages. Al-Ali's analysis is based on Swales' (1990) and Bhatia's (1993; 2004) notion of genre analysis. These genre analysts put forward the move structure analysis framework which focuses on identifying the strategic functional options utilized by the writers to articulate the communicative purpose of a particular genre, the allowable order of these moves, and the linguistic features used to realize them. The next step is to provide contextual explanations why these rhetorical options were utilized by the users of the genre to achieve their communicative purpose. That is because, according to Bhatia (2004), the schematic generic patterns of a particular genre are the result of the conventions of the socio-cultural contexts in which genres are written.

Despite the shared communicative purpose of the routinized requestive e-mail messages, Kachru (1988: 207) maintains that 'there is to be a fair amount of variation in the use of non fictional genres in a number of nativized contexts particularly where dominant regional socio-cultural factors operate differently.' To find out variations between the two sets, we then compared the native speakers' data with that of the non-native speakers.

Because the writers of these messages are in low position with respect to the addressee, it is assumed that they should employ requestive mitigation strategies to minimize the amount of imposition exerted on the prospective reader. Based on request strategy types in the Cross-Cultural Speech Act Realisation framework developed by Blum-Kulka, House and Kasper (1989), we identified each request head act together with its mitigation strategies. We analyzed the request act structure in terms of the syntactic and lexical/phrasal mitigating devices used to mitigate the request act proper and the level of directness of the request linguistic forms. Some examples of the mitigating strategies and illustration of how these contribute to the politeness of the request are presented in the Data Analysis Section.

4. Data Analysis

The analysis of the American native speakers' and Jordanian non-native speakers' emails revealed that there are ten component moves by means of which requestive email messages are structured. Some moves have sub-steps such as the Apologizing move. Apart of salutation that indicates the Opening, and the signing phrases that indicate the Closing, the criteria for move analysis are solely semantic because the same semantic move can be realized by different formal linguistic features. As found in the analysis, the request messages written by the English native speakers and the nonnative speakers of English demonstrated differences in the number and frequency of moves employed. The nonnative speakers tended to use eight-move messages, while the American native speakers used nine-move ones. This does not mean that every email corresponded rigidly to the organizational model presented in this Table. Following are the individual component moves; each will be described and exemplified by instances from the corpus.

Table 1: Component moves of American and Jordanian emails

Component moves of American emails	Frequency of moves (%)	Component moves of Jordanian emails	Frequency of moves (%)
1.Opening	100	1.Opening	88
2.Identifying self	33	2.Identifying self	10
3.Apologizing		3.Apologizing	
• Announcing apology	43	• Announcing apology	64
• Giving reasons	98	• Giving reasons	93
4.Requesting	100	4.Requesting	100
5.Referring to documents	30	5.Invoking compassion	25
6.Promoting contribution	5	6.Promoting contribution	25
7.Specifying means of further communication	23		
8.Ending politely	58	8.Ending politely	33
9.Closing	75	9.Closing	63

OPENING

It is the first move in the e-mail messages examined. I found 100% incidence of this move in the native speakers' messages whereas it occurs in 88% of the Jordanian learners' data. The major function of this move is to identify and/or politely salute the target addressee. Most of the e-mails examined are commonly opened with one of the options listed in Table 2. Most all of the messages use the epistolary convention for opening starting with an address term. This indicates that 'the students still followed epistolary conventions in writing e-mail to their professors, which suggests that they viewed e-mail as more similar to print convention correspondence' (Zhang, 200: 14).

Table 2: ‘Opening’ options in the American native speakers’ (NS) and Jordanian nonnative speakers’ data

Openings (ANSs)	No. of instances (%)	Openings (J NNSs)	No. of instances (%)
1. Dear (Selection) Committee (Members)	58	1. Dear (selection) committee (members)	16
2. To whom it/this may concern	25	2. To whom it may concern	4
3. Dear Sir/Madam	12	3. Dear Sir(s)	43
4. Dear Drs	0	4. Dear Drs	6
5. Dear Mr.	0	5. Dear Mr.	11
6. Hi	5	6. Hello/Hi	20

Table 2 above shows the frequency of occurrence of each option used by the two groups of respondents. As is shown, 80% of the Jordanian messages and 72% of those of Americans were opened with the conventional greeting ‘Dear’. It was noticed that, a higher use of ‘Dear Sir(s)/Mr. /Dr.’ was recorded by the Jordanians (60%) in comparison to ‘Dear Sir/Madam’ (12%) employed by their counterparts. Also, while the Jordanian learners employed the informal linguistic opening ‘Hello’/‘Hi’ (14%), their counterparts used ‘Hi’ only with a percentage of 5%.

IDENTIFYING SELF

In this move the respondent introduces himself/herself to the target addressee by including his/her name and/or affiliations. This component occurred in 33% of the native speakers’ data, whereas it is employed only in 10% of the Jordanian messages. This component is usually realized by the following portions extracted from both types of data:

- (1) ‘I am (x) from (z) University and I have signed up to participate in the competition for writing an.’ (NNS Email 39)

APOLOGIZING

By apologizing, the addresser ‘recognizes the fact that a violation of a social norm has been committed and admits to the fact that s/he is at least partially involved in its cause’ (Blum-Kulka and Olshtain, 1984: 206). In the decision to carry out an apology, the speaker is willing to humiliate himself/herself to some extent and to admit to fault and responsibility for a certain type of event that has already taken place (Olshtain, 1989: 156). In a closer look at the information sequencing of the e-mal data, this move occurs either before or

after the 'Requesting' move. Very interestingly, 92% percent of the Jordanian e-mails revealed a discourse organization pattern of an apologizing move followed by 'Requesting' whereas their American counterparts manifested a tendency (73%) to present the requestive move before the apology.

The data analysis revealed that the act of apologizing was realized explicitly by a routinized performative act of apology, and/or implicitly by giving the reasons related to the event that has taken place. Therefore this move can be divided into the following two subcomponents or steps: 'Announcing the apology', and/or 'Giving reasons'.

Announcing the Apology

This step involves an explicit announcement of the speech act of apologizing. The data revealed that this component step has a higher frequency of occurrence in the Jordanian learners' data (64%) than in the native speakers' (43%). It is realized by using one or a combination of more than one form of the following linguistic options:

- a. An explicit illocutionary routinized performative verb realized by the formulaic expression of regret 'apologize, or its nominalized form (i.e. apology).

The native speakers remarkably employed this option more often (76%) than the Jordanian learners (52%). In addition most of the native speakers' apologies were more direct and formal, and were further intensified by adding one of the following devices:

- an intensifying expression prior to the performative verb 'apologize' such as an intensifying adverb or the auxiliary verb 'do'
 - (2) 'I *strongly* apologize for not being better prepared and sending in my essay at an earlier time and hope I do not inconvenience you. (NS Email 30)
 - (3) 'I *do* apologize for not handing in the contest essay on time.' (NNS Email 20)
- a premodifying adjective before the nominalized form 'apology'
 - (4) 'Please accept my *sincere* apologies.' (NS Email 38)

- b. Apologetic 'sorry': This option was mainly used by the nonnative speakers and usually realized by using the lexical item 'sorry', or adding an intensifying adverb, or double intensifier as illustrated by the following examples:

(5) I'm *very* sorry for the delay.' (Intensifying adverbial)
(NNS Email 7)

(6) I'm *terribly, terribly* sorry.' (Double intensifier) (NNS Email 18)

The nonnative speakers were likely to express direct apology by using *sorry* and/or its intensified forms more frequently than the American native speakers with a percentage of 48% versus 12%.

Giving Reasons

The act of apologizing was also realized implicitly by giving the reasons and specifying the obstacles that make it difficult to achieve the desired objectives. Almost all the informants provided the addressee with reasons and explanations for having missed the scheduled submission. The reasons cited included an account of the cause which brought about the problem. This strategy occurred in both sub-corpora as suggested by its presence in 98% of the native speakers' and 93% of the Jordanian learners' data.

To realize this strategy, the native speakers employed subordinators such as 'Because (of) /Due to, or instances of adversative conjunctives (e.g. 'therefore'), or negative expressions indicating a problem such as 'Unfortunately', 'unable to', or 'malfunction', and 'corrupted'. The nonnative speakers mainly used adverb clauses introduced by 'because' and the adversative conjunction 'but' much more frequently. The major difference between the native speakers' and Jordanian learners' emails is the relative lack of variety of expressions in the Jordanian learners' sub-corpora.

The reasons were sometimes presented in detail or in the form of a story as shown in the following example:

(7) My delay was due to computer malfunction. There was a severe damage When I attempted to retrieve and send the essay initially, I discovered that my hard drive was corrupted, by the time the tech crew was able to fix the problem the deadline was already past.' (NNS Email 15)

As is shown in example 7, the problem is presented in detail taking the form of a story where the writer gives a ground (reasons, explanations or justifications) for his/her 'Requesting' (Blum-Kulka et al., 1989: 287).

REQUESTING

This move is considered the backbone of the messages as suggested by its occurrence in every email message. It is central to the main communicative purpose of this genre, commonly known as the ‘head act’. Requesting, along with apologizing, comprise the main propositional content of the message. Requests in general ask that an action be taken to redress the problem described. They are pre-event acts: they express the speaker’s expectation of the hearer with regards to prospective action, verbal or nonverbal (Blum-Kulka et al., 1989: 11). In the data analyzed, the writer expresses his/her desire that the reader performs an action – to give him/her another chance to submit the essay.

As shown in Table 3, the corpus displayed one or more of the following request strategies, the classification of which is founded on the empirical investigations carried out in the field of cross-cultural pragmatics by Blum-Kulka et al. (1989).

Table 3: Subjects’ use of request strategies in E-mail messages

Request Strategies	Mood Derivable	Explicit Performative		Hedged Performative	Want Statement	
		Ask	Request		Hope	Wish
No. of instances (ANSs)	6	4	9	3	15	–
No. of instances (JNNSs)	10	9	–	–	17	7

1. Mood Derivable: Instances where the grammatical mood (the imperative form) determines the illocutionary force a request, e.g.,

(8) ‘Please *give* me another chance to rewrite a new essay and send it to you.’ (NNS Email 33)

2. Explicit Performative: The illocutionary intent is explicitly named by using a relevant illocutionary verb. The native speakers tended to use the verbs ‘request’ and ‘ask’, whereas the Jordanian learners used ‘ask’, e.g.,

(9) ‘I am writing to request a time extension for my essay.’ (NS Email 4)

3. Want Statement: The utterance expresses the speaker’s desire that the event denoted in the proposition comes about. In addition to using ‘hope’ by

both groups of participants, the nonnative speakers also used ‘wish’. The following examples illustrate this:

(10) ‘I hope you will be able to consider my entry.’ (NS Email 28)

(11) ‘I wish you would be kind enough to consider accepting my essay even though I exceeded the deadline.’ (NNS Email 7)

4. Hedged Performative: The illocutionary verb denoting the request is modified by modal verbs or verbs expressing intention, e.g.,

(12) ‘I would like to ask for an extension of the application deadline for submitting my essay, please.’ (Email 22)

In addition to these strategies, the respondents usually used syntactic mitigators including ‘Interrogative’, ‘Past tense’, and ‘If Clause’ to mitigate this move internally, and lexical phrasal devices such as ‘Politeness markers’ and ‘Downtoners’ to soften the amount of imposition on the hearer (see Farch and Kasper, 1989: 222). Table 4 presents the subjects’ use of the various subcategories of syntactic and Lexical/phrasal mitigating devices.

Table 4: Subjects’ use of the various subcategories of mitigating devices

Mitigating Devices	Internal Mitigating Devices					External Mitigating Devices
	Syntactic Devices			Lexical/Phrasal Devices		Disarmers
	Interrogative	Past Tense	If Clause	Politeness Markers	Downtoners	
No. of instances (ANS)	2	20	14	4	4	8
No. of instances (JNNSs)	–	7	12	13	–	12

As Table 4 shows, a higher use of syntactic mitigating subcategories was recorded by the native speakers (36 instances) in comparison to 19 instances employed by the Jordanian participants. However, we found that the percentages of lexical/phrasal devices were higher in the nonnative speakers’ data (13 instances) than those in the native speakers’ (8 instances). The following examples illustrate these mitigating devices:

(13) ‘Would it be possible to submit my essay at this late time?’
(Interrogative) (NS E-mail 18)

(14) ‘... and was wondering if it was in any way possible for me to still be able to submit the essay.’ (Past tense) (NS Email 1)

Concerning the lexical/phrasal devices, the Jordanian students used the ‘Politeness Marker’ ‘please’ more frequently.

External mitigation, on the other hand, operates beyond the request by means of various optional supportive devices. The participants tended to use disarmers. The writer attempts to remove any possible refusals the reader might raise upon being confronted with the request (e.g. ‘I understand ..., but ...’) (Blum-Kulka et al., 1989: 287). The Jordanian learners used disarmers more than the native speakers (twelve instances versus eight). The following are examples from both types of data:

(15) ‘I understand the deadline has passed, but I would appreciate your consideration of accepting my submission at this time.’
(NS Email 6)

(16) ‘Although I know I exceeded the deadline, but I ask if you can give me another chance.’ (NNS Email 5)

The ‘Requesting’ as a directive speech act move is an integral part of the communicative purpose of this genre as it is a request for a positive action (i.e. invites action from the reader to give the reader a chance to resubmit his/her essay). This move tends to reoccur as the e-mail messages typically include giving apologies indicating why the writer missed the deadline, and in many cases each of these apologies is followed by a requestive move. Thus, a significant issue related to this move is its cyclicity in the sense that it does not necessarily occur once. One or more other moves can occur in between. It is likely that the length of the email message plays a role in the number of moves employed in this cycling configuration, so that the longer the email message, the greater the number of moves employed in between.

REFERRING TO DOCUMENTS

Thirty percent of the E-mail messages written by the American native speakers refer the prospective reader to the attached document(s) which provide additional evidence to justify why the request they have made. However, the Jordanian messages do not contain reference for documents. This move is often indicated by lexical items such as ‘attached’ or ‘enclosed’.

The following extract from the native speakers' emails seem to indicate this function:

- (17) 'Besides a computer description of the error, I also have attached with my essay scans of the receipt of work done to repair the machine, time and date noted' (Email 34).

PROMOTING CONTRIBUTION

In this move, the writer tends to encourage the reader to consider his/her request favorably by offering appraisal of their contribution and assertion of their ability to make a sound contribution in order to persuade the reader to be given another chance. This move occurred in 25% of the Jordanian learners' data, compared to 13% of the native speakers' sub-corpora. The following examples indicate this function:

- (18) '... because I know my essay has the potential of being competitive and winning the competition' (NS Email 23).
- (19) '... For I wouldn't work hard to hand it in if I wasn't sure that it would receive your impression' (NNS Email 28).

INVOKING COMPASSION

In this move, the writer appeals or asks the potential reader earnestly for help (Al-Ali, 2004) by referring to the importance of the competition to the writer. None of the American native speakers employed this strategy. This component was found in 25% of the emails written by Jordanian texts. They used expressions such as 'sympathize' and adjectives premodified by intensifiers such as *very*, *so* and *really*. The following examples illustrate this function:

- (20) 'I would like you to sympathize with me due to this exceptional circumstance.' (Email 2)
- (21) '... because I worked hard on it and also the subject means a lot to me.' (Email 4)

SPECIFYING MEANS OF FURTHER COMMUNICATION

In this move the writer expresses his willingness to provide any further information needed and indicates how he can be contacted (Connor et al. 1995). This move was realized by a statement or question inviting the reader for further correspondence to provide any further information, or to answer the reader's inquiries (Lesikar, 1984: 283). As is shown in Table 1,

'Specifying means of further communication' is given in 23% of the native speakers' data while it does not surface in the nonnative speakers' corpus. The following extracts indicate this aspect:

- (22) 'If you have any questions regarding the circumstances under which I was unable to submit the essay or any other aspect of my request, please let me know.' (NS Email 35)

ENDING POLITELY

The respondents usually end the body of the e-mail message with a conventional polite ending borrowed from print epistolary correspondence conventions. This component occurred in 58% of the native speakers' messages and 33% of the Jordanian learners' data. Subjects from both groups tended to use the following formulaic ending: '*I look forward to hearing from you (soon)*'. The major difference between the two types of sub-corpora is that the native speakers tend to vary their expressions using common endings such as 'Thank you ((so/very) much in advance) for your time/consideration', or 'I look forward to your reply', or 'I appreciate your time/consideration'. The Jordanian participants, on the other hand, used a limited set of expressions such as 'Thank you (very much)' and 'I will be (so) thankful'.

CLOSING

Seventy five percent of the native speakers' emails and 63% of the Jordanian learners' involved the use of at least one closing device at the end. The writers employed formulaic complimentary expressions such as 'Respectfully', 'With all my respect', 'Yours sincerely', 'Yours faithfully', to show their loyalty and respect to the reader, or used the casual way of sending good wishes such as 'Best regards' and 'Best wishes' to the recipient followed by the writer's name (first and last name). The native speakers used formal conventional closings more frequently than their counterparts with a percentage of 93% versus 75%.

5. Discussion

Comparing the American students' corpus to that of the nonnative speakers, I found some variations in the generic structure in terms of the sequential order, type, and frequency of moves, and the lexico-grammatical features realizing these moves.

Regarding the order of presentation of moves, the only significant difference between the two sets of e-mail messages is the preferred sequence of 'Apologizing + Requesting' or 'Requesting + Apologizing'. It can be seen that the requestive move in the nonnative speakers' data is usually made after

it has been justified, whereas the native speakers tend to issue their request intentions directly before they are justified. Therefore, nonnative speakers avoid immediate requesting (i.e. defer their request) and lead their readers into their request intention after other linguistic acts (Kasper, 1992). In contrast, English native speakers tend to start with the main subject or the main point that will be negotiated first in the discourse (Sifianou, 1992; Scollon & Wong-Scollon, 1991; Green, 1996). These results are consistent with previous findings that Jordanians prefer the pattern of justification followed by request (Al-Ali and Al-Alawneh, forthcoming), while English writers prefer the pattern of request followed by justification (Schiffin, 1987; Kong, 1998; Zhang, 2000).

With regard to the rhetorical moves that are only found in the American data and those that are only available in the Jordanian nonnative speakers' data, it was observed that the native speakers tend to use optional moves such as 'Referring to documents' and 'Specifying means of further communication', whereas the Jordanians are likely to employ a different optional move (i.e. Invoking Compassion) that is not utilized by the Americans. The occurrence of the latter move in the nonnative speakers' data might be thought of as an elicitation strategy manifested by lowering the self-esteem of the requester. In other words, they tend to utilize a self-submission strategy embodying a sense of humility to exert a kind of pressure on the reader, following the strategy 'the more persistent the requester is, the more consideration his request will be given' (Al-Ali, 2004: 16). American native speakers, on the other hand, tend to utilize a different optional strategic component called 'Referring to Documents'. Although this move does not have a high frequency of occurrence (30%), it indicates that the native speakers prefer to include factual documents to prove that they had fully intended to submit their work on time; thus, the imposition on the prospective reader was unintentional and unavoidable. It seems that they prefer this convincing strategy because they think that the one who asks for a matter to be looked into by lowering the self-esteem and desperately needs the compassion, forfeit his position as equal partner in the social communicative event.

In addition, the American native speakers tend to leave the door open for further contact (i.e. Specifying means of further communication), whereas the Jordanian learners did not do so. In soliciting a response, 'the writer cleverly keeps initiative for further contact in his hands' (Bhatia, 1993: 67). It seems that such a strategy is part of the American native speakers' communication skills. Twenty-three percent of the American writers insist on pursuing their topics (i.e. request), which in turn puts a kind of pressure on the intended reader to make a response relevant to the previous initiating turn and a positive contribution to the forward moving of the discourse (see Vuchinich,

1977). Thus American native speakers try to push for further communication by telling the reader about how they can be contacted in contrast to their counterparts who do not seek to prompt a response.

As regards the frequency of moves, the two text groups of writers showed considerable variation regarding the frequency of each move. For example, it was observed that 'Promoting contribution' was evident in 25% in the nonnative speakers' data as compared to 5% in the native speakers' texts. A possible explanation for this difference in frequency might be the reason that self-appraisal for native speakers may be thought of an unsupported claim based simply on feelings or desires rather than on rational judgment; thus, 'it lacks credibility and is likely to be viewed by the reader as subjective' (Bhatia, 1993: 70). Thus the American native speakers appear to be more objective and rational than the Jordanian students. This explains why the American group content themselves with 'Referring to documents/evidence'.

The 'Requesting' move was included in every e-mail message. The obligatory occurrence of this move in the two sets of texts corresponds to the communicative function of the requestive email genre. Since its main function is requestive, it stands to reason that this move is obligatory and has a higher frequency of occurrence than other components. However, the linguistic forms used to realize this move used by each group of writers are not the same. As is shown in Table 4, while the American native speakers tended to use more syntactic linguistic devices (36 instances) than the nonnative speakers who employed 19 instances, the nonnative speakers used more lexical/phrasal devices than the native speakers (thirteen instances versus eight). According to Faerch and Kasper (1989: 237), the nonnative speakers reliance on the lexical/phrasal devices more than the syntactic means could be attributed to the reason that the former are easier to process than the syntactic structures whose mitigating function is not inherent in their grammatical meaning, rather it is a pragmatic, 'acquired' meaning that derives from the structure's interaction with its context and requires extra inferencing capacity on the part of the addressee. The syntactic means were opted for by the native speakers because these devices have been acquired naturally and become part of their grammatical competence. Therefore it stands to reason that this difference in use of syntactic devices in making requests could come from the lack of English mastery of nonnative speakers. These findings correspond to previous findings by Al-Ali and Alawneh (forthcoming) that native speakers prefer using syntactic devices that require a native language proficiency that the nonnative users lack.

An examination of particular lexical choices used to realize the moves reveals that nonnative speakers' are sometimes unaware of the proper

pragmalinguistic devices in the appropriate context. A comparison of the sentences of apology used by both groups indicated that the Americans explicitly announce their apologies by using the verb ‘apologize’ or its nominal form ‘apology. By contrast, the Jordanian nonnative speakers were more likely to express their apology by using the word *sorry* despite the fact that this word is the most frequent expression of apology in spoken English, while in formal situations and in writing, forms of *apologize* are more common (Owen, 1984). According to Maier (1992), the nonnative speakers’ frequent use of ‘sorry’ in written texts is due to their assumption that its use is appropriate when apologizing to a person in a position of power. The casual use of this expression could have given the impression that the users did not recognize the appropriate use of these expressions. Additionally, most of the nonnative speakers’ apologies were intensified by intensifiers such as *very*, *so*. Intensification, according to (Olshtain, 1989: 163), rises with lower status (i.e. the lower the status of the apologizer in comparison to the apologizee, the more intensification s/he will use to make the apology stronger creating even more support for hearer (H) and more humiliation for speaker (S). It seems that apologizing to someone in authority (the committee) may impose a heavier psychological burden than apologizing to someone of a lower status. Thus, by strengthening the apology with intensifying adverbs such as ‘really’, ‘very’, ‘deeply’ and ‘so’, the Jordanian learners show their awareness of the status of the apologizees and establish the ground for later requesting. In contrast, the American native speakers seem to be less psychologically inclined to apologize. Another relevant instance is the nonnative speakers’ use of *please*. It was the preferred politeness marker in making requests as it occurred with imperative structure in all requestive acts of Mood Derivable. Faerch and Kasper (1989) claimed that language learners’ preference for the politeness marker *please* is due to ‘its double function as illocutionary force indicator and transparent mitigator’ (p. 232). It appears that nonnative speakers might use *please* indiscriminately as a device to mark the utterance or sentence as a request rather than a mitigating device (see Biesenbach-Lucas, 2007; Blum-Kulka and Levinson, 1987, for similar conclusions).

Other instances illustrating the nonnative speakers’ unawareness of the sociolinguistic rules linking the linguistic forms with contextual variables were evinced in the ‘Opening’ and the ‘Closing’ moves. To open their email messages, the native speakers used more formal conventional lexical options (95%) than their counterparts (80%). At the first glance, the frequent use of such formal openings by the two groups of writers is likely to be a natural consequence of the tenor variable indicating the formality of the situation at hand where the interactants are of unequal power, the contact is infrequent and the affective involvement is low (Eggins, 1994: 65). Apparently, the

nonnative speakers' messages addressed upward seem to be formal and conforming to the conventional norms required in communication with authority figures. However, a closer look at the lexical choice practices used to realize the 'Opening' move displays that they do not have enough control over the address term system in English in that they do not marshal appropriate linguistic forms with their contextual cues in language use. This is confirmed by the overwhelming of the instances of lexical choices (60%) addressing masculine figures distributed as follows: in 43% it is 'Dear Sir(s)', in 11% 'Dear Mr.', and in 6% it is 'Dear Drs', which foreground masculine power and disguise feminism. That is because the students in the Jordanian university domain think that the committee responsible for selecting the best essay would be a group of male members. Therefore, it seems that the writers rely on rhetorical masculine coloring borrowed from their socio-cultural norms in their first language and applied into English. In other words these choices reflect features of the influence exercised by the Jordanian society in which masculine authority is evident (Al-Ali 2006b).

Another finding illustrating that the linguistic forms are poorly utilized by the nonnative speakers is the high frequencies of informal linguistic options (Hello/Hi) for openings (20%) and (25%) for closings in comparison to (5%) and (7%), respectively, used by native speakers. A possible explanation for this inappropriate use of these informal options is the perception among some of the nonnative speakers that the mode of communication determines the language used. Those users think that email as a medium of communication, in general, is characterized by informal and casual language, ignoring the fact that politeness conventions are expected to be maintained irrespective of medium. Thus, it seems that some nonnative speakers are unaware of which stylistic options required for different purposes in different contexts. What might give explanation to these inappropriate linguistic choices is that email use is still a language-using situation with less clearly defined constraints (Malley, 2006). Additionally, socialization into acceptable email interaction is still without much guidance as books on writing email messages provide little help to email users (Flynn and Flynn, 1998; Biesenbach-Lucas, 2007).

6. Conclusion

In this study, we have looked at requestive email messages written by native and nonnative speakers of English addressed to the same reader, the selection committee. The choice of the same addressee is instrumental to avoid differences that result of the influence of status and power variables on the formulation of email messages. That is to say all the email messages were collected under the same social situation to insure a reliable qualitative comparability between the two categories of texts in order to determine similarities and differences.

The genre analysis of email component moves reflects the generic options that govern the rhetorical construction available to e-mail message writers in the native and nonnative settings. These staged options reflect the overall communicative purpose of this genre which conceals the socio-cultural constraints and pragmalinguistic behavior that have given rise to these generic options. As it is shown in this study, although the groups of students from different cultural backgrounds, one from American and the other from Arab, utilize some similar generic components such as ‘Opening’, identifying self’, ‘Apologizing’, ‘Requesting’, Ending politely’, and ‘Closing’, each group uses certain moves that are very rare or do not even exist in the other group’s texts. For example, the American native speakers tend to use other moves such as ‘Referring to documents’, and ‘Specifying means of further communication’ that do not even exist in the Jordanian corpus to formulate their email messages. The Jordanian nonnative speakers, in contrast, utilize certain moves like ‘Invoking compassion’ that does not surface in the native speakers’ texts. Therefore the nonnative speakers’ generic choices do not always conform to those of the American conventions, but sometimes utilize their culture-specific choices to carry out requestive genre to appeal to the prospective reader.

The differences found in the generic options reflect different pressure tactics utilized by each group aiming at exerting a kind of pressure on the same prospective reader. While the Jordanian writers tend to use the self-submission strategy ‘Invoking compassion’, and the unsupported claim ‘Promoting contribution’ that are based simply on feelings, the Americans, instead, use objective supported strategic claims based on providing factual documents to prove that their imposition is unintentional. The Americans tend to support this optional strategic option by ‘Specifying means of further communication’ as an additional optional convincing strategic component. Unlike the Jordanian students, the Americans tend to employ a different strategy in order to achieve a positive response; that is ‘the more objective and convincing the requester is, the more consideration one’s request will be given’.

Another significant finding is the presentation of moves. Jordanian nonnative speakers of English show an obvious preference for the ‘Apologizing’ or ‘Giving reasons’ followed by ‘Requesting’ pattern whereas the American students display the opposite (i.e. ‘Requesting’ followed by Apologizing’ or ‘Giving reasons’). That is to say the American messages are more direct, as addressers give priority to the propositional content of the request proper whereas the Jordanian participants put greater emphasis on the interpersonal elements by apologizing and justifying their delayed request.

With regard to the nonnative speakers' use of the linguistic choices to realize the component moves of the email messages, their choices seem to suffer of insufficient pragmatic knowledge. This is evident in the high frequency of the masculine address forms borrowed from their L1 pragmatic and socio-cultural. The casual use of expressions such as *sorry* for apologizing, *Hi/Hello* as openers, and the informal endings in this social situation could have given the impression that the users either had difficulty in finding the appropriate linguistic expressions or did not recognize the appropriate use and the contextualization conventions of these expressions in this context since the weight of face threatening act is great due to the unequal social status between the students and the selection committee. Another potential reason for the more speech-like features of some linguistic options is the medium of communication (i.e. email). It is possible that some of the nonnative speakers view email as an informal medium of communication; therefore, the language used in email tended to be informal.

To conclude, the present study has provided insights into generic and pragmatic flaws of Jordanian students in their use of English in email message writing. The study attempts to provide some potential explanations for these infelicities related to the subliminal influence of native cultural norms and the insufficient exposure to the pragmalinguistic contextualization conventions which are usually acquired through primary socialization in family or friendship circles or intensive co-operation in a finite range of institutionalized environments' (Gumperz, 1996: 383). Although explicit teaching of the contextualization linguistic options are difficult in a foreign language classroom (Niezgoda and Rover, 2001), it is important to raise nonnative students' awareness to email message conventions in terms of their standard generic components, and their pragmatic functions, as well as the linguistic expressions used to realize them, and how these organization options and linguistic realizations vary according to the social context.

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ABSTRACT

An Investigation into the Generic Features of English Requestive E-mail Messages

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This study examined generic and registerial similarities and differences between requestive email messages written by American native speakers and Jordanian nonnative speakers of English. In order to minimize the influence of status and power variables on the formulation of email messages, a sample of eighty email messages written by undergraduate students to the same prospective reader were selected for analysis. The collected texts were subjected to generic move structure analysis. Although the email messages share the same communicative purpose, the comparison between the two sets of texts revealed different linguistic and rhetorical preferences in terms of pressure tactics utilized, presentation of moves and the linguistic realization of these moves. The Jordanian writers tend put emphasis on the interpersonal elements and to use the self-submission, supplemented by unsupported claims; the Americans, instead, give priority to the propositional content and use objective supported claims to prove that their imposition is unintentional. The study attempts to provide some potential explanations for these infelicities related to the subliminal influence of native socio-cultural norms and the insufficient exposure to the pragmalinguistic contextualization conventions.

La variation synonymique dans la terminologie de l'énergie : approches synchronique et diachronique, deux études de cas

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1. Introduction

Cet article propose les résultats d'une réflexion menée sur la variation synonymique en terminologie. Réflexion issue d'une double volonté : d'abord celle de confronter deux approches différentes ; diachronique et synchronique, et ensuite celle d'étudier le rôle que joue la synonymie dans la genèse d'un lexique spécialisé (ici celui du pétrole), et la place qu'elle occupe dans les pratiques professionnelles (notamment dans le domaine de l'énergie éolienne).

Autrement dit, d'un point de vue diachronique d'abord, peut-on envisager la variation synonymique comme un instrument qui accompagne, voire qui facilite la mise en place d'un lexique spécialisé, et d'un point de vue synchronique et professionnel ensuite, cette même variation synonymique est-elle ou non source de complexité pour l'utilisateur ?

2. La variation synonymique en diachronie dans le lexique du pétrole : une synonymie de circonstance

2.1. La variation synonymique en diachronie

Le phénomène de la variation, bien connu et bien illustré dans la langue dite générale, a pendant longtemps été ignoré de la terminologie, car selon les

principes fondateurs de cette dernière, la variation est inexistante en langue de spécialité où elle n'a pas lieu d'être.

La fonction principale des langues de spécialité serait, en effet, selon les principes théoriques classiques de la discipline, d'informer et/ou d'échanger de l'information objective sur un sujet spécialisé, et ce de façon la moins ambiguë possible sur le plan lexical, ce qui laisse donc peu de place, en principe, à la synonymie, à la polysémie, aux glissements de sens et autres phénomènes décrits par la variation. De nombreuses études terminologiques (notamment Cabré (1998), Daille *et al.* (1996), Freixa (2006) ; Bowker et Hawkins (2006)) montrent pourtant le contraire, et reposent sur l'hypothèse de travail que les langues de spécialité, tout comme les langues générales, réagissent aux paramètres dialectaux, fonctionnels, cognitifs, discursifs, et aussi sociaux de leurs auteurs et de leurs utilisateurs, comme le souligne Cabré :

Nous faisons l'hypothèse suivante : toute langue de spécialité, dans la mesure où il s'agit d'un sous-ensemble de la langue générale, partage les mêmes caractéristiques que celle-ci ; il s'agit alors d'un code unitaire qui permet les variations (Cabré, 1998 : 140).

De nombreuses typologies de la variation en terminologie ont donc été proposées, comme celle qui est présentée ci-dessous. On remarque d'ailleurs que la variation chronologique dont il est question dans la première partie de cet article n'apparaît qu'au niveau de la variation dite dialectale.

*Tableau 1 : Les différents types de variation dénomminative
(adaptée de Freixa, 2006)*

1. La variation dialectale

(Résulte des différences géographiques, sociales et **chronologiques** des textes et des auteurs),

2. La variation fonctionnelle

(Résulte du besoin des auteurs et des textes de s'adapter au niveau de langue et de spécialisation des lecteurs/interlocuteurs),

3. La variation discursive

(Résulte du principe d'économie de la langue, du besoin d'éviter la répétition, etc.),

4. La variation interlinguistique

(Résulte de la cohabitation du terme « local » et du terme emprunté),

5. La variation cognitive

(Résulte du manque de précision des concepts et des différences de conceptualisation entre les auteurs).

Il nous semble pourtant que la variation diachronique trouverait sa place à d'autres niveaux de cette typologie, comme par exemple au niveau cognitif, parce que « l'imprécision conceptuelle » qu'évoque Freixa peut être source d'un type de synonymie particulier, que l'on appellera « *synonymie de circonstance* » ou « *synonymie occasionnelle* », et qui participe véritablement à la genèse d'un lexique de spécialité.

2.2. Présentation du corpus

Les résultats présentés dans la première partie de cet article s'appuient sur l'exploitation d'un corpus monolingue anglais constitué autour du terme *petroleum* dans le domaine de la minéralogie et de la géologie, et contenant des ouvrages et des articles spécialisés allant du 19^{ème} siècle à la première moitié du 20^{ème} siècle. Le corpus contient 257 864 mots et a été analysé à l'aide du logiciel *Wordsmith Tools*¹. Le corpus a en outre été divisé en trois grandes périodes ou trois grands « sous-corpus », correspondant chacun à des événements extra-linguistiques ayant marqué les domaines de la minéralogie et de la géologie.

Ainsi, le premier « sous-corpus » contient des documents ayant été publiés entre 1800 et 1860 et correspond à la période qui précède la découverte et l'exploitation du premier grand gisement de pétrole, en Pennsylvanie, en 1859. La découverte de ce gisement par le « Colonel » Drake marque d'ailleurs la fin du 19^{ème} siècle, qui voit alors se multiplier les recherches pour trouver du pétrole, notamment aux Etats-Unis, et particulièrement en Pennsylvanie et au Texas. C'est le début d'une nouvelle période : celle de l'exploitation industrielle du pétrole à grande échelle, qui correspond à notre second « sous-corpus », contenant des documents publiés dans les années qui suivent (entre 1860 et 1900).

Enfin, le dernier « sous-corpus » (1900-1960) correspond à l'accélération de l'exploitation industrielle et surtout commerciale du pétrole, sous l'impulsion de la première guerre mondiale mais aussi de l'invention de l'automobile au début du 20^{ème} siècle.

2.3. Synonymie de circonstance dans le lexique du pétrole

Guilbert, dans son observation des vocabulaires en gestation évoquait déjà l'existence d'une synonymie de circonstance ou transitoire, qu'il appelait alors *foisonnement néologique transitoire* :

¹ Il s'agit d'un logiciel d'analyse lexicale disponible à l'adresse suivante : <http://www.lexically.net/wordsmith/index.html>. Les trois fonctions principales du logiciel (*Concord*, *Wordsmith* et *Keyword*) ont été utilisées pour obtenir les listes de termes, les contextes et les fréquences.

Dans la période de création d'une réalité nouvelle et de formation d'un vocabulaire adéquat, c'est une caractéristique de la situation linguistique qu'un certain foisonnement néologique transitoire se produise pour désigner un même concept (1965 : 331).

Ce foisonnement néologique, caractéristique des lexiques en formation, et décrit par Guilbert pour le domaine de l'aviation, se manifeste par une production accrue de néologismes concurrents, désignant tous un même concept, et coexistant dans le lexique en question quelque temps, puis disparaissant de ce lexique ou se spécialisant d'un point de vue sémantique pour continuer d'exister.

Une étude en diachronie des termes du pétrole permet de mettre en lumière un autre type de synonymie transitoire, que nous appelons *variation synonymique de circonstance ou occasionnelle*, provoquée par « l'imprécision conceptuelle » mentionnée plus haut (cf. tableau 1), et qui se manifeste par la mise en concurrence provisoire dans le lexique de termes nouveaux aussi bien que de termes existant déjà dans la langue.

2.4. Imprécision conceptuelle et élasticité sémantique

Le pétrole est un produit connu depuis près de 5.000 ans, qui a été utilisé par de nombreuses civilisations au cours des siècles, à des fins multiples : il était notamment employé pour construire, pour protéger le bois contre les insectes, pour s'éclairer, mais aussi pour se soigner, puisqu'on lui attribuait de nombreuses vertus médicales, comme le montre la citation de Jacoutot (1804, p. 126) : *Les médecins l'emploient [...]quelquefois dans les paralysies ; ils frottent la partie malade, et l'exposent à la fumée du liquide .*

On constate cependant que même si le pétrole est connu depuis un certain temps déjà, les avis scientifiques, au moins pendant quelques siècles, et en particulier au 19^{ème} siècle, divergent sur l'essentiel : son origine, de quoi il est composé, ce qu'il peut produire et aussi ce à quoi il peut servir exactement. Même si les connaissances chimiques et minéralogiques au 19^{ème} siècle sont déjà importantes, elles ne sont cependant pas encore suffisamment avancées, semble t'il, pour déterminer avec précision la composition exacte du pétrole, son origine et ses propriétés. Ainsi, dans son ouvrage sur l'histoire de l'exploration du pétrole, Owen remarque que :

Petroleum geologists in 1800 already possessed substantial resources of concepts, observations, and equipment, but these hardly constituted an organized scientific system [...]The progress of petroleum geology beyond

the speculative stage had to await further advances in scientific capabilities (1975, p. 18).

De même, on peut lire les commentaires suivants dans l'article *Petroleum* de *The New American Cyclopaedia* :

Petroleum or rock oil is a natural product of the soil in some countries, oozing up from below the surface, and flowing out with the water springs. As it occurs in nature, it is of no definite composition, but consists of various oily hydrocarbons, which hold in solution paraffine [...]. The origin of this fluid is very obscure. It appears to be of organic nature, and do not differ from products distilled from bituminous shales and coal; but it is found in geological formations which were not repositories of great bodies of vegetable or animal substances, and is rarely met with in proximity to beds of coal. (1863, p. 206)

Des contextes extraits de notre corpus montrent à quel point les avis des scientifiques de l'époque pouvaient diverger sur la question. Ainsi, chez les deux auteurs suivants, le pétrole est dans le premier cas présent dans la roche et issu de la décomposition d'organismes marins (animaux et végétaux), alors que dans le deuxième cas, le pétrole se trouve dans la tourbe et est décrit comme étant le produit d'une lente fermentation végétale.

The substance, which is doubtless of organic origin, occurs in rocks of all ages [...] and its presence in the lower palæozoic rocks, which contain not traces of land plants, shows that it has not in all cases been derived from terrestrial vegetation, but may have been formed from marine plants and animals; the latter is not surprising when we consider that a considerable portion of the tissues of the lower marine animals is destitute of nitrogen, and very similar in chemical composition to the woody fibre of plants (David Wells, 1862, p. 286).

These circumstances, added to the fact of the petroleum being found most plentifully at the edge of the sand, led to the conclusion that it is produced by the decomposition of the upper bed of peat, where it is overlaid by sand : all that need to be said is that petroleum is probably the result of a slow fermentation or combustion of the vegetable matter composing the peat, and has been produced in a manner somewhat analogous to the hydro-carbons obtained by the destructive distillation of wood in close vessels (E.B. Andrews, 1861, p. 92).

Malgré les difficultés bien connues de faire un rétrodiagnostic en diachronie, et les risques qu'il y a toujours à enjamber la chronologie, on peut supposer

que c'est justement cette imprécision des connaissances au sujet du pétrole qui a contribué à la coexistence de *synonymes de circonstances*, qui décrivaient tous, dans la plupart des cas, le même produit, mais avec des noms différents. Cette *synonymie de circonstance* ou *synonymie occasionnelle* se caractérise d'abord par la grande élasticité sémantique de certains termes décrivant le pétrole. C'est le cas notamment des termes *bitumen*, *naphtha*, *tar*, *pitch* ou *asphalt(um)*, qui, dans la première partie du corpus (1800-1860), sont parfois utilisés comme des synonymes du terme *petroleum*, mais qui sont aussi parfois utilisés pour désigner d'autres produits, notamment les dérivés du pétrole. Il semble que parmi ces termes, *bitumen* et *naphtha* fassent preuve d'une élasticité sémantique encore plus grande. Ainsi le terme *naphtha* apparaît 89 fois sur la totalité du corpus (les trois périodes confondues) et dans 39 cas, il est utilisé comme synonyme du terme *petroleum* :

Near London, the naphtha or petroleum is found floating on the surface of the etangs, or stagnant waters of the Thames, and is frequently collected by means of a piece of cloth (Phillips, 1844, p. 185).

Mais dans les 50 autres cas, il est utilisé par les scientifiques pour désigner des substances qui sont en fait dérivées du pétrole :

Petroleum, or rock-oil, is found in various parts of the world [...]. It consists of a combination of carbon and hydrogen, and from it naphtha and paraffin are sometimes derived (Hildreth, 1836, p.4).

Le même cas de figure se produit avec *bitumen*, qui apparaît 60 fois dans le corpus, mais seulement 31 fois comme synonyme du terme *petroleum* :

Petroleum, or Bitumen may very probably arise from the decomposition of coal, effected by subterraneous fires, either volcanic, or produced by the combustion of coal, or the decomposition of pyrites; and these fluid Bitumens, by exposure to the air may gradually pass into a state more or less solid (Cleaveland, 1816, p. 394-395).

Dans 17 cas, il est utilisé comme hyperonyme de *petroleum* et *naphtha* et dans 12 autres cas, comme étant l'un des produits composant le pétrole :

Petroleum or earthy, slaggy mineral pitch – a dark coloured fluid variety of Asphaltum, containing much bitumen or mineral tar (Ure, 1860, p. 220-233).

Nous avons même rencontré plusieurs cas où ces termes étaient utilisés avec des sens différents, par le même auteur, dans le même ouvrage. C'est le cas

ici avec le terme *naphtha*, considéré comme synonyme de *petroleum* par Wells, en 1862, à la page 283 de son ouvrage, mais utilisé pour désigner une toute autre substance, page 285 de ce même ouvrage :

Notes on the history of petroleum or rock oil : the following comprehensive résumé gives the most important facts thus far made known respecting the geological history of the various substances designated respectively as « petroleum », « naphtha », « asphalt » and « pitch » (Wells, 1862, p. 283).

The form in which it now occurs depends in great measure upon the presence or absence of atmospheric oxygen, since by oxidation and volatilization what is called naphtha or petroleum, as we have already explained, become slowly changed into asphalt or pitch, which is solid at ordinary temperature (Wells, 1862, 285).

Dans ce cas, il y a coexistence d'unités lexicales aux contours sémantiques assez flous, qui deviennent alors concurrentes, de façon transitoire, parce qu'elles renvoient à des concepts flous, encore mal connus et donc mal décrits.

2.5. Imprécision conceptuelle et variation synonymique

Chez d'autres auteurs du corpus, il semble que les termes employés décrivent tout simplement ce qu'ils savent avec certitude du produit, c'est-à-dire ce qui est le plus facilement et le plus directement observable : les synonymes décrivent en effet tantôt l'origine du produit, autrement dit où on le trouve dans la nature (*rock oil, mineral pitch, earth oil*), ce qu'il sent (*empyreumatic oil*), quel aspect il a (*liquid bitumen, dark pitch, tar, carbon oil*) et aussi dans quel pays ou quelle région on le trouve. Sur ce dernier point, on dénombre ainsi, pour désigner le pétrole, pas moins de 09 termes construits sur le principe de la métonymie toponymique : *Barbadoes tar, Gabian oil, Sicilian oil, Trinidad bitumen, Persian rock oil, Genesee oil, Seneca oil, Seneca rock oil* et *Rangoon petroleum*. Dans la totalité du corpus, nous avons ainsi repéré 16 termes synonymes pour désigner le pétrole, dont plus d'un tiers sont des métonymes toponymiques.

Tous ces termes constituent ce que l'on a appelé la *variation synonymique de circonstance* autour de *petroleum*, et n'appartiennent en fait, pour la plupart, que de façon provisoire au lexique : en effet, la totalité des métonymes toponymiques ont aujourd'hui disparu de la terminologie du pétrole, ainsi que la plus grande partie des termes décrivant l'origine minéralogique du produit.

Peu de termes sont restés, comme *naphtha*, *asphalt*, *bitumen*, *maltha*, mais tous ont vu leur sens se spécialiser pour continuer d'exister.

Ainsi le terme *naphtha* désigne t'il aujourd'hui un produit utilisé comme combustible, et obtenu par distillation du pétrole ou d'autres corps riches en matières organiques. De même, on emploie le terme *bitumen* pour désigner une substance minérale composée de matières hydrocarbonées diverses, utilisée notamment comme revêtement des chaussées.

Pour conclure cette première partie, nous avancerons donc que l'étude diachronique des termes du pétrole nous montre que la variation synonymique occupe une place prépondérante dans les vocabulaires spécialisés, qu'elle participe activement à leur genèse, notamment lorsqu'elle prend la forme d'une synonymie de circonstance due à l'imprécision conceptuelle, et qu'elle peut être considérée comme un instrument d'enrichissement du lexique, même s'il n'est que provisoire.

Mais si l'on accepte que la variation synonymique, lorsqu'elle est observée en diachronie, finalement participe aux besoins de communication et de transmission des savoirs, peut-on en dire autant sur son rôle en synchronie ? Dans ce cas là, et dans le cadre d'une pratique professionnelle décrite ci-dessous, quels sont les problèmes concrets que pose la variation synonymique à l'utilisateur ?

3. Exemples de variation synonymique dans le secteur de l'énergie éolienne au Danemark

L'entreprise *TERMplus Aps* développe un outil de terminologie appelé *TERMplus Manager*² destiné à la pratique terminologique en milieu professionnel. Il ne s'agit pas seulement d'un simple outil de gestion de terminologie mais aussi d'un outil dans lequel sont intégrés une mémoire de traduction (*Wordfast*) et, depuis peu, un autre outil, appelé *TERMplus Word*, destiné la production de textes. *TERMplus Manager* est utilisé au Danemark par l'industrie, les organisations professionnelles et aussi l'université *Syddansk Universitet*, qui s'en sert pour l'enseignement et la recherche – dans le but d'assurer et de contribuer au dynamisme de la production terminologique dans le pays, en langue danoise, à partir de documents écrits. L'utilisation de cet outil informatique par les milieux professionnels et universitaires au Danemark a montré à plusieurs reprises l'importance et la place de la variation synonymique dans les discours spécialisés, comme ce qui suit le montre.

3.1. Le cas de Vestas Term Group

² Disponible à l'adresse suivante : www.termplus.dk

Le domaine de l'énergie est un domaine particulièrement important au Danemark, et l'énergie éolienne en particulier est un type d'industrie très novatrice dans le pays, puisque le Danemark construit de plus en plus de centrales électriques basées sur ce mode d'énergie dans les régions côtières, les régions désertiques, et en mer. Il s'agit d'un secteur dynamique aux activités internationales. Les entreprises *DONG Energy* et *VESTAS Wind³ Systems* se trouvent toutes deux dans ce secteur.

L'entreprise *Vestas Wind Systems* est le producteur d'éoliennes le plus important au Danemark et occupe également une place prépondérante sur le marché mondial de l'énergie éolienne. Cette entreprise a souhaité développer une base de données terminologique en interne (en anglais et danois) et pour ce faire, a acheté le système *TERMplus* ainsi que deux bases de terminologie complémentaires développées par *TERMplus ApS: Economics* et *Technologie*. Le département terminologie de l'entreprise *Vestas Wind Systems* (*Vestas Term Group*) a ensuite régulièrement mis à jour et augmenté cette base initiale avec ses propres données terminologiques, afin de permettre aux 5000 utilisateurs, à tous les niveaux de la compagnie, et via l'intranet de l'entreprise, d'avoir accès aux termes danois et anglais compilés dans cette base.

Au niveau de la pratique professionnelle, comme c'est le cas ici avec *Vestas Wind Systems*, le problème de la variation synonymique est bien réel. En effet, nous avons pu constater que de nombreuses entreprises ont conscience qu'il existe une variation synonymique des termes utilisés quotidiennement dans leur domaine, mais peu savent comment traiter cette variation synonymique tant sur le plan terminologique qu'informatique, et l'entreprise *Vestas Wind Systems*, est une des seules, au Danemark, à notre connaissance, qui a essayé de traiter le problème dans sa base de données.

La preuve en est que dans l'introduction écrite de cette base de données, le département terminologie de l'entreprise (*Vestas Term Group*) reconnaît qu'une telle variation synonymique existe, comme le montre la citation ci-dessous⁴ :

« Le but de la base de termes de Vestas est d'enregistrer les termes de l'entreprise dans une base de données de termes parce que nous voulons utiliser le même terme pour la même chose. Mais nous avons trouvé plusieurs exemples de la co-existence de différentes dénominations pour le même article à la fois dans la documentation technique – et parfois dans le même manuel.

³ Seul l'exemple de *Vestas Wind Systems* sera développé dans l'article.

⁴ Traduction par nos soins.

Une base de termes n'est pas un dictionnaire. Une base de termes est une base de données dont le but est d'enregistrer les termes propres à une entreprise ou à un projet. Elle ne contient pas tous les mots généraux que vous trouverez dans un dictionnaire général comme par exemple « Gyldendal et Advanced Learners Dictionary ».

Les termes que nous y entrons sont donc les suivants :

- *les termes qui sont propres à Vestas,*
- *les termes pour lesquels plusieurs synonymes sont utilisés (et parmi lesquels nous devons choisir celui à recommander à Vestas),*
- *les termes qui présentent un intérêt dans le contexte de Vestas pour toute autre raison ».*

Le problème posé ici est donc le suivant : puisque synonymie il y a, comment résoudre informatiquement la présence de cette synonymie dans la base de données? Le but étant de permettre à l'utilisateur d'accéder aux différents synonymes d'un terme rapidement, et de trouver rapidement, lorsqu'il y a plusieurs synonymes pour le même terme, le synonyme recommandé par l'entreprise. L'entreprise a tenté de régler le problème en prévoyant une touche appelée « Plus/Moins » dans la base de données *TERMplus Manager*⁵, permettant d'effectuer une recherche ciblée incluant toutes les variantes (synonymes, termes désuets etc.). L'utilisateur de la base peut ainsi avoir accès, pour chaque recherche de terme, à un résultat n'affichant que le ou les termes favorisés de l'entreprise (T) mais il peut aussi obtenir, en utilisant la touche « Plus/Moins », les différentes variantes du terme et surtout les synonymes du terme (S) s'il y en a, et le terme conseillé.

Ceci lui permet de trier les informations dont il a besoin, sans obtenir les résultats croisés obtenus habituellement sous la forme : « *hydraulic station*, voir *hydraulic power unit* », et qui ne sont pas toujours clairs pour l'utilisateur, surtout lorsqu'il travaille sous la pression du temps. Le tableau reproduit ci-dessous correspond à une partie d'écran donnant les résultats d'une recherche terminologique pour le terme *hydraulikstation*, dans lequel l'information sur la synonymie a été triée et organisée.

Les termes « vedettes » utilisés par l'entreprise (T) apparaissent, ainsi que les (s) synonyme(s) recommandé (s) par l'entreprise (S).

Pour cette raison, et afin de rendre le traitement de la synonymie plus simple pour l'utilisateur, il a été décidé de résoudre le problème en proposant directement parmi la liste de synonymes possibles le terme préféré par

⁵ Version 5

l'entreprise (cf. tableau 2), et dans un deuxième temps seulement, les autres synonymes de ce terme.

Tableau 2 : exemple de recherche terminologique avec TERMplus Manager pour hydraulikstation.

VestasTerm - Search Results

Page 1 of 2

Danish	Status	Class	English	Word Class	Status
hydraulikstation	T	hydraul	pump unit - see hydraulic power unit	n	S
hydraulikstation	T	hydraul	hydraulic station - see hydraulic power unit	n	S
hydraulikstation	T	hydraul	hydraulic unit - see hydraulic power unit	n	S
hydraulikstation	T	hydraul	hydraulic power unit	n	T
pumpeenhed - se hydraulikstation	S	hydraul	hydraulic power unit	n	T
pumpeenhed - se hydraulikstation	S	hydraul	hydraulic station - see hydraulic power unit	n	S
pumpeenhed - se hydraulikstation	S	hydraul	hydraulic unit - see hydraulic power unit	n	S
pumpeenhed - se hydraulikstation	S	hydraul	pump unit - see hydraulic power unit	n	S
pumpestation - se hydraulikstation	S	hydraul	pump unit - see hydraulic power unit	n	S
pumpestation - se hydraulikstation	S	hydraul	hydraulic station - see hydraulic power unit	n	S

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La réponse à la question : la variation synonymique est-elle ou non source de complexité pour l'utilisateur est donc clairement oui, surtout si les informations transmises à un utilisateur de base de données ne sont pas triées et organisées.

3.2. Le terme – nacelle - un autre exemple de synonymie

Un autre exemple de recherche interne au sein de l'entreprise Vestas Wind Systems au sujet de la synonymie, concerne le terme *møllehat*, synonyme de *nacelle*. Comme les administrateurs de la base souhaitent que les utilisateurs emploient le terme *nacelle* plutôt que son synonyme, le premier résultat de recherche opéré par l'utilisateur de la base ne montre que le terme *nacelle* et il faut appuyer sur la touche « Plus » (« More ») pour afficher son synonyme *møllehat*.

L'emploi du synonyme *møllehat* n'est pas encouragé par l'entreprise car le terme ne leur paraît plus assez technique et il est même considéré comme un peu désuet. Mais, malgré les recommandations terminologiques de l'entreprise *Vestas Wind Systems*, les utilisateurs continuent à considérer *møllehat* comme un synonyme « actif » de *nacelle* et l'utilisent fréquemment : il a donc bien fallu le laisser figurer dans la base de termes, dans la liste des synonymes. On constate ici que le traitement de la synonymie est intimement liée à la pratique professionnelle et qu'il est parfois difficile de faire correspondre recommandations terminologiques internes à une entreprise et pratique de la langue.

4. Quelques conclusions

On constate donc que la variation synonymique est une réalité lexicale dont la pratique terminologique ne peut faire abstraction, car elle joue un rôle, au niveau diachronique, dans la constitution des lexiques spécialisés. La synonymie de circonstance, telle qu'elle a été décrite dans cet article fait partie des outils qui enrichissent le lexique, même si ce n'est que de façon provisoire. D'un point synchronique, la variation synonymique ne peut être évitée non plus : elle surgit dans la pratique professionnelle quotidienne, et le terminologue doit la prendre en compte, notamment lorsqu'il s'agit de construire des bases de données informatisées qui sont sensées faciliter le travail de l'utilisateur, tout en respectant une cohérence interne d'entreprise.

Ainsi, la variation synonymique doit apparaître dans les bases de données terminologiques, mais l'information doit être triée, de manière à proposer directement à l'utilisateur les synonymes « actifs » ou les synonymes préférés par leur entreprise, tout en lui donnant accès, s'il le souhaite, aux autres synonymes (ceux que l'entreprise souhaite écarter ou considère trop « anciens » déjà).

Il faut donc bien adapter la structure de nos outils terminologiques à cette réalité de la pratique professionnelle et trop peu d'entreprises encore se sont attelées à cette tâche.

Le traitement des informations concernant les synonymes de termes représente sans doute l'un des enjeux informatiques et terminologiques – entre autres – les plus importants dans les années à venir dans l'industrie en général, et l'industrie danoise en particulier.

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ABSTRACT

La variation synonymique dans la terminologie de l'énergie : approches synchronique et diachronique, deux études de cas

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The prescriptive school of thought in terminology holds that terms should be fixed items and should not be prone to synonymic variation. Terminologists and translators have been trained to embrace terminological standardization, to disparage synonymy in favour of monosemy, and to employ consistency rather than lexical variation. However, despite this widespread assumption that synonymy is something to avoid in specialized languages, since it may hamper effective communication between specialists, a number of studies have revealed that even within the confines of specialized communication, synonymic variation does indeed exist.

This paper sets out to examine synonymic variation from a double perspective: First, diachronically, by investigating a historical corpus in the field of petroleum geology, and second, synchronically, by reflecting on how to handle synonyms in the terminological database *TERMplus Manager*.

The first part of the article presents the results of a corpus-based investigation into the semantic development of some synonyms of the term *petroleum* in 19th-century English. We will discuss two aspects of synonymic variation: Namely, first, the semantic 'flexibility' of several terms which were frequently used in the 19th-century lexicon of petroleum geology (e.g. *naphtha*, *bitumen*, *tar*, *pitch*, *asphalt*) and secondly, the simultaneous co-existence and then the disappearance of 'occasional' or 'temporary' synonyms of the term *petroleum* (e.g. *Rangoon petroleum*, *mineral pitch*, *rock oil*, *Trinidad bitumen*, *Seneca oil*, etc.).

The second part of the article deals with synonymic variation in today's lexicon of wind energy and explains how *TERMplus Manager* database was used by the *VESTAS Wind Systems* company, but had to be slightly altered in order to integrate synonymy. The two examples in Danish of *hydraulikstation* and *møllehat* are then given to illustrate this part of the article. The paper concludes that devising computer tools that are really able to integrate synonymic variation is probably one of the main challenges that terminology and translation work alike will have to take up in the years to come.

REPORTS:

Dealing with Linguistic Competences at University: the Erasmus Case

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1. Introduction

This study is set within the European Higher Education Area (EHEA), where competences play a key role and where, precisely, mastering a foreign language (both written and spoken) has an outstanding value in a globalized and intercultural society as the one we have nowadays.

Superior Teaching Institutions are aware of students' needs and claim for degrees which really fulfill certain studies and facilitate working anywhere in Europe. The challenges of this main change in education have been the object of several studies both in specialized literature and in documents produced by different European Organizations.

The project *Tuning Educational Structures in Europe* (Gonzalez et al. 2003) is at the heart of [the Bologna - Prague - Berlin - Bergen process](#). It is one of the few projects in Europe that actually links the political objectives set in the Bologna Declaration of 1999 to the higher education sector. Tuning is a project developed by and meant for higher education institutions.

The *Tuning* project deals with some of the lines of action mentioned in Bologna and, in particular, the adoption of a degree system easily recognizable and comparable, a system based in two cycles and the establishment of ECTS (European Credit Transfer System). The Tuning project, therefore, helps reaching some other goals set in Bologna. In other

words, it aims at **defining certain points of reference for generic and specific competences of each discipline** of first and second cycle in different thematic areas, such as: business studies, educational sciences, geology, history, mathematics, physics and chemistry. Competences describe then the results of learning: what the student knows or can prove to know once the learning process is over. This applies for both specific and generic competences as communication and leadership skills (Schwalm et al 1985, Bonwell et al. 1991, Ana Finol et al. 2005).

The main features of this new educative model require the development of a professional profile (Barbara McDaniel 1994, Dudley-Evans et al. 1998, T. Orr 1999, 2001), some new roles and different activities from the traditional ones (both for students and professors).

Taking as a starting point three of the main goals set from Bologna declaration, as:

- a) **Competitivity**, or the capacity of attracting European and non European students.
- b) **Applicability**, focusing learning in what is relevant for the working world and having a clear system to certify that goals are reached.
- c) **Mobility**, both internal and external and from students, professors and administration and services staff (PAS).

A new educational system in the Higher Education Area will be sought and this system will have to deal with two main issues: on the one hand, the need to cope with a global world and on the other, the society of knowledge. Within this framework, the present paper will be focused on two main competences: oral and written expression in English language. Not to mention that we consider these two competences essential not only for professional mobility but also for the future career of our present Engineering students. Besides, the language planning of the European Union generally seems to support multilingualism while, in particular, the Erasmus programme supports English only in its practice.

2. Methodology

In the first phase of this study about the linguistic evolution of oral and written competences in English of university students nowadays we have analysed the evolution of the subject *English for International Stage*. This subject is a free election one (ALE) with a credit load of 4,5 per year and whose objective is to prepare our students for a future mobility experience abroad since they will have to attend English lessons anywhere in Europe and

once back home they will have to hand in a summary of their project/practicum to “justify” the given Erasmus scholarship. And, of course, English will be the language of such official document.

In its second phase we will examine the results obtained by our students not only in their global mark but also in their partial, taking into account their grades of written and spoken skills in English. After that, we will compare the generated data in our university context with previous courses, such as the ones taking place in the compulsory secondary education in our country both by the official compulsory assessment and PISA annual report.

3. English subjects offer in the UPC

The English Section in the UPC offers a wide range of subjects in English (S. Abad et al. 2006, B. Amante et al. 2007, d. García et al. 2007). These subjects are divided in two main approaches: on the one hand the area of ESP (*English for Specific Purposes*) and on the other, the area of STS (*Science, Technology and Society*). In this sense, ESP subjects are the ones specially designed to meet our technical students’ needs both academically and professionally, whereas STS subjects are meant to provide our students’ syllabus with a more humanistic component and the level of English required to follow the classes is the equivalent to a First Certificate of English (Cambridge) or a B1-B2 from the Common European Framework of Reference. In the next lines we describe the main objectives of the English subjects we offer at our Engineering School in Terrassa:

A. Technical Writing: our objective here is to develop written communication skills in the field of Engineering and to work on some of the documents produced in this area. The content of this subject is divided in three main sections:

- a) technical writing basis,
- b) elements of organization, language and style and
- c) types of documents.

In other words, our topics range from the different types of discourse, qualities of a good technical writing, basic elements and rhetorical approach, to text organization, register typology, punctuation rules, etc. besides from dealing with the key documents of English correspondence and technical reports.

B. Communicating in Technical English: We also enhance communication skills in English in this subject, both for our industrial and our Aeronautical Engineers and hence from a technical and professional point of view. With

this objective in mind, our students practice the four skills of a language (*speaking, writing, reading y listening*) but the emphasis in our lessons is on the oral and audio activities. It is through autonomous learning (guided homework) that our students carry out reading and writing exercises.

C. English for International Stage: This subject was implanted during the academic year 2005/2006 and because of the cooperation of the English teacher with the International Relationships Department in our School (ETSEIAT). This subject aims at reaching First Certificate level of English and is mainly designed for students who want to participate in the Sócrates/Erasmus Program. The contents are structured in five main areas and are focused on: a) revising *upper intermediate* English Grammar and introduce our students in ESP, b) developing our students' *listening* skills, c) enhancing *reading* comprehension of academic business texts d) developing and practising *speaking* and last but not least, working on the *writing* of *Academic and Business English* texts.

D. Technical English for Aeronautics: This subject was also implemented during the academic year 2005/2006 and the contents of the course aim at our students' acquisition of vocabulary and specific expressions in the field, listening and speaking practice within the technical context and reading and writing specific documents from this discipline.

Finally, we would like to point out that there are far more students interested in applying for the subjects we offer in English than the actual vacancies available and that each and every year there is a higher number of students matriculated in these ESP subjects. In other words, an average of 140 students per academic year enrol in the ESP subjects offered in the School and every year there are more students asking for finishing their studies or carrying out their final project in a foreign University. We must say that it is required to prove a First Certificate level of English Language before applying for a Sócrates /Erasmus scholarship in our School. We can confirm our students' increasing interest for a stage abroad nowadays and It is only a matter of verifying whether these students reach the required English level or not. And if not solve the matter!

4. Results

In this study we have focused on the *English for International Stage* subject which, as we have mentioned before, was implemented in our School during the academic year 2005/2006 and because of the detected need of our students to be prepared for a future stage abroad. Not to mention for their professional careers, too. In the first place, we are going to present a

classroom activity specially developed to enhance oral communication in English language

In the first place, in the following lines we are presenting an activity specially developed to enhance oral communication skills in English. In the second place, we will focus on the results obtained by our Engineering students in the subject *English for International Stage* throughout the academic years it has been taught and taking into consideration not only speaking but also writing skills.

Afterwards, we will be dealing with the specific tests students not attending the above mentioned subject have to pass in order to be eligible for a Sócrates /Erasmus scholarship to carry out a stage abroad. We will then compare the results obtained both in those specific tests and the ones in the subject *English for International Stage* to finally discuss the data generated in a study carried out within the compulsory secondary education program in our country. Being secondary school the step prior to University education, we will take the advantage of having such results to focus on the “weaker competences” secondary students seem to have and better plan and develop university activities to enhance those lower level skills detected.

Example of an activity to enhance oral communication in English

In the following section we present the outline of one of the several sessions carried out in the subject *English for International Stage*, in which oral communication is emphasized and students’ level is continuously being assessed.

Each session in the subject lasted for 2 hours and in each case the activity was divided in two parts:

1. In the first part the content of the session was explained by the professor (1h), and it included:

- The explanation of how to conduct an oral presentation in English.
- The different parts of an oral presentation (see Figure 1)
- Key words in English to describe slides and link information.
- Vocabulary used for graphics description
- Relationship between the different parts of the presentation and a written document (either a research paper or a project)

2. In the second part of the session, students developed an oral presentation in English divided in groups of 6 and following the stages explained by the professor. After that, they presented the content in front of their classmates (1h).

In this 2h session students are given the guidelines to perform a coherent presentation from a written document (being a research paper or a project or even their own curriculum vitae for a job interview in English. By making them face this type of situation beforehand, students become more aware of facts and acquire important and essential vocabulary for any international stage and even to use in their future professional careers.

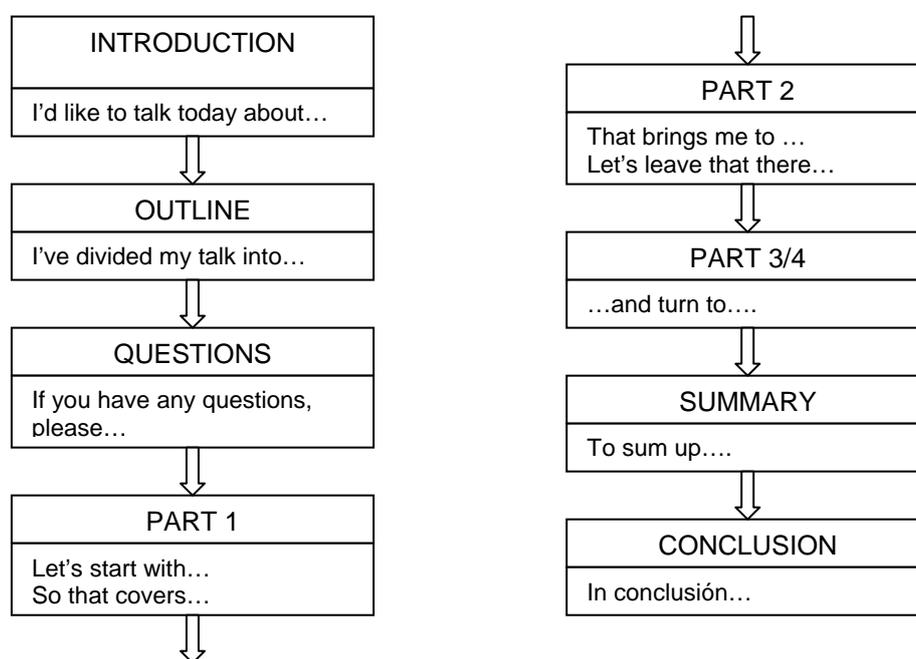


Fig. 1. The different parts of an oral presentation (Comfort 1995)

In the second part of the activity with an already chosen topic an oral presentation will be carried out and the professor will check that everything explained was fully understood. The presentation in question will be in English and in front of the classmates and the teacher. So as to help evaluating the oral presentations and the oral communication competence, in particular, students will be provided with an assessment grid to help them verify if the different parts of the presentation contain the main points explained-not only in terms of content but also in terms of behaviour facing an audience, modulating one's voice, gestures, etc. Examples of these assessment grids are in (D. García et al.2007, Cepeda).

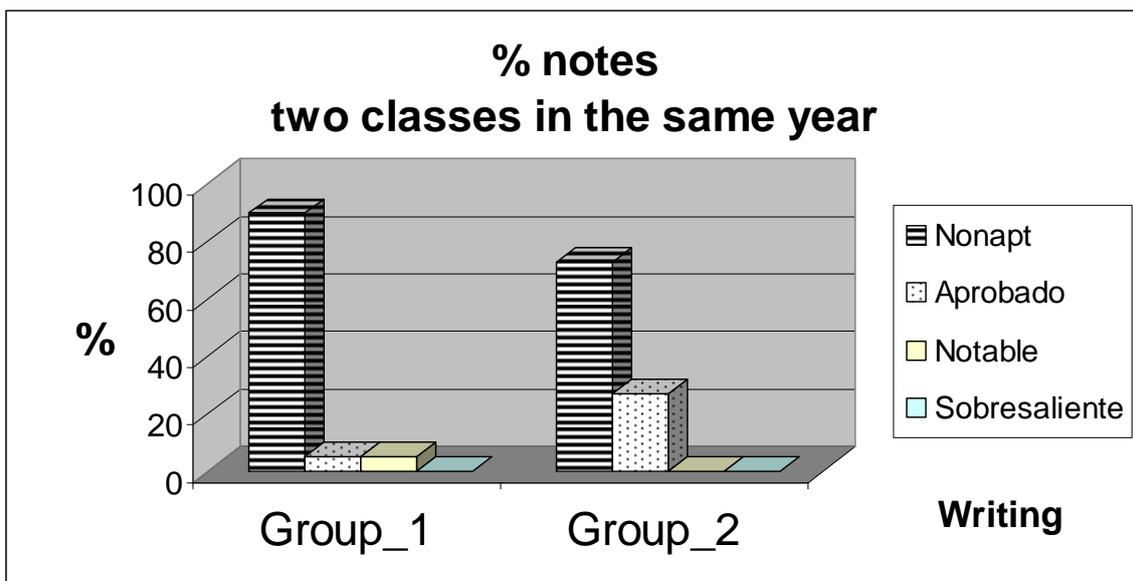
Besides from the peer-to-peer evaluation, the professor will carry out another assessment and all this procedure will provide more data to facilitate when giving feedback to students once the session is over. Not to mention students' evident implication in the evaluation system and greater cooperation among students in the learning process. Apart from this experience a wide range of activities are performed so as to assess oral and written skills throughout this subject.

Results obtained in the “*English for International Stage*” subject

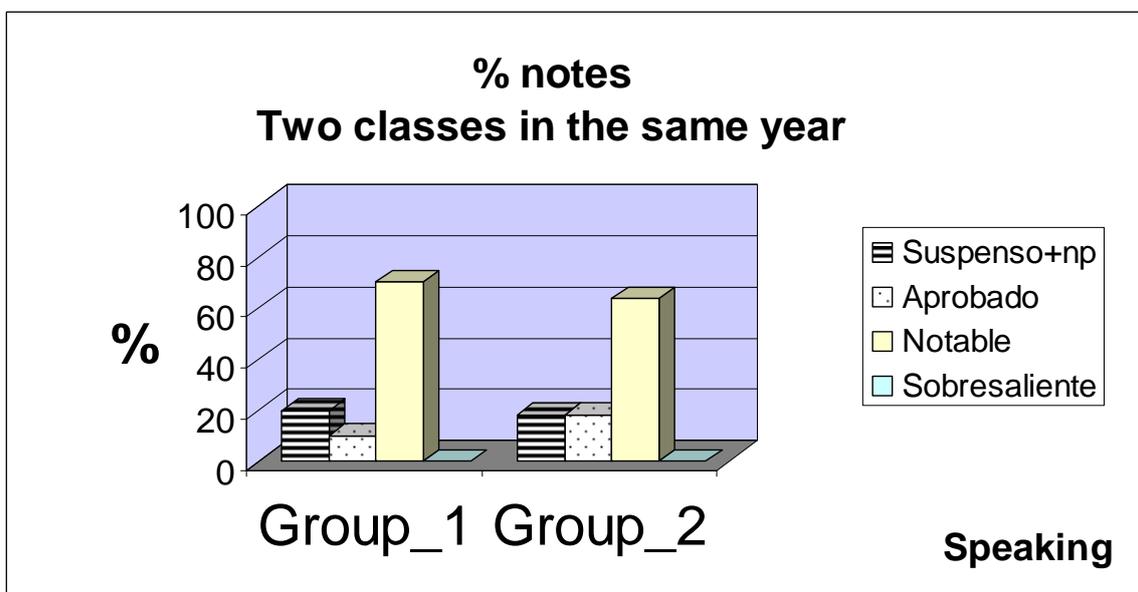
This type of subject has been very well accepted in our School. As a matter of fact, right from its first academic year 29 students matriculated in it and many of them were granted with a Sócrates /Erasmus scholarship and carried out a stage abroad. In its second year, the number of enrolments increased to 34 students and after that every year more and more students attend this subject. This causes a nowadays “overbooking”.

In this subject, as we mentioned before, we try to develop students' oral and written communication competences as much as possible as well as providing a grammar content and a general English culture framework. In order to check our student's competence level in such skills we have considered the global marks obtained. These marks are the total scores from the evaluation tests carried out in the different classroom sessions besides from the assessment the teacher carried out through several activities and individual interviews.

If we have a look at the results obtained in the subject and focus on the academic year 2005-06, in which the subject was taught to two groups simultaneously, we can observe in Figure 3a that the number of failures in *writing* is really high compared to the ones appearing in *speaking* Figure 3b. Marks that year by year (as we will see later on in this paper) will improve. It is remarkable that the results of two different groups reflect the same competence patterns. This fact makes us think that a good work on oral skills is being carried out in this subject but that more emphasis on written skills it is needed to improve students' present level.



a. Writing



b. Speaking

Fig. 3. Marks of English for International Stage (two different groups in Academic year 2005/06)

After these results, we questioned ourselves whether those patterns would be kept throughout the different courses and so we compared the average marks students obtained in the subject the following years (see Figure 4).

We must say that the evolution of students' marks in the successive years shows a decrease in higher marks (*notable*) and an increase in passing (*aprobado*) and *excellent* marks whereas the percentage of students failing the subject slightly decreases. Having a closer look at the marks taking into account the different competences studied, we can say that trends do not

vary, in other words, *speaking* marks keep on improving while *writing* results stay below the passing mark required in *English for International Stage* subject.

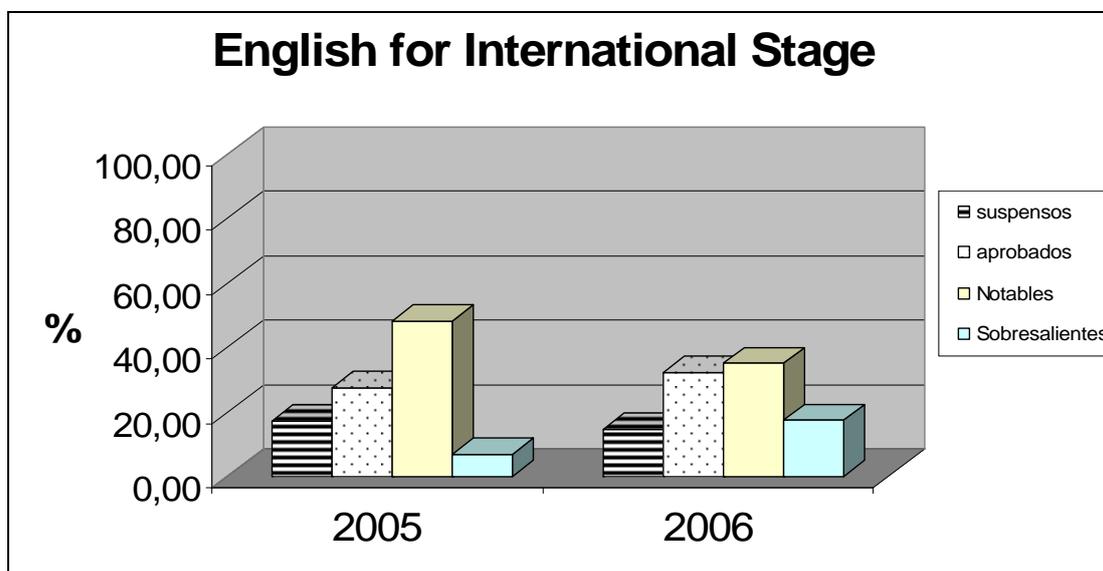


Fig. 4. Evolution of the average marks obtained in two academic years of the subject English for International Stage.

As we have previously stated, the results obtained imply a deep re-thinking from teachers' side in terms of enhancing writing and reading skills in the subject by designing and implementing new activities and exercises (inside and outside the classroom).

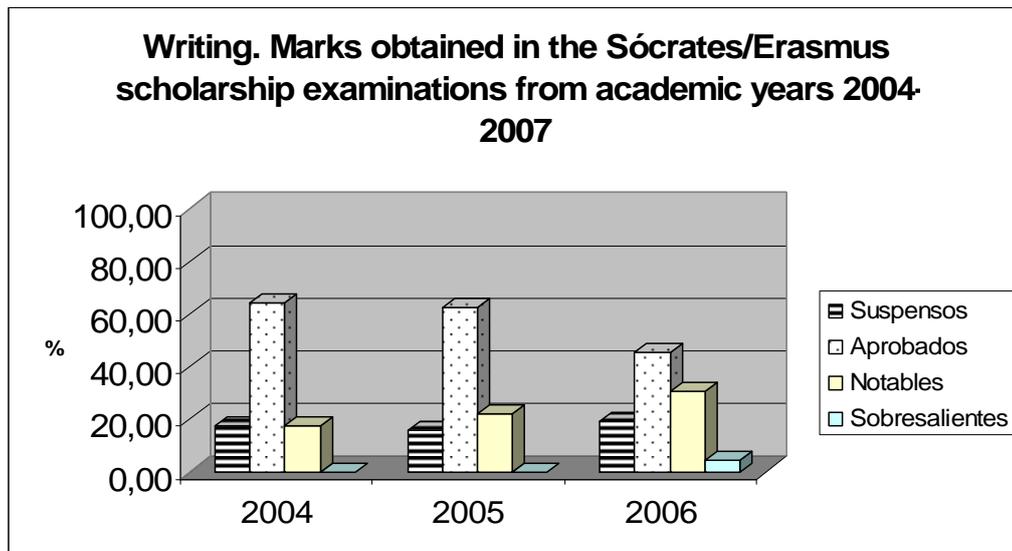
Sócrates/ Erasmus scholarship exams

For all those who have not attended *English for International Stage* subject and want to spend a term or an academic year abroad our School offers the possibility of sitting for a specific exam in English. The tests are designed so that students can show their approximate level of English grammar and written and spoken competences.

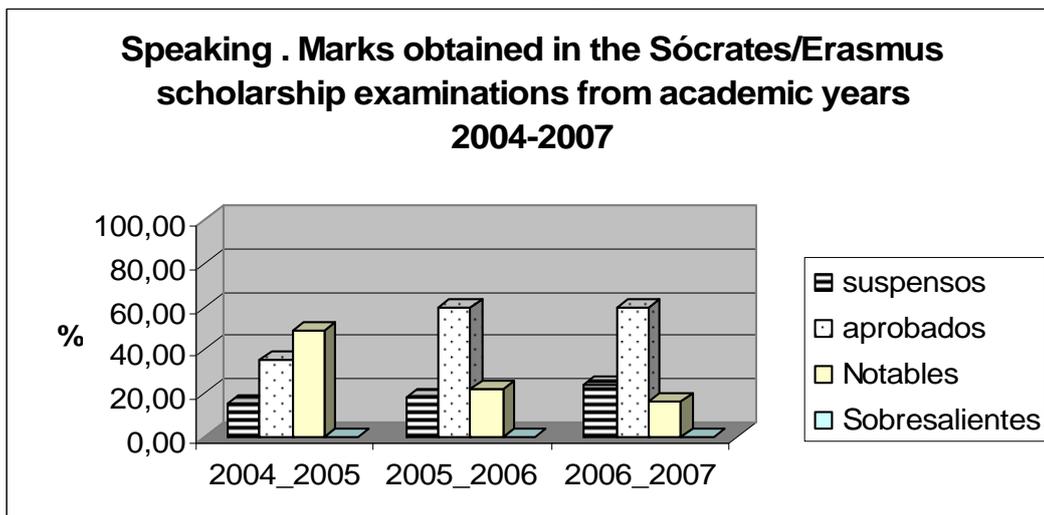
These examinations are being carried out in our school, ETSEIAT, since the academic year 2003-04 and, of course, by implementing *English for International Stage* subject we pretended to make the Sócrates /Erasmus exams disappear little by little. One of the inconveniences we found was the “overbooking” of students' enrolments in the subject and the increase of SOCRATES /ERASMUS applications in the last years. Therefore, nowadays there still exist both possibilities to accede a Sócrates /Erasmus scholarship for student's mobility: a) pass the *English for International Stage* subject or b) pass the specific oral and written examinations for Sócrates /Erasmus scholarship.

Focusing on the latter, we can distinguish three different parts:

- A.** In the first part, a student’s personal interview is carried out and the professor will assess the English oral performance level of each candidate.
- B.** In the second part, each student will write a composition in English (choosing from several topics suggested by the professor) and his/her written competence will be also assessed by the professor.
- C.** Students will have to sit for a content exam, mainly focused on specific vocabulary and grammar.



a.- Writing



b.- Speaking

Fig. 5. Marks obtained by Engineering students in the Sócrates/Erasmus scholarship examinations from academic years 2004-2007 (Parts A and B)

In figures 5 and 6 we can observe the evolution of the marks obtained by our Engineering students in the three parts of the specific oral and written

examinations for Sócrates /Erasmus scholarship from the academic year 2004 to the academic year 2007. By observing these Figures, and opposed to what had been shown in the *English for International Stage* subject, our students would seem to have improved their oral and written levels in English language although the percentage of failures is slightly higher. This pattern seems to be repeated in the content exam, where grammar and vocabulary is assessed, although in this part global results are higher and failures are less. Afterwards, we compared the number of existing applications for the Sócrates /Erasmus scholarships in the last years and the percentage of students passing the specific examinations.

As we can see in Figure 7, there is a clear trend to apply for the specific examinations to obtain a scholarship and carry out a term or an academic year abroad. Moreover, each year there are more students obtaining such scholarship although 20% of the applicants do not get it.

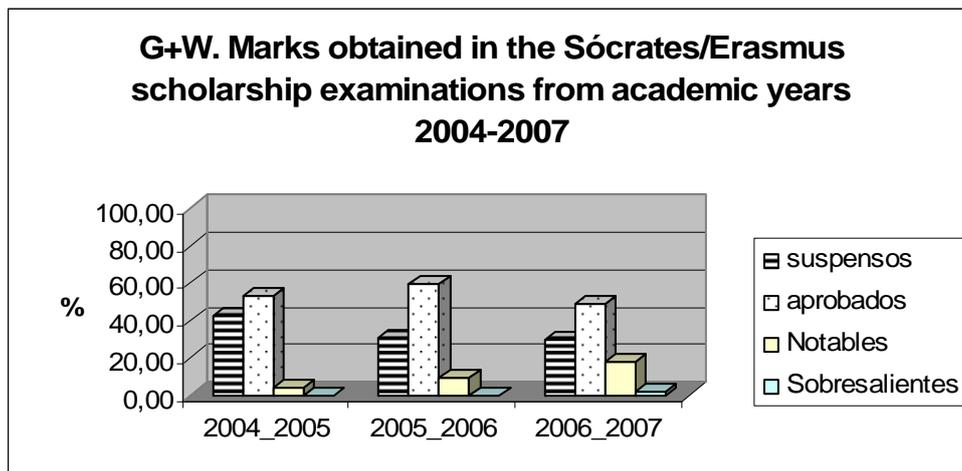


Fig. 6. Marks obtained by Engineering students in the Sócrates/Erasmus scholarship examinations from academic years 2004-2007 (Part C)

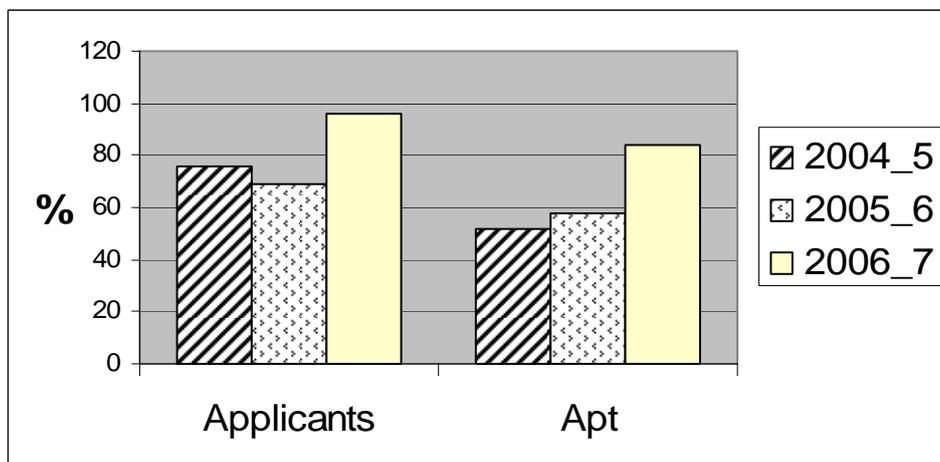


Fig. 7. Comparison of specific examinations applications (2004-2007)

These results make us realize the importance of academic mobility and the increasing interest from our Engineering students. On the other hand, we are willing to train our students the best so that they can take part in an International Stage without any problem. It is such our concern that we are already thinking about new planning strategies to improve these results and, hence, increase oral and written communication levels in English.

At this point, we have asked ourselves what the level of our students was before entering the University and, in particular, in written and oral competences in English language. Our aim is to detect “weak areas” to enhance certain skills and, thus, increase university students’ competence development in English (S. Oliver et al.2003).

Study of competence development in different languages and at pre-university level

In order to find out the competences level among primary and secondary school students a research has been carried out by the Generalitat de Catalunya (Education and Universities Department) (Generalitat 2006). This study focuses on the three languages that are taught in Catalonia throughout primary and secondary compulsory education. That is so say, Catalan, Castilian or Spanish and English as a foreign language. The period of analysis ranges from academic year 2000 until academic year 2006 and, therefore, it is a good reference for trends within this educational context. So as to develop the study students have been examined by sitting for a series of tests especially designed to provide data on written and oral competences. Later on, the results obtained by students in Catalonia have been compared to the ones obtained by students in the rest of the country (Spain) and to other European educational institutions.

The results of this study in particular show the great difficulty students face when developing written communication skills in the different languages studied and in the different educational levels (primary and secondary). This implies that although teaching quality seems to improve steadily there is always even a slightly lower level in reading and listening compared to speaking and writing abilities. As shown in the above mentioned study, this problem seems to exist in the three languages studied (Catalan, Spanish and English) not only in the foreign one as the trend is the same for all but with English having the lowest global scores (almost 50%).

If we focus on the English language and we observe the comparison between the results obtain in Catalonia and the results obtained in Spain as a whole, we can see that in both cases the written competence percentage of primary and secondary students is really low and so it is a trend that stands for all the

different state schools analysed in the study and all the languages being taught in our country.

Therefore, by comparing these results with the ones we obtained at University level we must say that there is a trend shared by the whole educational cycle nowadays and which means that all our students show a rather high difficulty acquiring grammar and developing writing skills. In this sense, the empirical studies behind the conclusions have shown that the oral usage of English is at a higher level than the written one and that means a challenge to master the language. Not to mention, the difficulties these Engineering students will face when dealing with technological documents as their interaction with their colleagues will not only imply attending conferences, visits abroad, multicultural meetings or working in a multilingual team but also being able to write research papers in their field, feasibility reports, deal with business correspondence, such as briefings or memorandums, etc. From our view, to overcome such lack of proficiency in English written competence of our present Engineers, experts in education should devote time to carefully plan and design a suitable curriculum to meet the requirements of nowadays globalized and multilingual society.

5. Conclusions

As we have already mentioned, the results we present in this paper show a mistake in our present educational system in terms of written competence in any of the languages taught in the different levels. This fact should make us rethink how competences are being developed nowadays and how to modify the way they are being dealt from early educational cycles.

As a matter of fact, at University level we face these difficulties as we have the same students coming from a poor competence level background in their previous studies and we (university professors) are the ones who have to analyse this complex issue and help them develop these communicative skills, essential for their future professional careers and the possible mobility stages abroad.

A further research would include finding out more about European trends in Education in terms of competences level and whether the new educational methodologies aiming at enhancing those competences are being applied in the different European centres and if European educational convergence will lead us to an improvement in the Spanish educational system and ,hence, modify the present trend and become real multilingual citizens.

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ABSTRACT

Dealing with Linguistic Competences at University: the Erasmus Case

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Keywords

Competences, Erasmus, linguistic skills, English language, Innovation, technology and research project

In this paper we present the preliminary results of a study carried out in the Polytechnic University of Catalonia (UPC) in which several linguistic competences related to English language learning of students from Industrial and Aeronautics Engineering have been analysed. The quantitative and qualitative results obtained in *English for International Stage* subject on the one hand, and the marks of written and oral tests from student candidates for *Socrates-Erasmus* scholarships, on the other, are the basis for data comparison with a similar research in the European University of Madrid (EUM) from which some conclusions about the competences profile of University students nowadays have been drawn. In addition, we analysed and compared the evolution of secondary students' oral and written English skills, as previous to University studies. Therefore, the main focus in this paper will be students' linguistic competences and the variety of pedagogical tools teachers/researchers may use to enhance them.

Help on the Spot: Online Assistance for Writing Scientific English

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In the ESP literature, much attention has been focused on the problems of NNSE (non-native speakers of English) researchers attempting to publish their results in English (St John 1987, Swales 1990, Shaw 1991, Gosden 1995). These researchers often face many setbacks compared with NS (native speaker) writers (Flowerdew 1999). It takes them longer to draft articles and they require assistance from peers, supervisors, Anglophone correctors and even translators. Yet publication in English is of paramount importance to these researchers as far as career evolution is concerned. It is well established that the research article (RA) is the most important genre for these researchers, and the aim of most writing courses is to give assistance by raising the writers' awareness of the rhetorical and linguistic characteristics of the genre which have been described by many past studies (Hopkins and Dudley-Evans 1988, Swales 1990, Gosden 1992, Salager-Meyer 1992, Hyland 1994). The problems of novice writers and doctoral students have also been well documented (Belcher 1994, Blakeslee 1997, Flowerdew 2000, Li 2006). Studies have illustrated how they gradually acquire genre knowledge and become more proficient writers. In France, the norm is for doctoral students to publish at least two articles during their studies. There is therefore a lot at stake in being accepted for publication and gradually becoming integrated into the discourse community. It therefore seems that for NNSE researchers writing up research is a difficult task, especially if we take the example of 'off-network scholars' who are hoping to be published in the more prestigious journals (Belcher 2007).

There seem, however, to be few tools available to help learners improve their writing. The style guides, handbooks and instructions to authors¹ tend to focus mainly on advice on presentation and journal requirements but rarely develop questions of rhetoric or language. With the exceptions of Swales & Feak (1994, 2000) and Weissberg and Buker (1990), most writing textbooks seem to focus on tasks for undergraduate students. Furthermore, published EAP materials have been criticised on several counts. Harwood found, “a lack of fit between how academic writers write and what the textbooks teach about writing” (2005: 150). Hyland (1994) also pointed out that materials are often based on inappropriate sources such as popular or simplified accounts. Misak et al. (2005) report how, as editors of the Croatian Medical Journal, they assist authors with manuscript preparation but it is unlikely that the editors and reviewers of other journals would spend as much time and make so much effort in helping NNSE with their manuscripts. Therefore it seems to us that there is a need for a simple, accessible tool which can be used autonomously by learners to aid them with the drafting of manuscripts.

Recent research has reported on writing courses and the use of corpora in the classroom (Yoon & Hirvela 2004, Flowerdew 2005, Lee & Swales 2006, Charles 2007). The use of concordancing tools has been shown to be very useful for students on the lexico-grammatical level. However Lee & Swales (2006) warn against ‘concordancing burnout’ and Flowerdew (2005) underlines the limitations of a purely bottom-up approach where learners may become lost within a mass of information which lacks its communicative context. It is therefore important to go beyond word lists and frequency counts and to study texts first of all on a rhetorical level before analysing how these rhetorical moves are expressed. Flowerdew advocates combining concordancing with a top-down approach which would also highlight the rhetorical aspects of a corpus “where the analyst is probably also the compiler and does have familiarity with the wider socio-cultural context in which the text was created, or else had access to specialist informants in the area (Flowerdew 2005: 260).

Our objective here was to compile a corpus of NNSE drafts² which would form the basis of a tool that could be used autonomously by both novice and more experienced NNSE writers. Our experience of re-reading, editing and revising articles with the researchers at our university has shown that even experienced writers make typical language errors on the sentence level. Writing courses for doctoral students and interviews with the students and their supervisors have shown that novice writers also require help to organise their text and to imitate the typical moves, learning how to refer to the literature, to emphasise the importance of their study and not just to report

but also interpret their findings. As the corpus is analysed manually, the interesting occurrences can be studied in their complete context, guiding the learners and drawing their attention to rhetorical and linguistic features and the conventions of research writing. The corpus thus consists of drafts written by successful NNSE writers. There is first of all an emphasis on the writing process as the errors, reformulations and improvements made to the text can be studied. The drafts are then analysed on several different levels. The highlighting of the move structure enables novices to examine information structure. Subsequently, the focus is on various surface level features which are problematic for both novice and more experienced writers: typical expressions, tense usage, grammatical points, links and vocabulary.

The tool, which is called TYOS®³, also contains a concordancer so that users can visualise how a particular word occurs in the corpus. For example, they may know the word “evidence” but are unsure of which verbs accompany it. By consulting the concordancer, it becomes clear that “provide” accompanies “evidence” and not “give”, which would tend to be used in legal English, for example.

As the reader will have understood, TYOS® is a model-based tool. One limitation of model-based language learning is that it may limit the writer’s inventiveness by keeping him firmly within the bounds of tried and tested manuscripts and texts. Scientific communication, however, is a domain in which there is little scope for creative writing, and in which consciously imitating a tried and tested model is actually desirable, even if repetitive. Demonstrating one’s knowledge of accurately formulated scientific English to one’s peers - in the peer review process – is possible only if one is aware of what constitutes “good scientific English”. Yet experts disagree about what this really is. Perhaps the only valid definition is the level of expression that allows writing to be accepted for publication, provided the science itself is of sufficient quality. As mentioned above, all scientific journals have “Instructions for Authors” that may specify the style to be used and refer authors to style manuals. The problem with these, however, is that the information they contain is not immediately exploitable for drafting manuscripts – which is why TYOS® has been designed on the basis of a model that users may recognize and imitate.

Finally, TYOS® contains a “learning box” whose objective is to allow users to store newly acquired information in a space of their own and according to a framework specially designed for students of scientific writing. In this respect, TYOS® is aimed not only at novice and fully fledged researchers but also at ESP students in general. Furthermore, it can be used as a teaching

tool, not only to teach writing but also to help learners improve their reading skills, since it demonstrates how sentences are broken down into units.

The idea for TYOS® came about several years ago. One of us (RC) realised that manuscript track changes, i.e. the demonstration of writing errors, could become useful pedagogical input for learning, provided they were processed and displayed in an efficient, user-friendly mode. The challenge, therefore, was to find a suitable corpus and to process it didactically. The corpus posed no problem in that locally-based researchers and students in the health and life sciences had requested editing assistance from our team for many years, so their imperfect initial drafts formed part of our database. They were therefore requested to provide written informed consent for these drafts to be used as input for a new pedagogical tool whose objectives were fully explained to them. The response was unanimously favourable. The next step was to decide which texts would constitute the corpus. For this, we applied two criteria: local representativeness, since we felt that all local research specialties should be represented if possible; and genre variants, since our database had accrued over the years to include a wide range of genres used academically. This led to the inclusion of drafts in the fields of medicine, biology, biochemistry, wine science, dentistry, psychology and pharmacology. The genres we included were full research articles, abstracts, case reports, cover letters, letters of request, letters of complaint, replies to reviewers and remarks as reviewer.

On the other hand, the challenge was to establish a common processing framework for each draft and to decide what sort of information future users should have available. Furthermore, we decided that information of any kind should be given in as simple and user-friendly manner as possible, hence ruling out the use of complex descriptions of language points. Since Birch's doctoral thesis (Birch 1996) had identified a typology of typical errors committed by Francophone researchers when writing research articles, we decided upon five forms of analysis: use of tense, discourse linkers, interesting grammar points, vocabulary points and useful phrases and expressions. Full research articles were also analysed for their discourse moves. The content of each form was then established so that the draft mark-up phase could be conducted harmoniously by two people working separately.⁴ Once this phase was complete, each file had to be converted into HTML⁵ mark-up language so that it could be incorporated into a program specially designed for the purpose by an IT colleague. The interface was then completed, the scroll-down menus built and TYOS® generally became a usable web-based tool.

1. The tool

On opening TYOS®, the user goes into the menu and chooses the genre he wishes to consult. He also opens his word-processing application and opens a new file. If the genre he wishes to consult is “Case Reports”, he can choose to browse several case reports or just focus on one. Each text is processed didactically in such a way that the user has access to several versions of the same text. All versions are processed to appear as one. A floating toolbar is used to display the versions available and the user simply moves to and fro between them. Once he finds an occurrence, phrase or sentence that he thinks he can reutilise in his own manuscript, he selects it and drops it into the word processing window that he has already opened.

To make a simple analogy, TYOS® helps the user to put cement between his bricks: to put structure into content that he already has. For example, scientist X studies the helical structure of yeast rotors. TYOS® will show him “The present article investigates...” and several alternatives for introducing the research subject. He can then create the sentence he wants to write. At no time will the user be copying unauthorised material because TYOS® does not contain any finally published versions of manuscripts, only initial drafts for which an authorisation for use has been granted by the authors.

The following section describes the versions available. All the didactic processing visible here was done with WORD®. However, TYOS® contains its own proprietary display system designed by its developers. The example used here comes from the “cover letters” category.

1.1 The initial draft

The initial draft version shows what the author wrote originally together with the corrections, editing and reformulations of the NS corrector. The learner can thus study typical errors, how the draft was improved, the increased clarity and the reinforcement or weakening of certain statements, for example. The focus is thus on the writing process. The other versions of the text are more ‘product-orientated’, with a highlighting system designed to raise awareness of certain features. Figures 1 and 2 show the initial draft and the corrector’s changes.

Dear Dr AAAA

Please find attached our manuscript entitled "*Inter-expert agreement of seven operational criteria in causality assessment of adverse drug reactions.*"

This paper is original because comparing judgments of five senior experts using global introspection about drug causation and 7 causality criteria on a random set of putative adverse drug reactions. Even if, previous publications have shown poor agreement between experts using global introspection, few have compared judgments of well trained pharmacologists, furthermore familiar with using a standardized causality assessment method.

All authors have read the manuscript and approved their submission for publication; the work is original, has not been submitted or published elsewhere, in whole or in part, in any language, except as an abstract or oral communication.

Sincerely yours

BBBB

Figure 1: Initial draft

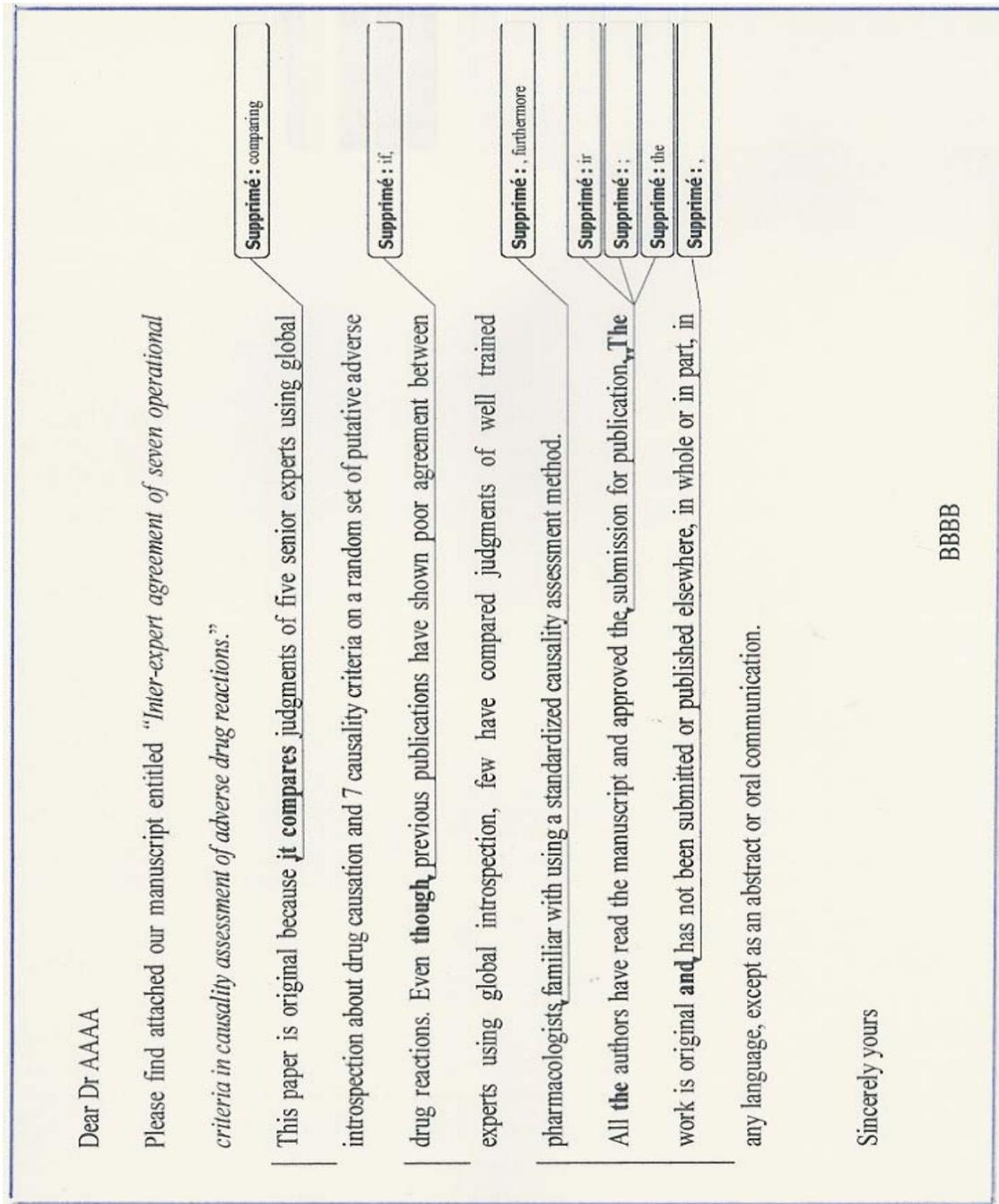


Figure 2: Initial draft with corrections

1.2 Discourse moves (only concerns research articles)

On this version of the text, attention is drawn to the organisational patterns, the author's intention and the rhetorical function of the sentences. As mentioned above, in our experience, fully-fledged researchers may be implicitly aware of the typical moves of science writing, while doctoral students and novice writers may need to imitate the structure and moves in their own writing. We have found that although this sort of genre knowledge is often acquired as they gain more experience and by interacting and writing collaboratively with their supervisors and team members, it would seem that there is a need for the rhetorical aspects of the discourse to be explained more explicitly. It appears that the most difficult rhetorical aspects of the discourse for doctoral students to learn are how to review the literature, how to underline the importance and interest of their study and how to express opinions on their findings (Gosden 1995, Hyland 2004, Birch 2008).

1.3 Typical expressions

A third version of the text (Figure 3) highlights typical expressions used. Our interviews with specialist informants and previous research (Shaw 1991) have shown that writers often use the articles of their bibliography intuitively to help them to pick out useful expressions for their drafts. This version formalises that process by highlighting reusable portions of text that serve a particular purpose. Users can integrate these portions into their own writing and are thus introduced to a set of expressions and linguistic devices for expressing a wide range of needs, such as indicating a knowledge gap for their community of researchers or (as above) for claiming originality. These expressions may be one of the factors that distinguish more experienced, mature writing from student writing and identify it as being part of the devices customarily used by a discourse community. As Hyland claims: "it is often a failure to use native-like formulaic sequences which identifies students as outsiders and there is a general consensus that formulaic sequences are difficult for L2 learners to acquire" (2007: 4). In science, it is essential to be seen as fully belonging to your community. By showing them the linguistic conventions germane to their socio-professional groups, TYOS® helps users to do that.

Dear Dr AAAAA

Please find attached our manuscript entitled **"Inter-expert agreement of seven operational criteria in causality assessment of adverse drug reactions."**

This paper is original because it compares judgments of five senior experts using global introspection about drug causation and seven causality criteria on a random set of putative adverse drug reactions. Even though previous publications have shown poor agreement between experts using global introspection, few have compared judgments of well-trained pharmacologists familiar with using a standardized causality assessment method.

All the authors have read the manuscript and approved the submission for publication. The work is original and has not been submitted or published elsewhere, in whole or in part, in any language, except as an abstract or oral communication.

Sincerely yours

BBBBB

Commentaire : 1: Typical opener for a letter in which you know the name of the recipient. "Dear Sir/Madam" if you don't.

Commentaire : 2: = veuillez trouver ci-joint... Typical first sentence in this type of letter.

Commentaire : 3: Typical second sentence in this type of letter.

Commentaire : 4: Some journals request the verbatim reproduction of such a declaration for legal purposes. You may wish to use only parts of it, for example, if you are not performing clinical research.

Commentaire : 5: This formula is almost universal and saves a lot of wasted time trying to work out just how you are going to translate "veuillez agréer l'expression de mes sentiments dévoués" ! You may also use "yours sincerely".

Figure 3: Typical expressions (yellow highlighting)

1.4 Grammar

Through the re-reading and editing of drafts, Cooke became aware of a “common core of unknown or poorly acquired elements” (Cooke 1993: 470). These typical sentence-level errors were highlighted in a corpus of first drafts (Birch 1996)⁶. In this version of the text (Figure 4), the common core of problematic grammatical elements is highlighted such as the use of the article, noun groups, irregular plurals and prepositions. Of course, exactly what constitutes a “problematic grammatical element” is a matter of debate, other than defining it as any item recurring with noticeable frequency in a

corpus of initial drafts produced by a non-Anglophone language group such as French or Chinese native speakers. The objective of TYOS®, however, is to draw the user's attention, at some indefinable but foreseeable point in time, to a set of knowledge that he is likely to need to acquire in order to become a proficient communicator in scientific English.

Dear Dr AAAAA

Please find attached our manuscript entitled "Inter-expert agreement of seven operational *criteria* in causality assessment of adverse drug reactions."

This paper is original because it compares judgments of five senior experts using global introspection about drug causation and seven causality *criteria* on a random set of putative adverse drug reactions. Even though previous publications have shown poor agreement between experts using global introspection, few have compared judgments of well-trained pharmacologists familiar with using a standardized causality assessment method.

All the authors have read the manuscript and approved the submission for publication. The work is original and has not been submitted or published elsewhere, in whole or in part, in any language, except as an abstract or oral communication.

Sincerely yours

BBBBB

Commentaire : 1. Singular of this word is "criterion". Note also "phenomenon, phenomena"

Commentaire : 2. sec 1

Figure 4: Problematic grammatical elements (blue highlighting)

1.5 Use of tenses

Another version of the text (Figure 5) highlights tense usage. This has been shown to be a problem for NNSE writers, especially in the introduction and discussion sections of the RA. The French authors we work with have a tendency to describe their study in the present perfect rather than giving their methodology and reporting their results in the past simple. They also need to distinguish between specific references to past studies in the past simple and more general references to the literature in the present perfect. Appropriate use of tense is therefore another important aspect showing other members of a scientific discourse community that an author fully “belongs” to it.

The figure shows a sample letter with green highlighting on specific verb forms. On the right side, there are seven comment boxes, each linked to a highlighted verb form in the text. The comment boxes provide explanations for the tense usage, often referring to specific sections of the text.

Dear Dr AAAA

Please find attached our manuscript entitled “*Inter-expert agreement of seven operational criteria in causality assessment of adverse drug reactions.*”

This paper **is** original because it **compares** judgments of five senior experts using global introspection about drug causation and seven causality criteria on a random set of putative adverse drug reactions. Even though previous publications **have shown** poor agreement between experts using global introspection, few **have compared** judgments of well-trained pharmacologists familiar with using a standardized causality assessment method.

All the authors **have read** the manuscript and **approved** the submission for publication. The work **is** original and **has not been submitted or published** elsewhere, in whole or in part, in any language, except as an abstract or oral communication.

Sincerely yours

BBBB

Commentaire : 1: Present tense because the final product of the research, i.e. the written study exists here and now.

Commentaire : 2: see 1

Commentaire : 3: Present perfect because the studies referred to are still considered pertinent.

Commentaire : 4: see 3

Commentaire : 5: Present perfect because the reading of the manuscript and its approval by the team of authors are still valid.

Commentaire : 6: see 1

Commentaire : 7: Present perfect because of the pertinence that the previous publication of the data (although it did not happen) would have had with regard to the present.

Figure 5: Tense usage (green highlighting)

1.6 Linkers

It is important to highlight linkers and cohesive devices, which are important signals for the reader. Hyland (2004) has underlined the importance of mastering these forms of metadiscourse. Note that in this version (Figure 6), the French language is used for some explanations. Subsequent versions of explanations regarding linkers will have recourse to other widely used languages. While TYOS® has been designed with a Francophone audience in mind and by using a corpus of drafts produced by Francophones, it could in principle be used by anybody who is interested in improving their scientific English.

Dear Dr AAAAA

Please find attached our manuscript entitled “*Inter-expert agreement of seven operational criteria in causality assessment of adverse drug reactions.*”

This paper is original **because** it compares judgments of five senior experts using global introspection about drug causation and seven causality criteria on a random set of putative adverse drug reactions. **Even though** previous publications have shown poor agreement between experts using global introspection, few have compared judgments of well-trained pharmacologists familiar with using a standardized causality assessment method.

All the authors have read the manuscript and approved the submission for publication. The work is original and has not been submitted or published elsewhere, in whole or in part, in any language. **except** as an abstract or oral communication.

Sincerely yours

BBBBB

Commentaire : 1: = parce que...

Commentaire : 2: Même si...

Commentaire : 3: = sauf...

Figure 6: Discourse linkers (mauve highlighting)

1.7 Vocabulary

The focus here (Figure 7) is on semi-technical vocabulary and not the specialised disciplinary terminology that students of science and researchers are already likely to know. Emphasis is placed, therefore, on points of language likely to be of interest for a large number of users, irrespective of their speciality or native language.

Dear Dr AAAAA

Please find attached our manuscript entitled "Inter-expert agreement of seven operational criteria in causality assessment of adverse drug reactions."

This paper is original because it compares judgments of five senior experts using global introspection about drug causation and seven causality criteria on a random set of putative adverse drug reactions. Even though previous publications have shown poor agreement between experts using global introspection, few have compared judgments of well-trained pharmacologists familiar with using a standardized causality assessment method.

All the authors have read the manuscript and approved the submission for publication. The work is original and has not been submitted or published elsewhere, in whole or in part, in any language, except as an abstract or oral communication.

Sincerely yours

BBBBB

Commentaire : 1: This word is being used more and more in electronic mail, simply because there is no longer any physical act of enclosing as there used to be when putting something into an envelope.

Commentaire : 2: Note spelling of this word.

Commentaire : 3: The French equivalent would be "mauvais". However, we avoid using the word "bad" in scientific English (which really has a derogatory sense) and prefer the word "poor".

Figure 7: Vocabulary points (grey highlighting)

Although public launch of TYOS® is imminent, a beta prototype has already been tested with a group of potential users composed of fully fledged researchers and doctoral students. This validation process, which will be fully described in a forthcoming article, clearly showed to what extent the subjects were satisfied by having pertinent information about writing scientific English immediately available at their fingertips. As they browsed, the information they encountered met visibly with their approval since they were already familiar with it, or it met their need in the particular writing task assigned to them. The fact that information is gleaned in an entirely random manner, and not according to a linear progression based on a schema contained in a manual, would seem to provide learners/users with a form of freedom to direct their learning and using. To provide scope for guided learning, however, learners/users could perhaps move back and fro between TYOS® and a set of exercises on the basis of directive links. Such an evolution is already being examined by the development team, as are other developments that will be announced in the coming year, such as classroom suggestions for ESP teachers. Furthermore, TYOS® circumvents a long-standing debate in ESP, i.e., in which order are items to be presented to the learner? The very notion of browsing and discovering means that a set of information is perused and implemented, if the user so decides. In this way, the same information is seen by different users but in no predictable sequence, only in response to a need. Learning is likely facilitated in this way, and future research will focus on how learners learn with TYOS® and how efficient this process is.

In conclusion, we hope that researchers and ESP students nearing the end of their university education will from now on be somewhat more autonomous in their writing and learning of scientific English than before. While TYOS® will never allow its users to produce the “perfect draft” nor iron out all the grammatical, structural and stylistic errors that non-native speakers’ drafts contain, it does provide insights into the micro and macro aspects of writing that may have escaped their attention before. In this sense, it is a complementary tool that could be used alongside the proprietary spellcheckers and style correction tools that are now used worldwide.

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¹ A good example is the journal *Neurology*, which has the highest impact factor in its field. The following is taken from the Instructions to Authors. “Competition for the limited space in *Neurology* is intense, and well-written papers have the best chance of being accepted. Be certain your words express your ideas and message. Write simply and concisely, adhering to Billings' rules: "(1) Have something to say; (2) Say it; (3) Stop as soon as you have said it." Otherwise, the scientific value of your manuscript may be obscured. The editor's office and publisher will not rewrite poorly written manuscripts. Those not fluent in English should seek help from a colleague or a professional author's editor who does this for a fee.”

<http://www.neurology.org/misc/sugg.htm>

² The corpus contains not only research articles but also case reports, abstracts, replies to reviewers, letters as reviewers, and letters of submission, recommendation, request and complaint.

³ Patent pending. Public launch is planned for January 2009. The website of TYOS® is www.tyos.org

⁴ The whole design and mark-up process was conducted during vacations and weekends over a two-year period.

⁵ Hypertext Mark-up Language: a mark-up language used to structure text and multimedia documents and to set up hypertext links between documents.

⁶ Birch’s doctoral thesis (1996) focusing on 40 first drafts of scientific articles written by Francophone biologists and biochemists revealed the between-subject and between-researcher recurrence of language errors.

ABSTRACT

Help on the Spot: Online Assistance for Writing Scientific English

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Publishing in English represents a major challenge for non-native speakers (NNS) of English since they face the dual requirements of producing good quality research and presenting it in good quality English. Many NNS researchers learn how to write scientific English in a haphazard way, and few receive specific formal training in this field. This leads to misunderstandings on their part about how to write scientific English and what actually constitutes a reliable model to be imitated. Guidance exists in the form of style manuals and published writing courses, but these may prove unwieldy and too time-consuming to consult. We therefore sought to develop a drag-and droppable form of online assistance in which NNS researchers' initial drafts are processed didactically as models.

Curriculum, Language and the Law – Symposium in Dubrovnik, September 18 – 21 2008

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The Faculty of Law at the University of Zagreb, Croatia, has founded a Centre for Language and Law in the framework of a European Tempus project started in January 2007. Partners in the project and the centre are (apart from relevant Croatian faculties and ministries) representatives from the universities in Antwerp, Innsbruck, London, Mannheim and Paris. The title of the project is “Foreign Languages in the Field of Law”, and focus is on providing language skills and research results with relevance for translators and lawyers working with multilingual law in a European context. Apart from training and education of different types of professionals in Croatia and the foundation of the centre, the cooperation has had two more generally relevant outcomes. And these outcomes are the reason for the present journal report: a recently founded international network on language and law (<http://lists.topica.com/lists/flifl>) and an international symposium. This report will focus upon the last mentioned fruit of the cooperation.

The symposium was held at the Importanne Resort just outside of the culturally and historically impressing town of Dubrovnik. With a total of about 100 contributors to the three-day conference, the symposium reflected the growing interest in the topic in the legal as well as in the linguistic field in these years. The programme of the symposium contained two plenary sessions (on Thursday morning and on Saturday morning) and a number of parallel sessions presented in a total of 9 different sections:

- Curriculum Development and Language Education
- Legal Terminology and Lexicography
- Legal Translation and Court Interpreting
- Legal and Linguistic Aspects of Multilingualism
- Language in Litigation and Arbitration
- Forensic Linguistics
- Analysis of Legal Discourse
- Legal Drafting and Transparency
- Language Issues in EU Law

The report will concentrate upon the plenary sessions, in which all of the section topics were treated more or less widely.

The opening keynote address on Thursday was held by Vijay K. Bhatia, City University of Hong Kong. His title was *Intertextual and Interdiscursive Patterns in Legal Discourse*. In his talk he focused upon the important characteristic of legal discourse that it is part of a legal practice and that this practice consists in confronting unique everyday situations with recurring descriptions of situations in legal texts like statutes, court decisions, etc. This confrontation process triggers a constant process of interpretation of texts and situations in the light of the needs and principles of legal practice. And it has as an important result a tendency of intertextuality and interdiscursivity in legal texts. By this he means that in legal discourse we may observe a tendency to reapply elements from related, but different texts and genres as well as from related, but different discursive practices. One example of intertextuality is the application of phrases and patterns of textualisation from statutes in contracts or court decisions. And as an example of interdiscursivity, he presented preliminary results of a study of the degree to which discursive patterns from litigation are taken over by professionals working in the field of international commercial arbitration. By way of conclusion Vijay Bhatia underlined the importance of investigating legal discourse from a global point of view in order to grasp the many intertextual and interdiscursive links characteristic of the professional culture.

The next plenary lecture was held by Isolde Burr, University of Cologne, and the author of this report. The title of the presentation was *Designing Curricula on Legal Language for Translators and other Professionals*. It was essentially a survey of traits of legal language with specific relevance for developing curricula for different types of professionals working with law in a multilingual context. The talk was centred on two subjects: Firstly, the role of individual understanding and interpreting of statutory texts. And secondly, the requirements which the importance of this process in legal discourse sets

up for education programmes. The presenters showed that the process of understanding and interpreting legal discourse is dependent on sensibility to linguistic factors as well as to legal background knowledge. This feature is relevant for everyone working with legal discourse. However, practice in the field of multilingual law may actually belong to one of at least two different modalities: The modality of decision making (lawyers), and the modality of description (translators). And depending on which modality students are to be trained to work with, curricula should have a different outline. As examples, two curricula with different aims concerning modality practice were outlined: The BA / MA programme in *Europäische Rechtslinguistik* at the University of Cologne combining law and language and educating legal professionals with a firm linguistic basis, and the legal part of the MA programme in Specialised Translation at the Aarhus School of Business, University of Aarhus.

The last plenary lecture in this section (*Multilingual Law: What is it? How is it made? How is it used and applied?*) was presented by Colin Robertson from the Council of the European Union. His background was his own practice in formulating multilingual law in an EU context as well as in being responsible for the quality assurance of such multilingual statutory texts. On this basis, he treated the three questions mentioned in the title of the paper. Special characteristics of multilingual law as opposed to monolingual law concerning the role of translation, terminology and term-equivalence were presented as well as the special process of multilingual lawmaking. And finally, focus was on the characteristics of application and decision making in a multilingual legal regime. Thus, the paper gave a brilliant basis for discussing the practical implications of the research results presented in the many papers following the introductory plenary section.

The second plenary section, held on Saturday, consisted of two presentations. In the first presentation (*Legal Drafting in an International Context: Linguistic and Cultural Issues*), Maurizio Gotti, University of Bergamo, gave an overview over the results of a number of research projects on generic integrity of legal discourse. Focus was not only on English legal texts, but rather on legal discourse from an intercultural perspective. Especially the interplay between factors from the globalisation of business and the consequent internationalisation of legal relations, on the one hand, and local requirements and conditions of specific cultures, languages and legal systems, on the other hand, was treated in the talk. Gotti presented a comprehensive list of empirically based results concerning characteristics of legal discourse and their realisation in different cultures.

The second presentation was by Sieglinde Pommer, Harvard Law School. The title of her presentation was *Legal Translation as Intercultural Expert Communication: What Role for Comparative Legal Analysis?* On the basis of her own double qualification as a translator and a comparative lawyer, she focused upon the relations between Translation and Comparative Law and the extent to which these two disciplines may be relevant in order to improve each others approaches to legal discourse. The two disciplines are both interested in understanding concepts from different legal systems in contrast with each other as functioning legal concepts. They are both interested in mediating between different cultures on the basis of the function of concrete legal concepts. Consequently, both disciplines see not the isolated term, but the underlying concept in its cultural and systematic context as the central issue to study and work upon. But where Comparative Law is oriented towards assessing the degree of overlap of concepts across cultures as elements of a system (perspective of Comparability), Translation is oriented towards expressing relevant aspects of concepts from one legal system in the cultural and linguistic context of a different legal system and in a concrete communicative context, in a text (perspective of Translatability). Summing up, Sieglinde Pommer presented interesting points of future mutual development of two neighbouring disciplines, especially in the field of the conceptualisation of their object and the relevant methods.

The overall impression that participating in the symposium left me with was a very positive one. Right now, much work is going on at PhD-level and above at many universities across Europe. It was one of the important assets of the symposium to bring people with special interests together. And the substantial number of upcoming scholars in the field is important from the point of view that it will make it easier to find qualified personnel for research positions at universities. Furthermore, work is being produced in many different fields of description of the object of legal language and in many legal cultures, as was demonstrated by the wide range of topics reflected in the list of parallel sections. This means, firstly, that the amount of knowledge about legal language and legal discourse in different countries and legal systems is growing quickly in these years. On the basis of such results, practitioners in the field find an improving basis for their work in the form of better dictionaries, more knowledge about concrete contrastive differences and similarities between specific cultures, etc. Secondly, we see the emerging contours of an actual Legal Linguistics (outside of Canada, where it has been rooted for quite some time) in the form of an interdiscipline drawing upon knowledge and methods from especially (comparative) law, translation studies, terminology, text-oriented linguistics, phraseology, philosophy of law, politics, sociology and psychology, to mention some of the topics present at the symposium.

However, for such an interdiscipline to develop it is not enough to work mainly on documenting characteristics of language and discourse in the field of law, as it was the case in the major part of the papers presented at the Dubrovnik symposium. It will be necessary to supplement such work with studies of the mechanisms underlying the interaction between language and law, taking advantage of combining knowledge and methods from more of the involved disciplines. Some more courage on the part of the researcher will be necessary. In the light of such wanted developments it is extremely positive that the organisers of the symposium have decided to set up the mentioned network that is open to all interested researchers and practitioners. Such initiatives are necessary prerequisites for achieving the exchange of ideas, methods and results needed for reaching the next level of development of Legal Linguistics.

BOOK REVIEWS:

Antike Fachtexte/ Ancient Technical Texts

Thorsten Fögen (Hrsg.)

De Gruyter. Berlin 2005. 378 Seiten
www.degruyter.de
ISBN: 978-3110181227

Reviewed by:

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Ein Band mit ausgewählten Beiträgen der Tagung "Fachtexte und Fachsprachen in kulturhistorischer Tradition" (378 S.) wurde von Thorsten Fögen i2005 herausgegeben. Auf die Einleitung des Herausgebers folgen fünf Abteilungen: Medizinische Fachtexte, grammatische Fachtexte, Kommentarliteratur, Fachliteratur verschiedener Gebiete und Ausblick auf die Neuzeit.

Fachtexte der Philosophie werden nicht als Sondergebiet behandelt. Unberücksichtigt bleiben auch die frühchristliche Fachliteratur, und die doch existierende rechtssprachliche Literatur und Gesetze.

Im Einführungsartikel wird in einer Note Nordens vernichtendes Urteil über Plinius d.Ä. zitiert: "Sein Werk gehört, stilistisch betrachtet, zu den schlechtesten". Thorsten Fögen hätte andere zitieren können, die Ähnliches über mittelalterliche und moderne Fachtexte gesagt haben.

Philologische Projekte erfordern eingehendes Wissen über die zu untersuchenden Gebiete, zum Beispiel über Medizin, Recht etc. Entsprechendes kann gewöhnlicherweise nicht von Projekten der Linguistik

gesagt werden. Ein alter Philologe, der mit Palimpsesten gearbeitet hatte, hat gesagt, als er blind geworden war: "Nisi oculis meis plus amarem". Soweit über die Anforderungen an die Arbeit mit alten Fachtexten.

Thorsten Fögens Einführung enthält Listen über wesentliche Fragen, die zur fachsprachlichen Kommunikation gestellt werden können. Zu diesen Fragen gehört auch die frustrierend oft vorkommende was Fachsprache ist sowie die gestellte Frage wo die Grenzlinie zwischen Fachliteratur und der Schönen Literatur liegt. Fögen weist natürlich auf die Kommunikationssituation hin um eine erste Antwort auf diese Frage zu geben. Unabhängig von der Situation und von den Teilnehmern kann wahrscheinlich keine Antwort gegeben werden. Eine operative Definition kann sich vermutlich nur aus der Interaktion ergeben. Fögen betont auch, dass die wissensvermittelnde Literatur sich sehr schwer von der Schönen Literatur abgrenzen lässt.

Fögen betont, dass er mit der Anthologie über Fachsprachen der Antike, anspruchslos gesagt, einen weiteren Schritt in der historischen Fachtextforschung getan hat. Seine Anthologie liefert mit ihrer Vielfalt an Beiträgen Beispiele unterschiedlichster Art. Meine Absicht mit dieser Buchbesprechung ist auch anspruchslos. Ich kann hier nur einige von den Artikeln behandeln.

Ein Thema, das als problematisch betrachtet wird, ist die Frage der Form des Fachtextes. Sabine Vogts Beitrag behandelt die Lehrdichtung „... er schrieb in Versen, und er tat recht daran": Lehrdichtung im Urteil Galens“. Sie stellt sich die Frage, ob das Lehrgedicht eine eigene Gattung sei und welche Kriterien dabei zur Verfügung stehen könnten. Von Aristoteles bis zur Moderne ist diese Frage immer aufs Neue gestellt worden. Die Antwort hängt davon ab wie man den Begriff *Dichtung* definiert.

In der Poetik von Aristoteles wird gesagt, dass Homer und Empedokles nichts Gemeinsames haben, außer dem Versmass. Den einen will er Dichter nennen, den anderen lieber als Naturforscher bezeichnen. Von Platon bis Goethe wurde das Schreiben von Versen als Kriterium der Gattungsunterscheidung verwendet; damit gehört auch das Lehrgedicht zum Epos.

Sabine Vogt präsentiert und diskutiert auch die von Bernd Effe vorgeschlagene Typologisierung, der drei Arten von Lehrgedichten unterscheidet:

- a) die formale mit virtuoser poetischer Form,
- b) die sachbezogene, die sich auf die wissenschaftlichen Inhalten konzentriert,

- c) die transparente, die den Stoff als nur zweitrangig betrachtet; im Vordergrund steht der Inhalt.

Die Kritik, die an der Typologie geübt wird, bezieht sich darauf dass die Typologie irreführend sein kann, weil Effe zu starke Gemeinsamkeiten in einem zu disparatem Material annimmt.

Meistens werden in Vogts Artikel Galens Vorschläge zur Typologisierung diskutiert. Die für das Fach sehr bedeutungsvolle Arbeit von Galen wird eingehend erörtert und endet „Ein angemessenes Urteil kann also nur gewonnen werden, wenn sowohl die Gattung als auch die Pragmatik gleichermaßen berücksichtigt werden“ Galen hat dies am Beispiel von Heilmittelrezepten nachgewiesen.

In dem Beitrag von Silke Diederich *Das römische Agrarhandbuch als Medium der Selbstdarstellung* werden Handbücher von Cato, Varro, Columella und Palladius aus der Sicht der sozialen Aufgaben der Senatoren diskutiert, denen ja nur der Beruf des Bauern gestattet war.

M. Porcius Cato gehörte der konservativen Führungsschicht an, unter denen die Fähigkeit der Gutsverwaltung als Qualifikation für die Verwaltung öffentlicher Ämter galt.

Diederich beschreibt Cato als einen Retter des römischen Rittertums. Es gelingt ihm, eine Darstellung über sich selbst als hart arbeitenden Bauern zu geben. Trotzdem erkennt der kritische Leser seiner Texte in ihm den Besitzer eines großen landwirtschaftlichen Betriebes. Es widerstrebt Cato offen zu sagen, dass er mit dem letzten wissenschaftlichen griechischen Wissen des Gebietes voll vertraut ist. Seine patrizischen Nachbarn hat er durch seinen Fleiss und seine Härte beeindruckt. Nach patriarchalischer Sitte arbeitete und ass er zusammen mit seinen Knechten. Sprichworte werden ihm zugeschrieben, die ihn als den wahren Bauern beschreiben: *Nihil agendo homines male agere discunt.*

Cato hat seine griechischen und landwirtschaftlichen Quellen nicht offenbart, weil man gerade in der Landwirtschaft das Fachwissen traditionell durch das Schauen auf das Feld des Nachbarn, durch Gespräche mit Nachbarn und Weitergabe vom Vater auf den Sohn erworben hat.

M. Terentius Varro, Columella und Palladius sind drei Nachfolger von Cato; alle mit verschiedenen Interessen, aber doch von Cato beeinflusst.

Eines der zwölf Bücher Columellas über *Re rustica* ist in Hexametern geschrieben. Er will von sich das Bild eines alten Kernrömers und

gleichzeitig auch das eines urbanen Intellektuellen zeichnen. In der Kaiserzeit werden die intellektuellen Attitüden wie auch die rhetorischen Fertigkeiten aufgewertet. Columella kann darum seine griechische Gelehrsamkeit offen zeigen.

Zusammengefasst enthalten die Handbücher fachliches landwirtschaftliches Wissen, aber sie lassen auch eine Weltanschauung und ein Werteprogramm erkennen.

Im Tagungsbericht wird m.E. nicht deutlich, warum die Betonung der Form vor dem Inhalt ein gültiges Kriterium ist, um nicht-fachsprachliche Texte zu identifizieren. Ein Fachmann nutzt natürlich seine Kenntnisse der Rhetorik und seine stilistischen Fertigkeiten, um gut rezipiert zu werden. Er kann auch zu jeder Zeit stilistische Experimente machen. Catos schlichter Stil ist bewusst geschaffen worden. Columella ist ebenso stilbewusst, aber an eine andere Zeit effizient angepasst.

Bruno Rochettes Beitrag behandelt Attitüden zum griechischen Einfluss auf lateinische Termini unter dem Titel *Die Übersetzung von Fachbegriffen bei Apuleius*. Lukretz, Cicero, Seneca, Plinius d.Ä. und, natürlich, der perfekt zweisprachige Apuleius werden miteinander verglichen. Ausgehend von möglichen Attitüden in den modernen Sprachen findet man erstaunlich modernes Denken.

Hierzu einige Beispiele: Cicero ist sehr vorsichtig, wenn er Neologismen schafft; er möchte nicht als nicht römisch genug betrachtet werden. Seneca argumentiert, dass ein Lehnwort Bürgerrecht im Lateinischen erwerben kann. In *De lingua Latina* führt Varro griechische Wörter zusammen mit Erklärungen auf Lateinisch ein. Lateinische Äquivalente sind bei ihm nicht von gleicher Bedeutung wie bei Cicero.

Apuleius ist als Übersetzer der modernen Auffassung, dass eine Übersetzung unter Berücksichtigung des ganzen Dokumentes vorgenommen werden sollte, also keine wörtliche Übersetzung. Er folgt dabei Ciceronischen Prinzipien.

Wie schon angedeutet wurde, sind viele Themen der Anthologie auch heute aktuell. Darum ist Hartwig Kalverkämpfers abschließender Artikel *Fachkommunikation zwischen Tradition und Innovation: Ein kulturhistorisches Phänomen der alten und modernen Gesellschaften* an der richtigen Stelle. Hier nur einige Beobachtungen zu den Themen aus seinem inhaltsreichen Text: der Dialog als Gattung des philosophischen Lehrgesprächs, das Verschwinden des Dialoges aus den wissenschaftlichen Gattungen, das Verschwinden der unterhaltenden, narrativen, dialogischen

Art bei der Behandlung von Sachfragen, die nicht unterhaltende wissenschaftliche Prosa, die Missachtung der Anwendbarkeit der reinen Forschung in unseren Tagen. Wie auch Fögen selbst in der Einleitung gibt Kalverkämper eine ganze Liste von Desiderata der Forschung, die als Ausgangspunkte für zukünftige Projekte dienen können.

**Insikter om insikt : Nordiska teser om
fackkommunikation**

*Christer Laurén, Johan Myking, Heribert Picht,
with Sigurður Jonsson*

Novus Forlag. Oslo 2008. 207 p.
ISBN: 978-82-7099-475-5

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It is paradoxical that much of the writing on specialised communication has had the effect of alienating many of the people it was supposed to convince, thereby creating barriers rather than facilitating exchange. This inward-looking phase was perhaps a necessary step to mark out an area of study and develop appropriate methods, but the publication under review suggests very strongly that those times are over: LSP needs to open up, and indeed has been opening up over the last few years, in two main directions. One is towards semiology, since language is only one ingredient in specialised communication, and the other is toward mainstream linguistics. LSP and terminology, perhaps a little later than lexicography, are demonstrably coming closer to various strands of the language sciences, semantics and text linguistics in particular. But it takes two to tango, and there are signs that some linguists are willing take a step towards LSP and embrace subjects outside the range of the language code itself. Some of these linguists come from a tradition of inductive research on such subjects as scientific language – M.A.K. Halliday is a good example of this orientation – whereas others work in newer fields such as corpus linguistics. The time is ripe, the authors claim, to engage a proper dialogue, though the linguists are given more prominence here than the semioticians.

The title of this essay could be paraphrased as *Knowledge about knowledge: Scandinavian theses on specialised communication*. Thirty years ago, when LSP and terminology studies began to emerge, there was talk of national schools and of a “Scandinavian approach”. With the advent of the Internet, research communities have largely lost their geographic specificity, with the possible exception of Northern Europe, where Nordterm is active and many researchers as well as pedagogues work on LSP. This is a long-held tradition, characterised among other features by a multilingual approach. Where else indeed could you find a new book alternating between three languages? It is tempting to equate the chapters in Swedish with Laurén, in Norwegian (nynorsk) with Myking and in Danish with Picht, but the authors claim in the foreword to have conceived and revised the whole work together, so in this review we shall only refer to the collectivity. Many of the wide-ranging themes discussed here were initially presented in the same authors’ *Terminologi som vetenskapsgren* (1997), better known outside Scandinavia in its German translation *Terminologie unter der Lupe* (1998), but are developed in this volume with a good deal more urgency.

Perhaps the quickest way to give an overview of the very broad scope of the book is to quote the ten “theses” of the title and comment on them briefly.

1. *Specialised communication is a cultural and semiotic phenomenon.*

One way of opening up LSP studies is to show how broadly based specialised communication really is. By taking the oldest form of specialized discourse, that which is displayed in legal texts, the authors underline the local, cultural roots, and the links with oral tradition that LSP and terminology exhibit, even for international scientific communication. The narrative form which is used for this chapter – itself something of an innovation – is in fact an invitation to revisit the history of philosophy and literature to see how thought patterns portrayed by such diverse figures as Balzac, Zola or Jorge Luis Borges reflect those found in scientific writing, such as that of Darwin for the nineteenth century writers. The relevance of the Sapir-Whorfian hypothesis of how individual languages “colour” the expression of thought is found to be central to any reflection on that of specialist knowledge. Semiotics is included as LSP and terminology include communication with both verbal and non verbal signs, and iconicity is displayed even in the most strictly text based documents, which calls out for specific study and the development of the best intellectual tools for the task.

2. *Specialised communication is a legitimate subject for linguistic research.*

This chapter can be interpreted as an appeal for linguists to study LSP and for LSP specialists to be proper linguists. Linguistics is a changing scene and voices have been raised to include in its brief more than the accounting for

the native speaker's competence: Robert de Beaugrande's plea for a broadly-based social and cognitive program of research is echoed here in relation to LSP studies. The role of semiotics comes into its own here, when the importance of the non-verbal component of specialised communication, visual in particular, is fully recognized.

3. Research into specialised communication including terminology can be considered as part of linguistics just as sociolinguistics and psycholinguistics are.

This short chapter can be seen as the heart of the argument of the book, effectively bringing LSP and terminology back into linguistics. Here it is argued that mainstream linguistics has broadened its scope sufficiently to take in issues of relations between thought, specialised knowledge and its linguistic expression.

4. There is no clear cut-off point between specialised and other communication.

The fourth chapter investigates the relations between specialised and non-specialised communications by analysing several sets of dichotomies, or at least what have been previously portrayed as dichotomies. While it is admitted that terminology and LSP studies in their early stages posited binary differences for purposes of marking territory, the authors take pains to mention those pioneers of LSP (L. Hoffmann in particular) who also stressed the relative nature of such contrasts. These dichotomous classifications have proved to be not only divisive in the academic field but also difficult to apply in field work. On closer inspection, these so-called oppositions have been found to be complementary: terminology and linguistics; concepts and meaning; denotation and connotation; correctness and appropriateness; motivation and arbitrariness; alphabetical and conceptual ordering; monolingual and multilingual... Differing and more useful ways of considering these oppositions are discussed, in particular the usual part/whole or generic/specific relationships. The dichotomies are not all to be found between the LSP world and that of mainstream linguistics, but also within the two groups, so that sociocognitive or socioterminologists declare their opposition to essential features of the so-called Vienna school's teaching. The social aspect of these dichotomies, creating insiders and outsiders are revealed to be particularly prominent. The way out of the sterile opposition is seen to be through researchers of varying options **negotiating** the meanings of their dichotomies, in a similar way to that seen by the Rouen socioterminological school of negotiating meaning in a specialised context. One of the most interesting outcomes is a sketch to show that "LSPedness" can be studied on all language levels: phonological, morphological, syntactic, textual...

5. There are therefore no absolute boundaries between terms and the rest of the lexicon.

It follows on from the previous that the difference between terms and the rest of the lexicon, a shibboleth of terminology studies of the past, is one of degree or of context or of perspective, and here Teresa Cabré's door model is presented as one way of looking at the question from different angles. The fact that some words become terms and that some terms lose their status as terms as they are popularized is taken as another demonstration of the relativity of the distinction. The typology of terms and how many and what elements they may contain are also important issues, these also prove to be at least partly language specific.

6. The relation between specialised knowledge and the forms by which this knowledge is represented is arbitrary but not necessarily unmotivated.

This thesis brings together the verbal and non-verbal forms of communication. Starting from the observation that specialised texts are made up of both verbal and non-verbal representations, the authors investigate the relations between the two forms taking into account the parameters of motivation and arbitrariness, iconicity, representation form, needs of specialised communication, convention. In spite of the semiotic framework used for this analysis, the starting point is Saussurian linguistics, and the reader is taken back and forth from the "langue planet" to the "parole planet". It is pointed out that the "parole planet", where conventions are established, is a blind spot for Saussurian linguistics, requiring a "consolidation phase" which is critical for LSP. The time element here is important, which leads the authors to consider terminology in a diachronic perspective, and different models of term formation are discussed. The idea of convention as expressed here is close to Coseriu's norm, obviously a key concept when lexical development, specialised or otherwise, is concerned.

7. The forms of representation vary according to the needs of communication.

This is another chapter with a distinct semiotic bias, but the focus on variation in all its forms lends itself to analysis first in the field of verbal communication, then in mixed forms, verbal and non verbal, to end up with analysis of non-verbal communication, especially in graphic forms, of both material and non-material objects. As elsewhere in the book, the authors suggest different parameters lending themselves to a systematic study of the various aspects of the question. As far as variation is concerned, some important parameters are the degree of specialisation and the way the different subject fields influence the forms of representation.

8. It is always possible to convert forms of representation but the result is not necessarily the same.

This is the shortest chapter, which takes up the various channels of communication discussed in the previous section and investigates how and to what extent messages transmitted through other channels are altered, a logical point no doubt, but one that left the present reader perplexed as to where it leads, both practically and theoretically.

9. A subject field has an inherent cognitive order and disorder, which changes with acquisition of knowledge.

LSP is generally defined pragmatically as the communication of specialised knowledge, but just what is specialised knowledge and how can it be approached? This chapter examines the answers variously suggested by rationalism and by constructivism, the latter relying heavily on Glaserfeld. The use of ontologies to model knowledge is well known and currently an interface between terminology and artificial intelligence, and its relations are briefly discussed here.

10. Both language use and language system can be planned.

This long section is divided into three parts, the lengthiest being the history of the Icelandic language and some explanations of its well-known purist tendencies. A more speculative section is devoted to prescriptive and descriptive attitudes in language planning, which turn out to be a false dichotomy, and a six-point scale is suggested in its stead. The final part is devoted to issues of domain dynamics and domain loss. The threat is seen to be the loss of specialised (and even some not-so-specialised) areas to English, which has been felt more acutely in Scandinavia than elsewhere in the world and which has been openly debated even outside university circles. In common with the rest of the work, the aim of the authors is to provide an intellectual – and terminological – framework to structure the discussion of these issues which are claimed to be vital to the societies involved. This framework includes planned terminology development and the treatment of loans. As examples of successful planning the authors cite not just Iceland but more particularly French “won back” in Québec. Though Jean-Claude Corbeil is not quoted, his insistence on the democratic underpinning of any such movement finds an echo here. The section closes on a proviso similar to that of section 8: the planning of language system and language use is possible, but the intended result can never be guaranteed.

Contrary to both English and French language usage, applied linguistics as envisaged here is not limited to teaching preoccupations, and indeed this is not a book which focuses on didactic aims at all, though it is highly didactic in its presentation: each section has an introduction which gives the general orientation, the points to be covered are all enumerated and at the end of each chapter or section there is a summary indicating to what extent the goals

mentioned have been attained. As many of the German handbooks of LSP, it contains many useful tables and graphics.

This volume is a worthy successor to the 1997/8 book by the same authors. It is a challenge to terminologists and LSP specialists to broaden their horizons and at the same time an invitation to mainstream linguists to engage in the dialogue which they open with this book.

It is to be hoped that a translation will soon follow so that the opening which is so eloquently advocated can take place on the international level.

Legal Discourse across Cultures and Systems

*Vijay K. Bhatia, Christopher N. Candlin
and Jan Engberg (eds.)*

Hong Kong University Press, 2008. 338 p.
ISBN: 978-96-2209-851-0

Reviewed by:

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Lawyers and linguists do not always find it easy to talk to each other. Lawyers have their terminology and linguists have theirs. In both cases, we are talking about sophisticated tools for describing their respective worlds: law and language. On the other hand, there is a clear understanding today among lawyers about how very important it is not only to master one's mother tongue, but also other languages, and that linguistics has a lot to contribute in terms of increasing understanding of the problems of polysemy in an internationalised world. As this anthology shows, there is also a considerable degree of awareness among language researchers internationally that not only are legal documents an important field of research, but also that linguistic knowledge is absolutely necessary to avoid some legal pitfalls. In philosophy of law, it has long been recognised that language theory can throw light on the peculiarities of legal norms, but it is probably only in the most recent years of increasing international collaboration and globalisation that questions of language have become a part of everyday life for most lawyers. Translating Danish legal terms to English and vice versa is not very easy, but even that recognition helps us comprehend the many different ways a text can be understood due to cultural differences.

The anthology has an almost invisible subtitle, “mediation, litigation, arbitration”, and all the articles in the book deal with various questions in relation to arbitration. We cover a lot of ground. In an introductory chapter, the editors describe the underlying project as “to investigate what happens to the same legislative genre when it is written, interpreted, and used across linguistic, socio-political, cultural and legal jurisdictional boundaries...”. An international research team investigated this question. Outside Europe they looked at Brazil, China, Hong Kong, India, Japan and Malaysia, and in Europe at the Czech Republic, Denmark, Finland, France, Germany, Switzerland and the UK. The book was written by experts for experts.

The most important lesson for lawyers is probably that what seems to be the same text is susceptible to very different interpretations in other linguistic and cultural contexts. Among the contributions of a more general character is an article by two of the editors on “Interpretation across Legal Systems and Cultures” (pp. 127–144) and an article on the translation of arbitration terminology (Chroma, pp. 309–28). An article on Japan (Sato, pp. 53–74) contains interesting observations on the relationship between modern rules of arbitration and traditional mediation. An article on India (Dhanai, pp. 109–24) gives interesting insight into more traditional arbitration methods and a more pragmatic approach more related to the needs of business life than to traditional legal norms. Other articles are not nationally oriented, but deal with particular aspects connected with arbitration cases, e.g. the question of confidentiality and secrecy (To, pp. 75–108), where “confidentiality” does not mean the same everywhere. An article by Engberg and Heller touches on the well-known problem for lawyers that legal norms are often vague and therefore need clarification. This is of course what lawyers are for, but the article throws light from a linguistic point of view on this well-known phenomenon, which is not seen as a problem by lawyers, but more as the essence of law (pp. 145–169). The article examines German law and could with advantage be presented to lawyers in a linguistic form less weighed-down with linguistic terminology. The book’s articles illustrate differences between English and other languages. An article by Gotti gives good examples of the significance of different cultures with regard to procedure (p. 221), while an article on Brazil gives a good introduction to the endeavours being made to internationalise the lawyers in a country undergoing furious development (Frade, p. 275–291).

This reviewer is a lawyer and has read the many articles with the eyes of a lawyer. From this point of view, the book is a collection of articles that immediately catch and hold one’s interest by relating to general cultural questions, while other articles require prior knowledge even for someone interested in language. But the latter also demonstrate that a linguistic approach to legal documents can give a lawyer a lot to think about with

regard to clarity of expression and linguistic categorisation. There is good reason to congratulate the editors on such good results from the investigation undertaken. A future investigation could perhaps start from the question of how one can create a better dialogue between lawyers and linguists on the understanding of legal documents.

CONFERENCE CALENDAR:

- 2008 -

November 6-8 (2008) – Alicante (Spain)

Symposium "Univer-Cities: Translation, Languages and Internationalization". The aim of this symposium is to find out and discuss the exact implication(s) of the various communicative changes entailed by the internationalization (globalization) of language (and translation) strategies. Areas: Languages, multilingualism and society; Translation/Interpreting studies in the global era; Translation and social psychology; Organization theory and univer-cities; Translation and political studies; The international book market; The (print/audiovisual) media world.

Information: E-mail: univercities@gmail.com

Web: www.ua.es/personal/iliescu/univercities

November 7-8 (2008) – Guangzhou (China)

International Conference on Forensic Linguistics: "Forensic Linguistics in the 21th Century: Research and Application". Contents of the conference will deal with all aspects of forensic linguistics/language of law, including: theoretical research on forensic linguistics; legal discourse analysis; legal translation and courtroom interpreting; the application of forensic linguistics; research on legal language teaching; construction of corpus for forensic purposes. Conference language: Chinese and English.

Information: E-mail: cafl_mishuchu@yahoo.com.cn

Web: http://www1.gdufs.edu.cn/chinaflr/english/Article_Show.asp?ArticleID=408

November 7-9 (2008) – Prague (Czech Republic)

EXPOLINGUA Praha 2008. 18th International Fair for Languages, Education and Cultures. The main topics of the seminar programme at EXPOLINGUA Praha 2008 will be: • studying and learning languages abroad • work experience abroad • mini-language courses • translation and interpreting • language tests • e-Learning and computer-assisted language learning (CALL) • foreign language professions.

Information: ICWE GmbH, EXPOLINGUA Praha, Silke Lieber & Claudia Schweder, Leibnizstrasse 32, D-10625 Berlin, Germany. Tel. +49 30 310 18180 Fax. +49 30 310 181829 E-mail: prague@expolingua.com

Web: www.expolingua.cz/index.php?lang=en

November 14-16 (2008) – Salzburg (Austria)

7th Interdisciplinary Symposium European Cultures In Business And Corporate Communication EUCO: “Stakeholder oriented Communication” / Europäische Kulturen in der Wirtschaftskommunikation EUKO: “Anspruchsgruppenorientierte Kommunikation”.

Information: Prof. (FH) Dr. Florian Siems, FH Salzburg GmbH, Studiengang BWI, Urstein Süd 1, Österreich. Tel: +43(0)50221-1108 E-Mail: euko2007@fh-salzburg.ac.at
Web: www.wirtschaftskommunikation.net

November 14-16 (2008) – Berlin (Germany)

EXPOLINGUA Berlin 2008. 18th International Fair for Languages, Education and Cultures. An extensive seminar programme takes place parallel to the exhibition. In cooperation with EUROCALL Germany and the German Academic Exchange Service (DAAD), EXPOLINGUA Berlin 2008 presents a rich and varied programme of workshops and lectures. The main topics of the seminar programme at EXPOLINGUA Berlin 2008 will be: • Mini-language courses • Studying and learning languages abroad • Work experience abroad • Language tests • CALL - Computer Assisted Language Learning • Foreign language professions.

Information: ICWE GmbH, EXPOLINGUA Berlin, project manager: Silke Lieber, Leibnizstrasse 32, D-10625 Berlin, Germany. Tel. +49 30 310 18180 Fax. +49 30 310 181829. E-mail: prague@expolingua.com
Web: www.expolingua.cz/index.php?lang=en

November 18-20 (2008) – Al Ain (United Arab Emirates)

1st International Conference on Translation / Interpretation & the Impact of Globalization. The main goal of the conference is to bring together scholars from all around the world to exchange ideas, share experiences and address current translation theories, issues and techniques in all areas of translation. Keynote speakers with a wealth of experience will be invited to the conference to allow researchers and translators to meet and discuss ideas and explore venues for cooperation in all aspects of translation and interpretation. Special emphasis will be placed on translation in the Middle East, particularly the UAE, and the challenges facing translators.

Information: Department of Translation Studies, College of Humanities & Social Sciences, U. A. E. University, Al Ain, U. A. E. Tel:+971-3-713-4732 Fax:+971-3-713-4961
Web: www.fhss.uaeu.ac.ae/Conference/call_for_papers.html

December 4-6 (2008) – Reykjavik (Iceland)

15th Nordic Network for Intercultural Communication – NIC 2008: Cultures in translation. The conference will have six central themes which will be divided into separate seminars. No topics in the field of intercultural communication are excluded but we particularly welcome proposals on the following themes: • The Glory of Babel: celebrating diversity in languages and linguistics • Bilingualism as a social asset • Dissolution and diffusion of cultures (cultural literacy in a hybrid world) • Literary translations - a gateway into different cultures? • Community interpreting • Nordic identity and language attitudes within the Nordic countries.

Information: E-mail: infovigdis@hi.is Web: http://vigdis.hi.is/page/svf_cultures

December 8-13 (2008) – Havana (Cuba)

World Congress on Specialized Translation 2008: Languages and Intercultural Dialogue in a Globalizing World. Topics: • Information sciences, the Internet and translators: efficacy and efficiency • “Translation is too expensive and too slow,” or the lies behind monolingualism • Translation in international organizations, patents and norms • The translator in dialogue with editors and producers of audiovisual material.

Information: E-mail: cmte2008@unilat.org

Web: <http://dtil.unilat.org/cmte2008/en/presentacion.htm>

- 2009 -

January 22-24 (2009) – Lahore (Pakistan)

Conference on Language and Technology 2009 (CLT09). CLT is a biennial conference series organized by Pakistan Society for Language Processing (PSLP), aiming to bring together students, researchers and practitioners to exchange research and development in the fields of linguistics and processing of speech, script and language. CLT09, the second conference in the series, is being hosted by the Center for Research in Urdu Language Processing at the National University of Computer and Emerging Sciences, Lahore.

Information: Dr. Sarmad Hussain, CLT09 Secretariat, Center for Research in Urdu Language Processing, National University of Computer and Emerging Sciences, B Block, Faisal Town, Lahore, Pakistan. Tel: +92-42-111 128128 Fax: +92-42-5165232 Email: clt09@crulp.org Web: www.crulp.org/clt09

February 7-8 (2009) – Crete (Greece)

1st International Conference on Language for Specific Purposes on Crete: “Options and practices of LSP practitioners”. The purpose of the conference is to disseminate information related to research, education and good practice of those interested in L S A P. In addition to plenary sessions, workshops and discussions, it will enable participants to network and share information and experiences in the field, catch up with existing developments and take home fresh ideas to implement in their professional and academic context.

Information: Web: <http://lspcrete.wordpress.com>

February 13-14 (2009) – Vaasa (Finland)

XXVIII VAKKI Symposium on LSP, Translation and Multilingualism: “Language and power”. The VAKKI symposium is an occasion for researchers in LSP, translation, multilingualism and related fields to meet in an international and multilingual environment.

Information: Heli Katajamäki. E-mail: hkat@uwasa.fi

Web: <http://lipas.uwasa.fi/hut/vakki/symposium2009/english.html>

February 20-21 (2009) - Palo Alto, CA (USA)

IWIC 2009. ACM workshop on intercultural collaboration. The main theme of this workshop is intercultural collaboration, from both technical and socio-cultural perspectives. Topics will include collaboration support (such as natural language processing, Web, and Internet technologies), social psychological analyses of intercultural interaction, and case studies from activists working to increase mutual understanding in our multicultural world.

Information: Web: <http://langrid.nict.go.jp/iwic2009>

February 14-15 (2009) – Sydney, Australia

IJET-20. International Japanese English Translation Conference: Striving and Thriving. The conference will be presenting a wide variety of content for translators and interpreters in an innovative program

Information: Web: <http://ijet.jat.org/en/ijet-20>

March 3-5 (2009) – Tehran (Iran)

3rd International Conference of Cognitive Science: Cognitive Education. Conference topics will include cognitive psychology, cognitive neuroscience, artificial intelligence, philosophy of mind, and cognitive linguistics.

Information: Conference secretariat, Institute for Cognitive Science Studies, 17 Pezeshkpour Alley, North of Zartosht Street, Vali-e Asr Street, 15948 Tehran, Iran.

Web: www.iccs.ir/e/ E-mail: info@iccs.ir Tel. +98-21-88935057

March 1-7 (2009) – Mexico City (Mexico)

CICLing 2009. 10th International Conference on Intelligent Text Processing and Computational Linguistics. Topics: Computational linguistics: • Computational linguistic formalisms • Discourse models • Morphology, syntax, semantics, parsing • Recognition of textual entailment • Word sense disambiguation • Anaphora resolution • Text generation • Lexical resources. Intelligent text processing and applications: • Machine translation • Document classification • Information retrieval • Information • Automatic summarization • Spell checking • Natural language interfaces.

Information: E-mail : cicling2009@cicling.org

Web: www.cicling.org/2009/

March 12-14 (2009) – Rennes (France)

30e colloque annuel du GERAS (Groupe d'étude et de Recherche en Anglais de spécialité) : Du non-spécialisé au spécialisé: les différentes voies menant à la spécialisation de l'anglais / From non-specialised to specialised: routes towards specialised English). Le thème du colloque invite à faire le point sur la multiplicité et l'unité de l'anglais de spécialité, compte tenu de la diversité des domaines (droit, sciences économiques, médecine, biologie ...), et de la variété des publics (formation initiale aux trois niveaux LMD, formation tout au long de la vie, enseignants, chercheurs et personnels de l'université). Parallèlement à ce colloque, une **exposition universelle** de l'anglais de spécialité intitulée « Le monde de l'anglais de spécialité »/ « ESP in the World » réunira une quinzaine d'associations nationales et internationales représentatives des principaux acteurs de l'anglistique.

Information: E-mail : sophie.belan@univ-rennes1.fr

Web: <http://geras2009.univ-rennes1.fr/>

March 21-24 (2009) – Denver, Colorado (USA)

AAAL 2009 Annual Conference (American Association for Applied Linguistics). The 2009 conference's plenary presentations and invited colloquia address the theme of the relevance of applied linguistics to the real world and to other fields of scientific inquiry. Topics: • Analysis of discourse and interaction • Bilingual, immersion, heritage, and language minority education • Language and technology • Language cognition and brain research • Language, culture, socialization and pragmatics • Language, maintenance and revitalization • Language planning and policy • Second language acquisition, language acquisition and attrition • Sociolinguistics • Text analysis (written discourse) • Translation and interpretation.

Information: Local Chair Email: AAAL2009Denver@gmail.com

Web: www.aal.org/aaal2009

March 26-28 (2009) – Ciudad Real (Spain)

XXVII AESLA International Conference: “Ways and Modes of Human Communication” / “Modos y Formas de la Comunicación Humana”. The conference organized by the Spanish Applied Linguistics Association (AESLA) will cover the following areas: • Language acquisition • Language teaching • Language for specific purposes • Language psychology, child language and psycholinguistics • Sociolinguistics • Pragmatics • Discourse analysis • Corpus linguistics, computational linguistics and linguistic engineering • Lexicology and lexicography • Translation and interpreting .

Information: Secretario del congreso, Javier Enrique Díaz Vera, Universidad de Castilla-La Mancha, Facultad de Letra, Departamento de Filología Moderna, Avda. Camilo José Cela s/n, E-13071 Ciudad Real, España.

Tel. +34 926 295300 extensión: 3114, Fax +34 926 295312

E-mail: JavierEnrique.Diaz@uclm.es or Congreso.AESLA@uclm.es

Web: www.aesla.uji.es/congresoxxvii

March 30 - 3 April – Athens (Greece)

EACL-09. 12th Conference of the European Chapter of the Association for Computational Linguistics. The conference covers a broad spectrum of disciplines working towards enabling intelligent systems to interact with humans using natural language, and towards enhancing human-human communication through services such as speech recognition, automatic translation, information retrieval, text summarization, and information extraction.

Information: e-mail: info@eacl2009.gr

Web : www.eacl2009.gr

April 3-4 (2009) – Monterey, CA (USA)

Monterey FORUM 2009: Principles and Practices of Assessment in the Training of Translators and Interpreters. The forum will focus on principles and practices of assessment in the training of translators and interpreters. We invite translation and interpreting researchers, trainers, practitioners and students to share and discuss their research, practices and experiences with respect to various aspects of assessment.

Information: E-mail: gsti@miis.edu

Web: <http://translate.miis.edu>

April 6-8 (2009) – Lodz (Poland)

PALC 2009. 7th international conference on Practical Applications in Language and Computers. Topics: Contrastive Studies and Language Corpora • Discourse and Language Corpora • ESP and Language Corpora • Expert, Retrieval and Analytical Systems • Virtual Learning Environments • E-testing • Large (multilingual/multimodal) Corpora • Lexicography and Language Corpora • Cognition, Computers and Language • Computer Translation Tools • Machine Translation, Machine-aided Translation, Translation and Corpora • E-books and Corpora and Literature.

Information: E-mail: palc@uni.lodz.pl

Web: <http://palc.ia.uni.lodz.pl>

April 6-8 (2009) – Southampton (UK)

2nd International Conference on English as a Lingua Franca (EFL). The conference will deal with the aspect of English as a Lingua Franca: linguistic, sociolinguistic and psycholinguistic, and/or relating to issues of language policy, language teaching, and language ideology that concern ELF.

Information: Dr Alasdair Archibald, Modern Languages University of Southampton, Avenue Campus, SO17 1BJ, UK. E-mail: aa3@soton.ac.uk

Web: www.soton.ac.uk/ml/research/elf.html

April 6-10 (2009) – Pavia (Italy)

LETiSS International Spring School 2009 on “Standard and non-standard languages in Europe: future and vitality of dialects, language contacts and new linguistic scenarios in today’s Europe“. The aim of the school is to enhance dialogue among young linguists interested in the topics announced in the title, under the guide of leading specialists. This is why the number of participants has been limited, in order to facilitate interactions among them.

Information: E-mail: letiss@iusspavia.it

Web: www.iusspavia.it/eng/centri.php?id=23&sez=2

April 28-29 (2009) – Copenhagen (Denmark)

Eye-to-IT conference on translation processes, sentence processing, and the bilingual mental lexicon. The EU FP6 Eye-to-IT project (2006-2009) has brought together psycholinguists, neurolinguists, eye-tracking specialists, EEG specialists, translation scholars and developers of translation tools. Jointly, they have explored the possibility of developing a research application for studying translation processes intensively and, in parallel with this, to develop a prototype gaze-based support tool for translators.

Information: E-mail: mb.iadh@cbs.dk

Web: www.cbs.dk/forskning_viden/konferencer/eye_to_it

April 30 – May 2 (2009) – Iowa City (USA)

Workshop on Language Acquisition and Interfaces of Cognitive-Linguistic Modules. The purpose of this workshop is to discuss current issues on the interfaces between phonology and syntax, syntax and semantics, syntax and discourse, syntax and the lexicon and their first and second language acquisition.

Information: E-mail: interfaces-workshop@uiowa.edu

Web : www.uiowa.edu/interfaceworkshop/

May 21-22 (2009) – Los Angeles, CA (USA)

ABC 2009. The Association for Business Communication Special Topics Conference: Business Discourse. Business or organizational discourse is often cross- or interdisciplinary and qualitative in its approach and involves the investigation of spoken and written communication in general and language in particular in business settings (Bargiella-Chiappini, Nickerson and Planken (2007). It looks at how people in business organizations achieve their organizational and personal goals using language.

Information: Jolanta Aritz, Program Chair. E-mail: aritz@marshall.usc.edu

Web: www.businesscommunicationconferences.org/ocs/

May 20-22 (2009) – Leuven (Belgium)

International Colloquium on “Translation in Multilingual Cultures”. The recent understanding of the multilingual character of past and present cultures asks for a reconsideration of disciplinary boundaries that are traditionally language-bound. The complex practice called ‘literature’ can no longer be fully apprehended (if it ever could) in linguistic isolation, or within constricting frameworks like ‘space’ or ‘nation’. The questioning of linguistic, spatial or national boundaries in relation to which separate literatures are constructed, urges us to rethink the nature of the relationships between literatures: how to replace the familiar distinctions between ‘source’ and ‘target’ or between ‘import’ and ‘export’?

Information: Reine Meylaerts. E-mails: Reine.Meylaerts@arts.kuleuven.be

Web: www.ivnnl.com/congressen.php?id=21

May 20-23 (2009) – Faeto, Foggia (Italy)

Colloque international : « Troisièmes journées des droits linguistiques » / ”Terze Giornate dei Diritti Linguistici”. À l’heure où la mondialisation montre pleinement son revers, et où le développement durable devient une urgence pour nombre de gouvernements nationaux et d’organisations internationales, il paraît opportun d’analyser et de souligner l’importance sociale et économique de la promotion de la diversité linguistico-culturelle, et d’insérer cette réflexion dans le cadre de la conférence permanente sur les droits linguistiques.

Information: E-mail: giovanni.agresti@portal-lem.com (veuillez préciser dans l’objet du courriel: « Troisième Journée des Droits Linguistiques »). Tel. : +39.347.81.07.634

Web : <http://plurilinguisme.europe-avenir.com/images/Colloques/appeljdl2009.pdf>

May 27-29 (2009) – Ottawa (Canada)

ACLA 2009: “Global Languages, Local Cultures”. From the early spreading of languages such as Greek, Chinese, Latin, and Arabic across broad regions to the present age of globalization, local literary cultures have long had to interact with hegemonic languages and literatures of foreign origin.

Information: E-mail: conference@acla.org

Web: www.acla.org/acla2009/

May 28-29 (2009) - Antwerp (Belgium)

Symposium on: “Aptitude for Interpreting. Towards Reliable Admission Testing.”

Each year, conference interpreting schools organise labour-intensive and timeconsuming admission tests. In the end, they accept a few hundred applicants, and reject many hundreds more, some 75% of those that apply. Of these few hundred accepted students,

just over one half makes it to successful graduation. And what about aptitude and selection for community interpreting and sign language interpreting programmes? It seems that admission tests into interpreting schools need more of our attention. Unlike any other kind of assessment in interpreter training and professional life, admission screening requires predicting whether a candidate will be able to learn to interpret or not. This aspect places special demands on both admission testing and aptitude research, and the aim of this symposium is to explore them.

Information: E-mail: heidi.salaets@lessius.eu or sarka.timarova@lessius.eu
Web: www.lessius.eu/tt/nieuws/Aptitude.aspx

May 28-29 (2009) – Craiova (Romania)

CITS09. Colloque international : « Théorie, pratique et didactique de la traduction spécialisée ». Ce colloque se propose d'aborder le domaine de la traduction spécialisée sous l'angle de la définition des principaux concepts opérationnels et de la présentation des domaines de manifestation (économique, technique, juridique, scientifique, médical, etc.). Le but sera de mettre en évidence le statut et le rôle du traducteur et d'envisager des possibilités de renouvellement méthodologique, en matière de recherche et de pédagogie, afin de perfectionner la formation des traducteurs spécialisés.

Information : e-mail : cits09@yahoo.fr
Web : http://dtil.unilat.org/colocviu_craiova_2009

May 28-30 (2009) – Tartu (Estonia)

ICLM 2009 – 12th International Conference on Minority Languages. The ICML conference in Tartu will focus on the study of autochthonous minority communities and their language use. New perspectives have emerged for the revitalisation of lesser-used languages due to modern technological development. However, new educational and communicational technologies and tools have not been fully applied in the development of minority communities and their languages. This conference will provide an academic opportunity to discuss which barriers need to be overcome, myths to be broken, processes to be followed and changes to be undertaken.

Information: E-mail: icml@lists.ut.ee
Web: www.icml.ut.ee

June 3-5 (2009) – Tammerfors, Tampere (Finland)

10. Nordiske konferanse om leksikografi. Målet med det vetenskapliga programmet är att ge en så bred bild av den nordiska lexikografien som möjligt.

Information: E-mail: harry.lonnroth@uta.fi eller kristina.nikula@uta.fi
Web: www.nordisk-sprakrad.no/nfl.htm

June 4-6 (2009) – Groningen, Netherlands

Second Conference on Language Contact in Times of Globalization. The Conference will focus on the effects of language contacts as a result of the on-going globalization process, which is, in principle, not a recent phenomenon but of all ages.

Information: E-mail: lctg2@rug.nl
Web : www.rug.nl/let/lctg2/

June 5-6 (2009) – Ávila (Spain)

1st International Seminar on Languages for Business: A Global Approach. The seminar intends to be a meeting point for academics carrying out research on languages for business from multidisciplinary fields. It aims at sharing scholarly views and perceptions on the use of languages for business communication with the purpose of enriching the integration of LSP with professional practices and raising issues related to the discursive practices of business professionals.

Information: E-mail: llantada@unizar.es

Web : http://ice.unizar.es/portfolio/?page_id=97

June 9-10 (2009) – Copenhagen (Denmark)

NORDTERM 2009: Ontologier og taksonomier. Specialtemaet for NORDTERM 2009 er udarbejdelse og anvendelse af ontologier og taksonomier, især hos organisationer og offentlige myndigheder i de nordiske lande. P.t. er der et stort behov for terminologer hos det offentlige, hvor bl.a. terminologiske ontologier bliver brugt til optimering af databasearkitektur, i digitale forvaltningssystemer, til afklaring af virksomhedernes interne/eksterne terminologi og meget mere.

Information: E-mail: nordterm.isv@cbs.dk

Web : www.cbs.dk/nordterm2009

June 26-28 (2009) – Mendoza (Argentina)

INTERPRETA 2009. 2nd International Interpretation Conference. Luego de una exitosa primera edición de INTERPRETA, que superó con creces las expectativas de todos los que la disfrutaron, y que atrajo a colegas de la Argentina, Brasil, Chile, Eslovaquia, España, Estados Unidos, Francia, Inglaterra, Nueva Zelanda, México, Panamá, Paraguay, Sudáfrica, Taiwán, Uruguay, los organizadores nos imponemos nuevos retos: ahondar aún más en el debate y discusión de temas que demostraron ser de interés y que se pusieron sobre el tapete en la edición anterior; además, abrir nuevos espacios (plurales) para estimular la capacitación y crecimiento en nuestra profesión.

Information: E-mail: lucille@interpreta-conference.org

Web: www.interpreta-conference.org/interpreta2009

August 17-21 (2009) – Aarhus (Denmark)

LSP2009 - XVII European Symposium on Languages for Specific Purposes: "Methods and Aims - (Re)Conceptualising LSP Research".

Today, the characteristics of LSP and specialized discourse are seen as increasingly interesting not only by scholars working in the traditional fields of LSP like terminology and genre studies, but also by scholars in other fields like sociology, psychology and communication studies. This widening of the range of scholars studying specialized discourse makes it relevant to set up a contemporary map of the field. And as we see it as one of the central characteristics of studies of specialized discourse that they are driven by problems of the investigated discourse communities rather than mere theoretical concerns, we want the methods and aims behind the studies presented in Aarhus (and thus of LSP studies in general) to be a central concern of the conference.

Information: E-mail: lsp2009@asb.dk

Web: www.asb.dk/article.aspx?pid=17696

LSP and Professional Communication is an international peer-reviewed journal aimed at those interested in language for special purposes and professional communication.

The purpose of the journal is to underpin professional language research and make its results available to a wider audience in order to increase its visibility and public interest in professional language matters. This, in turn, should lead to an increased capacity to defend the interests of this subject area.

International Peer Review Board

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MA Jeannette Ørsted

Group Manager of Terminology, CLS Communication AG, Switzerland